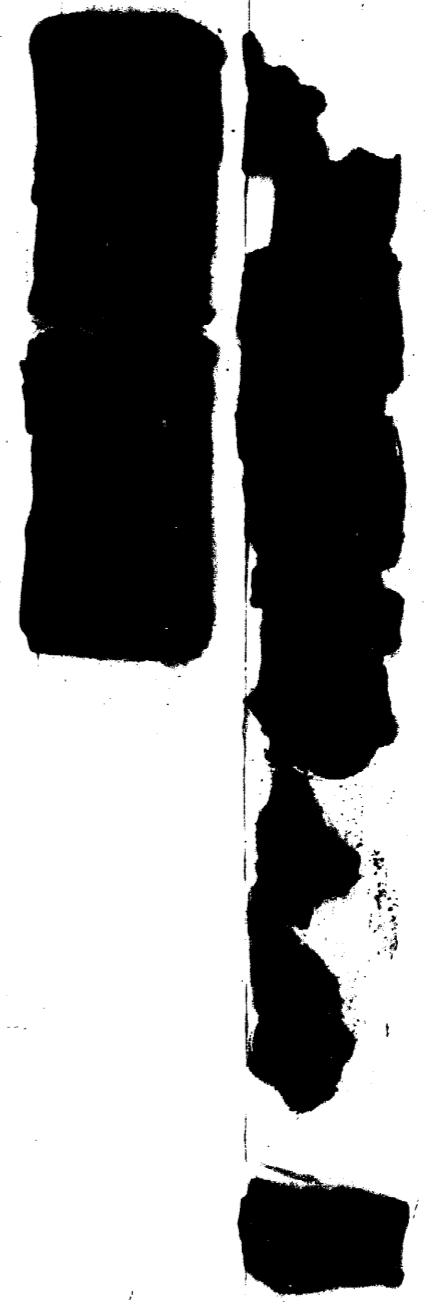


2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100



寄贈者
南亮進氏



THE
Primitive Origination
OF
MANKIND,
CONSIDERED AND EXAMINED
According to
The Light of Nature.

WRITTEN
By the Honourable Sir *MATTHEW HALE*
KNIGHT:
Late CHIEF JUSTICE of His MAJESTIES
Court of *KING'S BENCH*.



LONDON,
Printed by *WILLIAM GOBBID*, for *WILLIAM SHROWSBERY*
at the Sign of the Bible in *Duke-Lane*. c1o 1oc LXXVII.

* M: 7/5
157
30842

TO THE
R E A D E R.

THE subject Matter of this Book is a free Disquisition, according to the Light of Nature and Natural Reason, touching the Primitive Origination of Mankind, consisting principally of these Parts and Assertions.

I. That according to the Light of Nature and Natural Reason, the *Mundus aspectabilis* was not Eternal, but had a Beginning.

II. That if there could be any imaginable doubt thereof, yet by the necessary Evidence of Natural Light it doth appear that Mankind had a beginning, and that the successive Generations of Men were in their Original *Ex non genitis*.

III. That this Truth is evident by Reason and Arguments demonstrative, or at least little less than apodeictical.

IV. That there are Moral Evidences of the truth of this Assertion, which are herein particularly expended and examined; and how far forth they are concludent, and how far not: which I have impartially delivered.

V. That those great Philosophers that asserted this Origination of Mankind *Ex non genitis*, both ancient and modern, that rendred it by *Hypotheses* different from that of *Moses*, were mistaken: Wherein the several *Hypotheses* of *Aristotle*, *Plato*, *Empedocles*, *Epicurus*, *Avicen*, *Cardanus*, *Cisalpinus*, *Beregardus* and others are examined, and the absurdity and impossibility thereof detected.

VI. That the *Mosaical* System, as well of the Creation of Man as of the World in general, abstractively considered without relation to the Divine Inspiration of the Writer, is highly consonant to Reason, and upon a bare rational account highly preferable before the Sentiments of those Philosophers that either thought Mankind Eternal, or substituted *Hypotheses* of his first Production different from the *Mosaical*.

VII. I have

To the READER.

VII. I have concluded the whole with certain Corollaries and Deductions, necessarily flowing from the things thus asserted, as well touching the Existence, the Wisdom, Power, Providence of Almighty God, as touching both the Duty and Happiness of Mankind.

Though this may seem a laborious Work to little purpose, since the generality of Christians, among whom I write, do generally believe this Truth of the Origination of the World and Mankind, as it is delivered in the Holy Scriptures; and thus to write in proof of a Truth generally received, doth rather create Doubts in Mens Minds of what they already believe, than any way advantage or confirm their belief.

I Answer, 1. That for my part I think Atheism so unreasonable a thing, so abhorrent to the Light of Nature and Sentiments of Conscience, that I cannot think there is so much speculative Atheism abroad in the World as many good Men fear and suspect: But if there be but one quarter of that Atheism in the World, I do not know any better Cure of it, or Preservative against it, next to the Grace of God, than the due Consideration of the Origination of Mankind. 2. Again, though the Creation of Man be generally acknowledged by *Jews and Christians*, yet we must likewise consider that many take it up only as a part of their Education, and not upon any serious, deep Conviction of the truth of it: and had such Men but an Education in such a Place or Country where it is not believed, or where it is doubted, they would be at least sceptical and doubtful in the belief of it. 3. The best of Men, and soundest believers of Divine Revelations, may be better confirmed by the accession and suffrage even of Natural Evidences of the Verities they already believe; but howsoever, it better enables them to convince such Gainlayers as will be governed in their Judgments by no other Light than the Light of Nature and Reason, and many such there may be met withal in the World.

And upon that account, my whole Discourse is bottomed upon Natural and Moral Evidences suited to these Mens Principles or Motives, by which they are guided and governed; yea when I make use of the Sacred and Infallible Scriptures, I do use them abstractively from their Divine and Infallible Authority, and only as Moral Evidences of the Truth I assert:
for

To the READER.

for any Man may easily foresee, that an Atheistical Spirit that denies or questions the truth of the Fact therein delivered, will not be convinced by the Infallibility of that Scripture which delivers that for a Truth, which he denies or questions.

This whole Book as thou now seest it, was written by me some Years since, and hath lain ever since in my Chest, and surely therein should have lain still, but only for Three Reasons: 1. Because that some Writings of mine have without my privity come abroad in Print, which I never intended; and this might have had the same fate, if not in my Life time, yet after my Death. 2. Because possibly there hath some more care been used by me in the Digesting and Writing hereof, than of some others that have gone abroad in publick. 3. That although I could never be brought to value the Writings of mine that are published, as worthy of the publick view, yet I find them well accepted by many, which encouraged me to let this Book come abroad under my own Name; wherein I used more care than in those lesser Tractates, although I have not yet confidence enough to say that this may deserve any great acceptation: though there be many things in it which may not please, yet I do think there be many things useful, and such as will not displease Judicious Readers.

If there be any Faults or Mistakes in Quotations, in Syntax, in Translations, in Transcriptions, or if there be any Errours (as possibly there may be) in my Deductives, Inferences, or Applications; or if the Language be in some places either improper or obscure, or if the Expressions or Words which we sometimes use be not so full, so significant, or proper, or delivered from Amphibologies, yet I must desire the Reader to take this Apology for it.

1. It was written at leisure and broken times, and with great intervals, and many times hastily, as my busie and important Employment of another nature (known to the World) would give me leave; which must needs make such Breaks, and Chasms, and Incoherences, that possibly a continued, uninterrupted *series* of writing would have prevented, and carried on the Discourse with a more equal Thred.

2. A long indisposition of Health hath much hindred and interrupted me in a strict revising and amending of what possibly might have been requisite to be done.

To the READER.

3. A Man whose scope, and intent, and drift is at some one thing, and hath his Eye and Design fixed upon it, many times is not so solicitous nor so curious, nor so exact in the choice of his Words, especially in Expressions of collateral things, not being the principal Subject of the Discourse, which though they may lye in his way, yet are not much under his strict advertence; but he thinks it is enough if he dresseth his Discourse so that it rend to what it principally aims and drives at. And hence it is, that in Chronological Computations, which I sometimes make use of, I content my self with a more lax and common Computation, without any great curiosity or exactness, because it equally serves my purpose as if my Computations were more critical and exact, even *usque ad minutias Chronologicas*; and so in some other mentions of Names and Times of Authors, and the like: and likewise in the choice of Words or Expressions, wherein possibly I may sometimes be too lax and free, using such as come next into my Mind, without a curious or critical choice; which is more excusable in a Discourse of this nature, than in some Polemical and Controversial Discourses of other natures, where Men usually catch at Words and Expressions, and it is the greatest part of their Business.

4. I must also desire my Readers pardon, in that in my Transcripts of some entire Texts out of *Aristotle, Plato, Plutarch* and others, I use the *Latin* Translation, and not the Original *Greek*, wherein the Authors wrote: I was a better *Grecian* in the 16th, than in the 66th Year of my Life; and my application to another Study and Profession, rendred my skill in that Language of little use to me, and so I wore it out by degrees.

And thus thou hast this Book presented to thy view, I wish thee as much Contentment in Reading as I had in Writing it: If there be any thing therein that may be useful to thee (as I suppose there may be) there is matter for my Contentment and thy Benefit; if all be not answerable thereunto, and to thy expectation, the former Considerations give thee reasonable Motives of Charity to excuse it.

The

The Contents.

S E C T. I.

C A P. I.

THE Introduction, declaring the Reason of the Choice of this Subject, and the Method of the intended Discourse.

C A P. II.

Touching the Excellency of the Humane Nature in General.

C A P. III.

A brief Consideration of the Hypotheses that concern the Eternity of the World.

C A P. IV.

Concerning the Origination of Mankind; and whether the same were Eternal, or had a Beginning.

C A P. V.

Concerning the Supposition of the first Eternal Existence of the common Parents of Mankind, and the production of the succeeding Individuals from them.

C A P. VI.

Certain Objections against the Truths formerly delivered, and against the Reasons given in proof thereof, with their Solutions.

S E C T. II.

C A P. I.

The Proofs of Fact that seem with the greatest Moral Evidence to evince the Inception of Mankind; and first, touching the Antiquity or Novity of History.

C A P. II.

Concerning the first Evidence, the Antiquity of History and the Chronological Account of Times.

b

C A P.

The CONTENTS.

C A P. III.

The Second Evidence of Fact, namely, the apparent Evidences of the first Foundation of the Greatest and Ancient Kingdoms and Empires.

C A P. IV.

The Third Instance of Fact, proving the Origination of Mankind, namely, the Invention of Arts.

C A P. V.

The Fourth Instance of Fact, seeming to evince the Novity of Mankind, namely, the Inceptions of the Religions and Deities of the Heathens; and the deficiency of this Instance.

C A P. VI.

A Fifth Consideration concerning the Decays, especially of the Humane Nature; and whether there be any such Decays, and what may be collected concerning the Origination of Man upon that Supposition.

C A P. VII.

The Sixth Evidence of Fact, proving Novitatem generis humani, namely, the History of the Patres familiarum, and the original Plantation of the Continents and Islands of the World.

C A P. VIII.

The Seventh Evidence of Fact proving the Origination of Man, namely, the Gradual Increase of Mankind.

C A P. IX.

Concerning those Correctives of the Evils of Mankind, which may be thought to be sufficient to reduce it to a greater Equability.

C A P. X.

The farther Examination of the precedent Objection.

C A P. XI.

The Consequence and Illation upon the premisses against the Eternity of Mankind.

C A P. XII.

The Eighth Evidence of Fact proving the Origination of Mankind, namely, the Consent of Mankind.

SECT.

The CONTENTS.

S E C T. III.

C A P. I.

The Opinions of the more Learned part of Mankind, Philosophers and other Writers, touching Man's Origination.

C A P. II.

Touching the various Methods of the Origination of Mankind.

C A P. III.

Touching the Second Opinion of those that assert the Natural Production of Mankind ex non genitis, or the possibility thereof.

C A P. IV.

Concerning Vegetables, and especially Insecta Animalia; whether any of them are sponte orta, or arise not rather ex præexistente semine.

C A P. V.

If it be supposed that any of those Insects at this day have their Original ex non genitis, or spontaneè; whether yet the same may be said a Natural or Fortuitous Production.

C A P. VI.

Supposing the Production of Insects were totally spontaneous, equivocal, and ex putrido; whether any Consequence be thence deducible for the like Production of Perfect Animals, but especially of Men.

C A P. VII.

Touching the Matter of Fact it self, whether de facto there hath been any such Origination of Mankind, or of any Perfect Animal, either Natural or Casual.

S E C T. IV.

C A P. I.

Concerning the last Opinion, attributing the Origination of Mankind to the immediate Power and Will of Almighty God.

C A P. II.

The Mosaical History touching the Production of the World and of Mankind, and the Congruity and Reasonableness of the Mosaical Hypothesis.

b 2

C A P.

The CONTENTS.

C A P. III.

Concerning the Production and Formation of Man.

C A P. IV.

The Reasonableness of this Hypothesis of the Origination of the World, and particularly of the Humane Nature, and the great Advantages it hath above all other Hypotheses touching the same.

C A P. V.

Concerning the Nature of that Intelligent Agent that first formed the Humane Nature, and some Objections against the Inferences above made, and their Answer.

C A P. VI.

The Reasonableness of the Divine Hypothesis touching the Origination of the World, and particularly of Man, and the preference thereof before all the other precedent Suppositions.

C A P. VII.

A Collection of certain evident and profitable Consequences from this Consideration, that the first Individuals of Humane Nature, had their Original from a Great, Powerful, Wise, Intelligent Being.

C A P. VIII.

A farther Enquiry touching the End of the Formation of Man, so far as the same may be collected by Natural Light and Ratiocination.

De



DE HOMINE.

CAP. I.

The Introduction, declaring the reason of the choice of this Subject, and the Method of the intended Discourse.

IT is an admirable evidence of the Divine Wisdom and Providence, that there is that suitable accommodation and adaptation of all things in Nature, both to their own convenience and exigence, and to the convenience, use, and exigence of one another, which evidenceth, 1. That all things are made, governed, and disposed by a most intelligent, and wise, and powerful Being. 2. That that governing Being is but one, and that all this accommodation, and adaptation, and mutual subservience of the things in Nature are the product of one most wise decree, counsel, and purpose of that one most wise, intelligent, and soveraign Being.

It is not here seasonable to make a large prosecution of the particular instances of that accommodation of things in Nature, nor of the necessity of the former consequences arising from it. The instances thereof, that are suitable to the Design meant in this Discourse, shall be only these two, which I shall but shortly touch: 1. The admirable accommodation of Sensible Faculty to the Objects of Sense, and of those Objects to it, and of both to the well-being of the Sensible Nature: 2. The admirable accommodation of the Intellectual Faculty in Man to Intellectual Objects, and of those Objects to it, and of both to the well-being of the Humane or Rational Nature.

Touching the former, the Sensible Nature in its complement and integrity hath five exterior powers or faculties, that are accommodated to all those motions or impressions of natural bodies, and their accidents which are useful to it, and by these five ports or gates all those impressions which are useful for the perception of the Sensible Nature are communicated to it, namely, the five exterior Senses. It is not only possible, but very likely, that there may be such motions or qualities of Bodies, that make not any impression upon any of those Senses, but if there be such, they are such as are not of use for the perception or convenience of the Sensible Nature. But for such as are necessary for such perception of the Sensible Nature, there is no motion, quality, or operation of external Bodies, but what hath accommodated to it a Faculty in Sense receptive of it: Is there such a motion or objectiveness of external Bodies which produceth light or colour, figure, vicinity, or distance? the Faculty of Sight is fitted to receive that impression or objectiveness, and

B

that

that objectiveness fitted and accommodate to that Faculty. Is there that motion or objectiveness that causeth sounds? the Faculty of Hearing is fitted to be receptive of it, and that objectiveness or motion (or what ever it is) fitted to make an impression upon that Faculty. And so for the other Senses. And by this adaptation and congruity of these Faculties to their several proper Objects, and by the fitness and proportionateness of these objective Impressions, Qualities, or Motions, upon their respective Faculties, accommodated to their reception, the Sensible Nature hath so much of perception and reception of things as is necessary for its sensible Being. I speak not here of those other interior Senses of Discrimination of the Objects of Sense, Phantasie, Memory, Appetite, and the rest, for they are not at present to my purpose.

II. And what is thus excellent and admirable in the accommodation between the sensitive Faculties and their Objects, is to be observed in the intellectual Faculty, though the Faculty and Object are far more noble and excellent than that of Sense. As there is an accommodation between the visive Faculty and its Object, and as there is an accommodation between the Faculty of the Taste and the Object, the Object fitted to make an impression upon the Faculty, and Faculty fitted to take the impression from the Object; so there is an accommodation, and suitable adaptation, between the intellectual Faculty and the intelligible Object, the Object as it were thrusting it self into the Faculty, and the Faculty receiving and perceiving the Object.

The means of derivation, and immediate union of these intelligible Objects to the Understanding, are various: Sometimes divine and supernatural, as by immediate irradiation or revelation; sometimes artificial and instituted, as by discourse and instituted signs, and thus Intelligibles are conveyed from one man to another by words or writing; sometimes natural, and that seems to be by three kinds of means, 1. by the mediation of Sense, which is ordinarily the first basis of all humane intellectual knowledge; 2. by ratiocination or discourse of the Mind, whereby even from sensible Objects the Intellect receives a farther prospect of other Intelligibles, not immediately presented by or to the Sense, but by consequences, deductions, and conclusions deduced from things more obvious to Sense, and perchance at first represented by it; 3. there seems to be a third means, which is a kind of intuition; there are some truths so plain and evident, and open, that need not any process of ratiocination to evidence or evince them; they seem to be objected to the Intellectual Nature when it is grown perfect and fit for intellectual operation, as the Objects of Light or Colour are objected to the Eye when it is open, they are understood and assented unto *quasi per saltum & intuitum*; and though these truths are such as are also deducible by ratiocination and rational process, yet the connexion between the premisses, and the conclusion in them, are so clear, and the transition from the premisses to the conclusion is so swift, short, and clear, that it seems to be in a moment, and the assent to them and evidence of them is instantaneous; such are many conclusions of moral and intellectual truths, which seem upon this account to be congenite with us, connatural to us, and engraven in the very frame and compages of the Soul, because they are Intelligibles of that nature that present themselves, and thrust themselves into the Understanding

imme-

immediately, and many times without the mediation of Sense or Ratiocination. There is that primitive congruity between these Intelligibles and the Intellectual Faculty, that they are immediately united as I said by a kind of intuition, and though they are deducible by ratiocination, as conclusions from premisses, yet in respect of their swift *transitus* in the Understanding they seem to be principles.

Now this excellent Faculty of the Understanding, though it seems to be passive in relation to its reception of its Object, yet it is not barely a passive Faculty, it hath an activity about that Object that it receives, and it actively trades upon it to its farther improvement.

And therefore according to the nature of this excellent Faculty the Understanding (which as it hath been said is partly active and partly passive) there are two things that do much improve and enrich this Faculty.

First, It is improved by its Exercise and Employment; the very Faculty it self will degenerate, and grow sluggish, dull, and rusty by idleness: The exercise of the Intellectual Faculty makes it agil, quick, and lively, yea though the object about which it is exercised be poor, little, and low, yet a Man hath this advantage by the exercise of this Faculty about it, that it keeps it from rust and torpidness, it enlargeth and habituates it for a due improvement even about nobler Objects.

Secondly, It is enriched by the nobleness and worth of the Object about which it is exercised, when the Object is noble, generous, useful, and suitable, at least in a convenient degree to the worth of the Faculty: Diligence and Industry, and exercise of the Intellectual Faculty therein, doth not only exercise, employ, habituate, and enlarge the Faculty, but enrich and enable it by the worth of the Object wherewith it is furnished.

There is so great variety of Intelligibles in the World, so much objected to our Senses, so much deducible from them by Ratiocination and Discourse, and every several Object so full of subdivided multiplicity and complicateness: And on the other side, the life of Man so short, and the approaches of the Understanding to the knowledge of things, is for the most part so slow, and gradual, and difficult, that it is not to be hoped that a Man should ever attain the full comprehension even of any small inconsiderable Insect, with all its connexions, dependences, relations, deductions, and consequents; much less can it be expected, that any Man should ever attain the full knowledge of that stupendous multiplicity and variety, that appears in all or any considerable part of those Objects of our Senses that occur in that *mundus aspe&abilis* which every day we behold: And yet even the World we see is the smallest part of that which we neither do nor can see.

Therefore it seems to be worth the care of a Man, that hath a desire to improve those two great Talents that God hath lent us, namely, his Time and his Faculties; that he not only exercise his Faculty to keep him from sloth and idleness, but out of this great multiplicity of Objects to chuse some such for the exercise of his Faculties, that by their worth and value may improve and advance them; and such as may be profitable for this use and exercise, and in some measure attainable with competent certainty and satisfaction.

There be certain qualifications that do much commend an Object to a Man's Enquiry, which are principally these: B 2 First,

First, the nobleness and worth of an Object: Secondly, the usefulness of this Object being known, or of the knowledge of it: Thirdly, sufficient certainty touching the Object, or of the knowledge of it: Fourthly, that the Object be such as may be large enough to satisfy the Intellective Faculty, and yet not distract it through its multiplicity, vastness, or extent. Something I shall say of each of these.

I. The first qualification in the choice of an Object is, that it be noble and worthy of the Faculty that is employed about it. There is not only a congruity herein between the nobleness of the Faculty and the Object, but also the Faculty is enriched and advanced by the worth of the Object. It was the reproach of *Domitian* a great Emperour, that he busied himself in hunting of Flies: Yet I do not blame the pursuit of the Works of Nature, even in the Contemplation of the smallest Works thereof, for though the things themselves are comparatively low, and inconsiderable, yet even in the smallest Vegetable or Animal, even in the very little Insects, there appears the excellent Work of the Divine Wisdom, and therefore there is a worth and excellency in the Contemplation of them, especially when that Contemplation is directed to the search and admiration of the great Wisdom and Skill of the great Creator, who in many small Insects, that in respect of their minuteness almost escape the Sight, hath placed and digested as great a variety and excellency of Organs, Faculties, and Instincts, as in the Whale or Elephant: And therefore the Labours herein of *Aristotle*, *Fortunius Licetus*, *Muffetus*, *Aldrovandus*, *Goddart*, and others, that have written whole Volumes concerning the generation, production, alteration, and variety, even of small Insects: Flies and Worms are not without their worth and use, seeing in the least of these the curious Wisdom, Skill, and Power of the great Maker of all things is conspicuous, and though they are but little Rills, yet if they be closely followed, they are and may be Manuductions to lead us to that Ocean of Wisdom, Power, and Goodness of the God of Nature, from which they had their original.

II. The second qualification that commends an Object, or Subject of Enquiry, is the usefulness of its knowledge. It is true, that there is scarce any kind of knowledge of any Object but is grateful and useful in some measure to the Understanding: But among the *Scibilia* or *Intelligibilia* in the World, there are several degrees, some are not only useles to be known, but seem to be meer impertinencies, as for instance, many Grammatical Criticisms, and how this Word was written by one Author, how by another, what fashion Cloaths the *Roman* Officers, Military, Civil or Sacred used, and very many Curiosities relating to Languages: It is true, so far forth as Words and Languages are means to derive unto us the memory, relation, or understanding of the things contained under them, so far the knowledge of them is useful in order to that end, but Languages simply in relation to themselves are but a narrow piece of speculation, and consequently those great expences of time and study that some have taken about little useles Criticisms, and trifles of that nature, hath been an improvident expence, and misemployment of their time and faculties. Again, some things there are which are yet of more value, but yet but of little use, they are known only that they may be known, or inquired into only for the exercise of Wit, Invention and Subtilty:

Subtilty: What great pains hath been taken concerning the Quadrature of a Circle, and the Duplication of a Cube, and some other Mathematical Problems? And many Men have spent much time, and written great Volumes touching those matters, which yet were they attained, the knowledge rests in it self, and is never applicable to any use answerable to the pains of their acquest. Again, there be many things touching Matters Physical, which though they are full of contentation to be known, and have their use thus far, that they are an inquiry and discovery of things that are the Works of God, and of his Wisdom, and serve to explain many *Phenomena* in Nature, yet they are otherwise of little use to Mankind; as concerning the degrees of acceleration of Motion; the gravitation of the Air, the existence or non-existence of empty spaces; either coacervate or interspersed, and many the like, which have taken up the thoughts and times, and exercised the Wits, and even the Passions of Men in Disputes concerning them; and yet though the knowledge of them is curious, and contenting in it self, yet it is not much ordinable or applicable to the use and benefit of the Man that knows them, or of others: And therefore though the knowledge of these Objects be commendable unto us upon an account of their contentation and curiosity, yet they do not commend their knowledge to us upon the account of their usefulness and beneficialness.

Again, some Objects there are that are not only noble in themselves, but they have also at least a mediate and preparatory usefulness to Mankind, though perchance in themselves and immediately they have not that commodation. Thus the knowledge of divers parts in Natural Philosophy, and the rules, motions, and variety of Qualities and Operations of divers Natural Objects, the connexion of Causes and Effects, the observation of the Order of things in Nature, are of singular use to carry the Mind up to the acknowledging and admiration of the Great Efficient and Governour of the World, of His Wisdom, Power, Goodness, Bounty, and consequently to raise up the Heart to veneration of Him, dutifulness and gratitude unto Him, dependance upon Him, and a deep impression of Natural Religion towards Him, and of all those consequents that arise in the Mind and Life from this habit of Religion: So true is the Saying of an excellent Naturalist of our own, *A little knowledge in Philosophy may perchance make a proud empty Man an Atheist, but it is impossible that Atheism can lodge in a Mind well studied and acquainted with Natural Philosophy.*

And as thus the knowledge of Nature is useful to Mankind, to bring him to and confirm him in the knowledge of the Glorious God, so it is preparatively useful, and indeed necessary to many useful things in this Life, as to make a Man a good Physician, *ubi desinit Philosophus ibi incipit Medicus*, where the Philosopher ends the Physician begins; which next to the knowledge of Almighty God is of great necessity and use to Mankind.

And touching Geometry, Astronomy, and Arithmetick, though in the knowledge of them there be many things that are nice and curious, and not so much in order to use as to speculation and exercise of Wit, yet they are such Objects, the knowledge whereof is in many things very beneficent to Mankind, as we see in the construction of all Mechanical Engins in

in the measuring of Bodies, Superficies, and Distances, in the Rules and Exercise of Architecture, Fortifications, and ordering of Battalia's, Computations and Reckonings in Contracts and Merchants Affairs, in Navigation, in the Measure and Computation of Time, and the right knowledge of several Seasons, these Mathematical Subjects and Sciences have great use in relation to humane affairs and concerns.

And as thus those more curious Sciences have their use in the Affairs of Mankind, and are commended unto us, not only upon the account of the nobleness, but also of the usefulness thereof; so the knowledge of History, of Humane Laws, of Moral Philosophy, and of Political and Oeconomical regiments of the various Modes, Temperaments, and Qualifications of Governments, with their Appendages, are upon the account of their usefulness to Humane Society, and the Peace, Tranquillity, and Order of the World, and of the particular Societies, Relations, and Persons therein commended to our knowledge and contemplation, as things without which the World of Mankind would soon be in disorder and confusion. And although these Studies are not so pleasing and grateful to the Understanding, as those other more curious Contemplations either Physical or Mathematical, yet they recompence it with the excellency and necessity of their use, in relation to the noblest visible Creature, Man, and in relation to his noblest and most useful posture and station in this World, namely, a state of regulated Society and Government.

Now according to the kind or degree of the usefulness of the Objects to be known, so the knowledge thereof is more or less commended unto us, upon the account of the various degrees of usefulness: Some Objects and their knowledge are of greatest value, because their use is of more universal concern and important necessity, and such is the true knowledge of Almighty God, His Greatness, Power, Wisdom, Goodness, and Will, especially as He hath revealed Himself in His Word, and those noble habits that upon that account are ingenerated in the Soul, as Religion, Gratitude, Obedience, and Tranquillity of Mind, Regularity of the Soul and Life.

And upon the same account there is a great value in knowledge of Morals, and of those Duties that we owe to our selves and others, and a conformity of Minds and Lives to the Dictates of Religion and Morality. And the excellence of their use, and consequently the commendation of that knowledge upon that account is evident in these particulars: 1. The right and true knowledge of those things do not only perfect our Souls and Natures by the excellency of the knowledge it self, but they perfect our Souls and Natures with Goodness: They do not only perfect the Intellectual Faculty, but they also perfect the Volitive Faculty; they make the Man not only more knowing, but more wise, and they also make him the better, more just, sober, temperate, religious: A Man may know very much in Mathematicks and Natural Philosophy, and yet be a bad Man; but a Man truly acquainted with the knowledge of God, and with the due sense of his Duty to Him in matter of Religion, and his Duty to others in points of Morality, which is a part also of the Divine Will, is not only a knowing Man, but becomes also a good Man (if indeed his knowledge be found and true).

Again,

Again, 2. All other knowledge merely or principally serves the concerns of this Life, and is fitted to the meridian thereof: They are such as for ought we know will be of little use to a separate Soul, at least we do not know whether the Soul in its state of separation will be much concerned in the knowledge of Physical or Mathematical Learning, or the Rules or Methods of Political Regiment: But this we are or may be sure, that the Soul will carry with it into the other World that knowledge of God which it acquires here, and receive an unspeakable improvement thereof by a nearer union to Him; and it will carry with it those improvements and advances of Piety, Goodness, Righteousness, Holiness, those Habits and Graces that it began here, and as the Soul is improved and made the better in this Life by this knowledge, and those effects and meliorations that it here acquired by them, so it will carry along with it those advantages to the next World; for there is a connaturality and congruity between that knowledge and those habits, and that future estate of the Soul. So that this kind of knowledge is not only serviceable and useful for the present Life *in via*, but is proportioned to that state that is *in patria*.

And as touching the knowledge of things that are merely accommodate to the present Life, they receive their disparity of value in this respect, according to the disparity or different degrees of usefulness. Some are useful for nobler ends, some for lower and more inferior ends; some are in a greater degree useful for the same ends than others; and according to the varieties of ends, uses, and their degrees, the knowledge of them (as in reference to this part of the commendation of an Object, namely, usefulness) is more or less eligible. But this is too large a Subject particularly to prosecute in this place.

III. The third commendation of a Subject of Contemplation, and that renders it eligible, is Certainty. Where the Subject is uncertain, and the evidences touching it doubtful, although perchance the speculation that it affords be very high and sublime, yet such a Subject is not in this respect so eligible as what is more certain, for it leaves an impartial and serious Mind full of doubt and dissatisfaction; and where it meets with a Man of a busie phantasia, self-conceited, and partial to himself and his own thoughts, and that would be thought to know beyond the common standard of other Mens Reason, it puts him upon the confident framing of Hypotheses built merely upon Imagination, and from these weak foundations he deduceth Systems of Consequences and Conclusions, which being built upon meer fanciful and inevident Suppositions, fall to nothing but dust and smoke as soon as their evidence is impartially examined. Some Subjects are so remote from us that we are strangers to them, and our knowledge concerning them is merely conjectural, and those very conjectures for the most part wanting competent *media* to make them tolerably probable. Concerning the Extent of the Universe, the Plurality of Worlds, the State of Heavenly Bodies, whether they are inhabited, and with what kind of Inhabitants, whether they are animate Bodies, whether they are moved by Intelligences, or by their own Forms, or by the motion of the Body of the *Aether*, or those imaginary *Vortices* wherein they are placed: These and many such Speculations touching things at this distance may gratifie the Imagination, but never

never satisfy the Mind. Again, some things though they are or may be near unto us, yet are of that subtilty that they escape our Senses, and thereby we cannot make our approaches to their discovery. As concerning the Nature of Spirits, their *ubi, motus*; the manner of their Intellection and mutual communication of Notions; by what means or in what manner actual Intellection is effected in the Soul; how the Species, Order, and Circumstances of things are preserved in the Memorative Faculty or Organ, or where else; these and many other hidden parts of Nature, even of a far lower form, are unaccessible to us.

The Contemplation of the Universe, and of the Natural Causes and Effects therein, is indeed an excellent Contemplation: For, first, it exerciseth the Intellectual Faculties, keeps them in motion and employment, and thereby perfecteth them. Secondly, It is full of delight and contentation to the Mind. Thirdly, Although the Understanding attains not a perfect discovery of what it searcheth after, yet many times undesigned and unthought of discoveries of many excellent things recompenseth the loss of the principal intention; as those that have bent their endeavour to attain the Philosophers Stone, though they never attain their end, yet in their process towards it do many times light upon excellent discoveries which they never thought of or designed, which in a great measure recompenseth their disappointment in the Particular sought after. Fourthly, It gives a great discovery of the admirable Wisdom and Power of God in framing and ordering of the World, and so becomes a manuduction to the knowledge, acknowledgement, and adoration of Him.

But yet when we consider how short and weak our best discoveries are in the most accessible, obvious particulars, and narrowest Integrals of the Universe: When we consider how many things in Nature escape our Senses, and the discoveries thereof; and yet how much we stand in need of the discoveries of Sense, and sensible and experimental observation, to bottom any sound conjecture concerning the Nature, Causes, and Effects of the things in Nature, and how uncertain, fanciful, and imaginary our Suppositions are without it; whereby it comes to pass, that we many times frame suppositions and conclusions concerning things supposed to be in Nature, before we have any certain evidence, whether in truth the very things about which we frame our suppositions or conclusions have at all any real existence, or if they have, yet for want of a clear, and sensible, and experimented observation of them, our positions and conclusions touching their Causes, Effects, Order and Methods of their procedure are but fictions and imaginations, accommodated to our Inventions rather than to the things themselves, and such as we rather project we would have them be, if we had the making of them, than what in truth they are. And lastly, if we consider the vast extent and multiplicity of the whole Compass of the Universe, and the things therein contained, the many parts thereof, that either in respect of their tenuity or distance escape the reach of our Senses; the infinite complications and combinations of several concurrences, causes, and contributions to the constitution and operation of almost every Integral in Nature, the shortness of our Lives, and the many necessary diversions that we have, and must necessarily have from those Contemplations. I say, when we consider these

these things, it seems a thing utterly to be despaired of to attain a full, certain, evident knowledge of the whole Universe, or of any considerable portion thereof.

And hence it is, that if we consider the various *Hypotheses* of the ancient and modern Philosophers, touching the general Systeme of the World, and those more Universal and Cardinal Solutions of the common and great Appearances in Nature, we shall find them or the greatest part of them, to be little else than excogitated and invented Models, not so much arising from the true Image of the things themselves, or resulting from the real Existence of them, as certain instituted and artificial Contrivances of mens Wits and Fancies. And these Suppositions being thus invented, they distort, stretch and reduce the Orders of things in a conformation to those pre-conceived Suppositions; and then by the Inventors of them, and those that are their followers, and would seem to be men of quicker sight than others, and not to come too short of the perceptions of their Leaders, they are in a little time magnified into the true Solutions of the *Arcana Natura*, and then all or most of their Argumentations, Positions, Superstructions and Conclusions, are founded upon; and conformed unto, and deduced from these excogitated *Hypotheses*, as if they were the true, and only and real frame and constitution of things; when they have as little reality, and less evidence than the imaginary solid Spheres in the Heavens, or their Musick, the Horses of the Sun, or any other Poetical Fictions.

And if at any time some one *Phenomenon* of Nature appears, that crosseth any of these Suppositions or *Hypotheses*, or suits not with them, or is not saved by them, presently great pains is taken to supply that Defect with some subsidiary Supposition, that may stop that Leak, and piece up the *Hypothesis*, which must be presently granted to be true, not because there is any evidence of it from the things themselves, but because it suits with that artificial and precarious *Hypothesis* which was before taken up and made much of.

This we may easily observe to be true, if we should examine all the various Suppositions of leading men in their several Sects.

The Chymical Philosophers make their *Tria prima*, *Salt*, *Sulphur* and *Mercury*, the great constituent Principles of all Bodies; others add two more: And their evidence that they are so, are, because they find by their solutions by Fire, some things which they call by these Names, to be that whereinto Bodies are dissolved; when, for ought can be evidently made out, many of these are not so much really in the constitution of the Bodies themselves, as the very alterations or changes of them by the force and energy of that active Element, or at least, though after their solution, they assume the shapes of *Salt*, *Sulphur* and *Mercury*, yet there are even in those Consistences very various Contextures, differing extremely in each Body from other, though they seem to assume some analogy of shape: And possibly there may be a thousand Constituents of different Natures from any of these supposed Principles in Bodies, both before and after their solution by Fire or Heat.

The *Aristotelians* have excogitated another sort of Suppositions of Principles, *Matter*, *Form* and *Privation*. And yet it is very difficult to conceive that any such thing should be as *Matter*, undetermined by something called

called *Form*; and as difficult to conceive what many sorts of these Forms are (which they call substantial) whence they arise, what becomes of them, whether some of those they call Substantial, are any other than the various Modifications of *Matter*; whether others of them are not some middle Nature, neither Bodies nor Accidents, but Powers of a different nature from Bodies, Accidents, or Qualities, or Substances, though not so obvious to our perception: This *Hypothesis* therefore seems for the most part, to be a kind of artificial contrivance, not wholly taken from the natures of things, but fitted to give some kind of explication of them; and for the most part an Engine to guide our Conceptions, as the Figures in *Logick*, or the artificial Schemes for the finding out a *Medium* used by them; *Barbara*, *Celarent*, *Darii*, &c. *Napæas*, *Cipinis* vel *Nipis*.

Again, if we look upon the Supposition of *Epicurus*, and his Explicator, *Lucretius*, and his Advancer, *Gassendus*, how many things must be taken for granted, that are not only perfectly invident to our sense, but altogether improbable: The multitude of physically indivisible Atoms, their strange Figures accommodated to their Motion, Adhesion, and Coagulation, their declined Motions, and the means of their Coalition: And when all this will not serve to contain things within any possible certainty or specific determination, to patch up that defect, certain *Moleculæ Seminales* must be supposed to make up that Defect, and to keep the World and its Integrals from an Infinitude and Extendibility of excursions every moment into new Figures and Animals; and yet made up merely by chance, and by the contexture of those Atoms which have neither quality nor energy, nor any thing else besides their small and imperceptible Moles, to make them operative, and that Local Motion which they there have; but they teach us not from whence they have it.

Again, If we look upon *Des Cartes* his Supposition, who was not altogether content with the former, but gave it some Correctives, though the main *Substratum* be of *Epicurus*; what colour of evidence have we of the various Configurations of his Atomes, the grinding of them round by their mutual attritions, the coalition of the Globular Atomes into the Heavenly Bodies, the filling of Chinks and Interstices by the *Ramenta* of the greater, whereby a *Materia Subtilis* is diffused through the Universe, which is invisible, performs most of those motions that we see in things, that the Animals are only Engines, and actuated by the mobility of this subtil matter? These, and infinite more artificial Inventions of his there are, that neither Sense nor Reason could ever acquaint him or us with; but they are an ingenious Creature of his own fruitful Invention, wittily framed to explicate not so much the Nature of things, but those Conceptions he entertained thereof, and to reduce and range them into an Order contrived by him, not by Nature.

This Excursion I have used to shew how great a difficulty there is for a man to have a suitable conception of the great Fabrick of the World with any tolerable certainty, whereby it hath come to pass that the readiest and most exercised Wits have fallen into so great varieties of explication thereof, and yet all of them so full of unevidence and uncertainty, so full of precarious and imaginary *Postulata*, so

full

full of unreasonableness, and improbability, and impossibilities in themselves, and one with another, that a man that is not imposed upon by the Veneration of the Authors, or his own Phantasia, cannot tell how to fix in any of them but must cry out upon them with the Comedian, *Probè fecistis, incertior sum nunc quam dudum*: Ye have mended the matter well; I am now more in doubt than before: Neither are we ever likely to attain any certain or satisfactory knowledge in the Physical Causes, Effects and Appearances in their largest extent and latitude.

4. The fourth commendation of an Object of Knowledge is, that if it be merely Physical or Mathematical, it bears some proportion to the Intellective power, neither too narrow, and circumscribed into a small compass, nor yet too full of multiplicity: The former satisfies not the Understanding; for it soon exhausts all that is in it, and leaves the Understanding no work to exercise it self withal. The latter surchargeth and oppresseth the Understanding with its multiplicity. And upon this latter account it is, that although the whole Universe and every part thereof are Objects full of excellency and worth; yet the multiplicity thereof is so great and various, that the Understanding falls under a kind of dependency of getting through so great a Task: and those that have undertaken the full speculation of all the parts of the visible World, have done it but superficially, lightly, and in Generals; the time of Life and the Intellective faculty, that moves but gradually and successively, have not been sufficient for an exact account of all things visible: And therefore they that have designed exactness and deep scrutiny into things, have taken some one part of Nature for that purpose; and even in those single Objects there is most commonly a connexion of such various Appendances or Incidents that they that have set themselves upon such seemingly narrow Enquiries, have found it a business enough to take up a greater portion of Time and Enquiry than our short Lives will afford us; as may easily appear by the great and large Tractates of them that have written concerning the little Organ of the Eye, or the Visive Faculty, the Magnetick Motions and Variations, or some other single Organ or Faculty of the Reasonable or Sensitive Nature.

Among the many Objects of Knowledge, there seem to be two especially, which upon the most part of the before-mentioned accounts, most commend themselves to our contemplation and enquiry; namely, the knowledge of the ever-glorious God, and the knowledge of our selves and the Humane Nature. Almighty God is the highest and most excellent and sovereign Object of the Intellectual Faculty: It is true, he falls not under the last qualification. Though he is but one, and one most simple uncompounded Being, yet his Nature and Perfections, his Power, Wisdom, Goodness; and all other Excellencies are infinite and incomprehensible by any intellectual Nature but himself; and therefore he is an Object infinitely too large for the comprehension of any created Understanding: He is a Light too bright for our Intellective eye to see, but by reflexion, or through the Vail of his Word or Works. The more we know of him, and the more we draw near unto him by serious and humble contemplation, the more we discover an endless and unsearchable Ocean and Perfection in him, so that we must not, cannot expect to find out the Almighty to perfection; his ways are unsearchable and past

C. 2

finding

finding out, and much more his Essence and Perfections; so that though he be the most natural, and the most desirable Object of created Understandings; he is an Object infinitely too large for it.

But although in respect of the measure of his Perfection, he be an Object unproportionate to a created Understanding, a Light too bright, and an Ocean too large and too deep for it, yet there is so much of his knowledge attainable by us, as is sufficient for use, nature and everlasting happiness: and the knowledge of Almighty God, so far as it is attainable by our narrow created Understanding, highly advanceth the humane Understanding upon all accounts, and infinitely excels the knowledge of any other Object in the world, upon these ensuing accounts among many others.

First, It is a knowledge of such an Object that hath the greatest and most convincing certainty in the world, a certainty that he is, and in a good measure a certainty what he is, for though it be impossible for any or all the created Beings in the world, to attain a distinct, perfect and full *idea* of the Divine excellencies, in their full, adequate, distinct perfections; yet that Image that he hath given of himself, in the admirable Frame of so much of the world which we know, doth with all imaginable certainty evince, That he is, that he is but one, one most intelligent, wise, powerful, free, good, simple, eternal, infinite and most perfect Being, the Fountain of Being; and the first Cause of all things, though we cannot attain the full comprehension of that perfection: And truly it is no small evidence of the Divine Wisdom and Goodness, That that great and important Truth of the being and perfection of Almighty God (the Principle and Object of the greatest importance in the world to the good of Mankind, and for the advance and perfecting of humane Nature) should be written in such plain, clear and evident Characters in the Works of Nature, and evinced by Evidences rising from thence, as are obvious to any person that hath but the common use of Reason, and the honesty to use and exercise it sincerely.

Secondly, It is the most noble and excellent Object in the world, and that may and doth most enoble and advance the intellectual Faculty; he is the Fountain of all Being; and of all Perfection: Those Excellencies that are in the noblest created Natures in the world, are but shadows of that perfection that is in him: Though a created Understanding can never take in the fulness of the Divine Excellencies, yet so much as it can or doth receive thereof, is of greater extent, use and value, and doth more advance and enrich the Faculty, than any other Object in the world, though that other Object were fully and adequately known.

Thirdly, Although the Understanding can never search out the Almighty to perfection, by reason of the infinite excess of this Object, beyond the capacity of a created Faculty, yet there is that congruity between this Faculty and this Object, that connatural ordination, as it were, of Intellectual Faculty to this Object, as if it were (if not only, yet principally) lodged in the humane Nature for the sake of this Object; so that though there is no commensurableness between this Object and a created Understanding, yet there is a congruity and connaturality between them: And hence it is, that so much as we do or can know of God, is delightful and grateful to the Understanding. And though

though this abyss of excellency be infinite, yet it doth not confound, nor disorder, nor overwhelm the Understanding in its modest and due searches into it: And besides, although the perfection of his Essence, and many of his Attributes, as Infinity, Immensity, Indivisibility, &c. do dazzle our Understandings, yet some of his Attributes, and the Manifestations thereof, are not only highly delectable to the Intellectual Faculty, but are suitable and easily conceivable by us, because apparent in his Works, as his Goodness, Beneficence, Wisdom, Power, &c. if we attend to it.

And certainly it was the great Goodness and Condescension of the Glorious God unto his Creature Man, that when he knew all his own Excellencies were too great and too bright for us to see, he hath been pleased to discover so much of himself as was fit and necessary for us to know, by means that our Faculties might use without dissipation, distraction, or too great astonishment; namely, first, By his Works, reflecting his Greatness and Goodness. Secondly, By his Word, by Divine Revelation discovering his Goodness, Mercy, Power and Truth. Thirdly, By his Son, through the Vail of our Flesh, by all which that Brightness and Splendor of the Divine Excellence, that by an immediate intuition or exhibition would have overwhelmed our Intellectual Faculty (as it stands united to our Bodies) is presented to us more proportionately to our Capacities and Faculties, by a kind of refraction, and a more easie and familiar manifestation.

Fourthly, It is the most useful Object of our Knowledge that can be; and in comparison of this, all other Knowledge is vain, light and impertinent; and indeed all other knowledge is valuable upon this single account, by how much it gives us a manifestation of the Divine Excellencies, and leads and conducts to the knowledge of Almighty God and his Attributes. If I consider my self in this Life, there is not a moment which I live, or wherein I have any contentation, or comfort, or convenience, but all this I have from his Influence and Bounty; and certainly it concerns me highly to know my Benefactor, from whom I receive my Good, that I may depend upon him, be thankful unto him, propitiate him, and make my applications to him for what I want. Again, the wisest men that have searched after happiness in this Life, though they have missed of the place where it is to be found, have with great reason placed the best happiness that can be found on this side Death, either in Virtue and the exercise thereof, or in Tranquillity of mind, or in both, for they are rarely asunder. Now I may be an excellent Mathematician, a man well seen in Natural Causes and Effects, an excellent Statesman and Politician, and yet be without that Goodness that may denominate me justly a good man, and without that tranquillity of mind that may make me a happy man; but the true knowledge of God, seriously and really dwelling and digested in the Soul, makes a man a good man, and a happy man: it makes a man to love, fear, honour and obey him that he thus knows. A man cannot truly know him, but he must know that in him, which by a moral necessity raiseth in a man those Habits and Dispositions, namely, of Religious Piety towards God, Justice and Righteousness to men, Sobriety in relation to himself, for in knowing this God, he knows that these things are well-pleasing to him, and the contrary

trary displeaseth him, and he knows him to be a God that knows all things in the world, and that is a bountiful Lord to them that love and obey him, and a just Judge of them that despise or forsake him. And as thus it makes him good, so it makes him happy, by giving him the highest and most firm Tranquillity of Mind that can be; for he knows that this most gracious and powerful God orders and governs all the things in the world with irresistible power, exquisite and infinite wisdom, and abundant goodness, and that he is well pleased with them that love, fear and obey him; and upon all these accounts a man rejoiceth in his Favour, depends upon his Power, Goodness, Wisdom and All-sufficiency, resigns himself to his Will, is contented and patient under all conditions, and so doth enjoy perfect tranquillity of Mind.

But this is the lowest portion of the usefulness of Divine Knowledge. There is another Life after this, a Life of eternity, and the influx of the knowledge of God in relation to this everlasting Life, is infinitely of more moment; it fills the Soul with a capacity of it, with a suitability and state of congruity to it, with those preparations, dispositions and habits that are necessarily pre-requisite for it, and gives him the fruition and perfect enjoyment of it: That measure of the knowledge of God that we attain, is the best happiness we enjoy in this Life. and the perfection of our happiness in the Life to come, where we shall have a more perfect intellectual Vision of the Glorious God, and as full a fruition of the Goodness of God, as that elevated Nature which we shall then have, can be capable of: Then that measure of the knowledge of God which we here acquire, shall be refined and advanced to a degree of perfection suitable to the advance that this Intellectual Faculty shall then receive; and that measure of goodness that by the means of that knowledge is wrought in the Soul in this Life, shall then be improved to a higher degree of excellence, and rewarded with a weight of Glory.

This Knowledge therefore of all other Knowledge is to be preferred: And in all our busie inquisitions touching other things, we must remember our selves, as our Lord remembred *Martha* in the Gospel. We are busie about many things, and trouble our selves with many Enquiries; but there is one thing, one Object, and the knowledge thereof necessary, namely, the knowledge of the glorious God: *This is life eternal, to know thee the only true God, and Jesus Christ whom thou hast sent,* John 17. 3. Whatever therefore we endeavour to know, it must be with subordination to the endeavour after this knowledge: And as far as is possible, all other knowledge, and desire thereof, should be directed to the improvement of this Knowledge, or in order to it, and to the end acquirable by it.

The second profitable and useful Object of our Knowledge, is, the the Knowledge of our selves: And next to the Knowledge of Almighty God, and his Will, and his Son, this Knowledge of our selves, seems most worthy of our endeavour: And therefore I have chosen this Subject for my search and examination at this time: For in this Subject we shall find all those Qualifications or Requisites before-mentioned, that commend any Subject to our Enquiry or Knowledge.

Of any one visible Subject in the compass of created Nature, there is none

none that we know and are acquainted with, that hath more worth and excellency next to the great Creator of all things, and the holy Angels; and that which seems to be most noble, the Image of the glorious God; namely, the Universe, as it comprehends the Systeme, Order and Excellencies of all created Beings, digested into their several Ranks and Orders, and collected and put together into that glorious Frame of the Universe: But as it is impossible for us, at least in this Life, by any means to be acquainted with all the Integrals of that glorious Structure, some are in their nature imperceptible by our Sense; namely, the Spiritual Beings; yea, and the more refined parts of material Existences, which by reason of their subtilty, escape our perception: Other parts thereof are so remote, that although they might in their own nature be perceived by Sense, yet they are at that remote distance from us, that they escape our Sight, though the most active Sense we have. And again, the vast extent of the Universe is such, that though we might successively see the parts of it, yet it is not physically possible to see it at one view; and consequently impossible to see at once that beautiful and glorious Image of the more beautiful and glorious God in its full complement represented in the entire Frame of the Universe.

Again, we cannot but suppose that there are divers Ranks of created Beings intermediate between the glorious God and Man, which far surpass man in perfection of Nature and Operations; as the glorious Angels, and created Intelligences; nay possibly there may be material Beings of a more refined substance, and endued with more advanced Forms than ours. Who knows whether the Stars are not furnished with intellectual Creatures more excellent for their Substance, and Forms, than we Mortals? Yea, and for ought we know, the Stars themselves may have Forms appropriate to them, of a more excellent frame than ours; though, as I have before said, this exceeds our determination.

But although these things may be, yet we know not that they are; and if they were, yet we are unacquainted with their natures and kinds; only the reality of existence of Angelical Creatures, and created separate Intelligences, and the possibility of Nobler Creatures or Natures than ours, residing in some parts of the Universe, may teach us not to be so over-prizing and over-valuing our selves, as to think that there are no other Creatures intermediate between God and Man, of a greater perfection than Man. We see a multitude of Creatures between us and the lowest rank of Animals specifically and gradually one below another; and doubtless there are, or may be, many ranks of Beings intermediate between the glorious God and Mankind, that have specifical gradations one above another.

But whatever may be said touching these, yet certainly of all the visible Creatures that we are acquainted with, Man seems to have a very great Prerogative of excellence. And though he may not bear so fair and so noble an Image of the Divine Glory as the Universe in its full Systeme and Order, or as those nobler Beings that are of a Rank and Nature above him, yet certainly he bears a greater measure of the Divine Image, than any one visible Creature we know; and so far forth as we know: God himself affirms thus much of Man, that he created him after his own Image; which he says not of any of the Celestial Bodies themselves;

Gen. 1. Man therefore is a Creature, that of all visible Creatures that we know, is the noblest.

We may observe in the Creatures of a subordinate rank to us, how the more inferior and ignoble bear somewhat of the Image of the superior, a kind of shadow or adumbration of those perfections that in the superior are more perfect, not only by a gradually, but specifically differing perfection. We see in some Metals an Analogical resemblance of those vital effects of Vegetables, growth, digestion and augmentation that is more perfectly in Plants and perfect Vegetables: We see in Vegetables a resemblance of Appetition, Election, Generation, and in some of them an imperfect Image of that universal sense of Feeling which we find more perfectly in Animals: We find in Animals, especially some of them, as Foxes, Dogs, Apes, Horses and Elephants, not only Perception, Phantasia and Memory (common to most, if not all Animals) but something of Sagacity, Providence, Disciplinableness, and a something like unto a Discursive Ratiocination, bearing an analogy, image or imperfect resemblance of what we find, though in a degree, specifically more excellent in the humane Nature, insomuch that *Porphiry*, *Plutarch*, *Sextus Empiricus*, *Patricius*, and some others have been bold to make reasonableness not the specific difference of the Humane Nature; and some latter persons would not have the Definition of a man to be *Animal Rationale*, without the addition of *Religiosum*; wherein he seems particularly to exceed the Brutal Nature: Although in truth that which seems to be Reason in the Brutes, is nothing else but the Image and Analogical representation of that true Reason that is in Man, as the Water-gall is the Image, Shadow, or weak Representation of the Rainbow.

And we have reason to think that that intellectual and volitive power which is in Man, bears an Image and Representation of the like power that is in Angels and separate Intelligences, though neither of equality to that perfection that is in them, either in degree or kind.

And although it were too great presumption to think that there is any thing in any created Nature, that can bear any perfect resemblance of the incomprehensible perfection of the Divine Nature (very Being it self not predicating univocally touching him and any created Being and Intellect, and Will, as we attribute them to God, are, as we may reasonably think, not only of a Perfection infinitely transcending any created Intellect and Will, but of another kind and nature from it) yet though we are not able to comprehend the excellence of the Divine Nature, we cannot frame unto our selves a conception of him without the notion of Intellect and Will, though infinitely perfect: It seems that those two great Faculties in us, bear a weak Analogy with, and Representation of the Divine Nature. And therefore in that respect, Man is the Image and Representation of the Glorious God, though the disproportion between him and this his Image, be infinitely more than the disproportion between *Cesar* and his Image upon his Coin, or the Sun in the Heaven, and the Shadow of him in a Basin of Water.

And in this respect, the Humane Nature is a worthy and noble Object of our Enquiry and Knowledge, because here is the best visible Image of Almighty God that we can fully acquaint our selves with, next to him that was the Brightness of the Fathers Glory, and express Image of his person, Christ Jesus our Lord.

And

And besides this relative consideration of the Humane Nature, with relation to those Beings that are above him, Man is an excellent Object of contemplation; so if we look upon him either absolutely in himself, or with relation to Creatures of an inferior nature, he is a worthy and noble object of our contemplation.

If we consider him absolutely in himself, he is an Object worthy of our contemplation; he is admirable in excellent composure and figuration of his Body, and in every part apart, and in the whole structure put together, admirable in the Nature, Faculties, and Excellence of his Soul, admirable in the conjunction of both together, admirable in all the operations of Life, Sense, Intellect and Will, which he exerciseth in this state of conjunction and union, admirable in his production and generation, and admirable as to the condition of his Soul in its state of disunion and separation. The speculations concerning him, are all full of great variety, curiosity and worth, because the Subject it self is such.

If we consider him with relation to other created Beings of an inferior nature; First, he comprehends all the excellencies that are in the inferior ranks of Being, and that for the most part in a more excellent and perfect manner: The Life that is in Vegetables, and the operations of that Life; the Life and Sense that is in Sensibles, and the excellent operations of them, all Sensation, Perception, Memory, Phantasia, Nutrition, with its several process, the faculties of Appetition, Passion, Generation; The disposition of Parts and Organs that are best in any Animal, are to be found in the disposition, order and texture of the Body of man; and wherein it differs, it differs with much advantage and prelation over the structure of the Bodies of Animals; so that the knowledge of Man gives us a full account of the excellence of others, either Animals or Vegetables: He that well knows Man, knows whatsoever is excellent in the Animal or Vegetable Nature. Secondly, Besides these Excellencies common either to the Vegetable or Animal Nature, and Man, there are certain excellencies superadded to the Humane Nature, certain specific prelations in his Body, the Structure, Posture, Beauty and Majesty thereof, certain specific excellencies and usefulness in some of his Organs, the disposition of his Hand, Brain, Nerves and other Integrals: Again, the specific Excellencies of his Soul in those great and admirable Faculties of Intellect and Will; Of all which in their due time: So that he that is well acquainted with, and knows Man, knows whatsoever is excellent in the Vegetable and Animal Nature, and much more.

So that upon the whole account, we have a Noble and Worthy Object of our Contemplations, in the contemplation of Man.

2. In the contemplation of Man we have an Object that doth not overmuch confound us with its excessive multiplicity, and yet it doth not fatigue, nor proves ingrateful for want of sufficient variety: Touching the former of these, it hath been before observed, that he that goes about to make the whole Universe and all the several parts thereof the business of his Enquiry, as he shall find that there are many things therein that he cannot come at, or make any discovery of, so among those parts of the Universe that are objected to a greater discovery of our Senses, the multiplicity is so great, that a man of the most equal and firm constitution, must despair of Life enough to make a satisfactory, particular and deep enquiry

D

quary

quiry into them: But the Object in hand is but one; it is Man, and the Nature of Man.

I confess it is true, that he that shall make it his business to take in as it were, by way of a common place, all those things that may be taken up under this consideration, and follow all those Lines that concenter in this, or almost any other the most single piece of Contemplation, will make this Subject large enough, and upon that account may be drawn in almost all things imaginable: We find in the consideration of the Humane Nature, a Substance, a Body, a Spirit: We find the several Objects of his Senses, Light, Colour, Sound, and infinite more: He that upon this account will take in the distinct and large considerations of these and the like Appendices to Humane Nature, in their full amplitude, will have a large Plain, that will more than exhaust his Life, before he come to the Subject it self which he designs. Again, there is an infinite multitude of collateral considerations that yet are relative to man; hither comes all the considerations of Theology, Physick, Natural Philosophy, Politicks, the considerations of Speech, Government, Laws, of History, Topography, of Arts, of those Sciences that relate to the Senses, of Opticks, Musick, and infinite more; for all these have a relation to Man, and are like so many Lines drawn from several Objects that some way relate to him, and concenter in him; and he that shall make it his business to follow all those Lines to their utmost, shall make the contemplation of Man almost as large as the contemplation of the whole Universe.

When I say therefore the contemplation of Man is the contemplation of a single Object, I mean, when it is kept into those single bounds of Man in his own specific Nature, and under the physical contemplation of his Nature, Parts and Faculties, as they are appropriate unto him. And then it is a Subject that we may possibly make some progress in its contemplation and conception within the period of the time, that by the ordinary time of Life, and the permission of necessary avocations, a man may employ in such a contemplation.

And yet secondly, though in this restrained notion, the Subject seems to be restrained and single, we shall find it no very narrow Subject; but there will be business enough in it to employ our Faculty, and to take up that time, which either more necessary, or more importunate thoughts or employments will allow us; and variety enough to entertain our thoughts with delight, contentation and usefulness.

3. The Third Commendation of this Object to our contemplation, is this, that therein we have more opportunity of certainty and true knowledge of the Object enquired into, than we can have in any other Object, at least of equal use, worth and value: Many excellent things there are in Nature, which were very well worth our Knowledge, but yet, as hath been said, either by reason of their remoteness from us, unaccessibility to them, subtilty and imperceptibility to us; either are not at all suspected to be, or are not so much as within any of our Faculties to apprehend or discover what they are; or in case we have any conception that there may be something of that kind, yet our Notions touching them, are but products of Imagination and Phantasie, or at best, very faint, weak, ungrounded and uncertain conjectures, and such as we can

can never prove to the satisfaction of others or our selves. Our Sense is the best evidence that we have in Nature, touching the existence of corporeal things without us, and where that is not possibly to be exercised, we are naturally at a great uncertainty whether things are, or what they are. Now the Understanding perceives or understands things by the assistance of Sense in a double manner. 1. It either perceives them immediately, as being immediately objected to, and perceptible to the Sense; as I perceive the Sun and the Stars by my sight; I find that there is a Body hard or gentle, or hot or cold, by my Touch; and accordingly my Understanding judgeth of them: Or secondly, though the Sense perceive not the Object immediately, yet it doth represent certain sensible effects or operations; and though by those effects or operations the Understanding doth not immediately conclude any thing else to be, but what the Sense thus feels or sees; yet the Understanding sometimes by ratiocination, and sometimes by the Memory doth infer and conclude something else to be besides what the Sense immediately represents either as the cause or the concomitant of it, and doth as forcibly and truly conclude the thing to be, and also sometimes what the nature of that cause or concomitant is, as if it were seen by the Eye, or felt by the Hand.

I do not see, nor by any Sense perceive the quiet, undisturbed Air; yet because I do see that a Bladder, that was before flaccid, doth swell by the reception of that which I see not, I do as truly and certainly conclude that there is such a subtil Body which we call Air, as if I could see it as plain as I see the Water: I do not see the Animal or Vital Spirits, neither can they, by reason of their subtilty and volatileness, be discovered immediately to the Sense; yet when I see that forcible motion of the Nerves and Muscles, I do as certainly conclude, there are such Instruments which the Soul useth for the performance of those motions, as if I saw them: I come into a Room where there is no visible or tangible Fire, yet I find by my Sense the Smoke ascending, I do as forcibly conclude that Fire is or hath been near, as if I saw it; because my sensible experience and memory tells me they are concomitant. Upon the same account it is, that when my Sense and sensible experience shews me that these and these effects there are, and that they are successively generated and corrupted; though my eye sees not that God that first made those things, yet my Sense having shewed me these sensible Objects, and the state and vicissitude of them, my Understanding doth truly conclude that all this vicissitude of things must terminate in a first cause of things, with as great evidence and conviction; as if my Sense could immediately see or perceive him: So that in the ordinary way of Nature, and without the help of divine Revelation, all our certainty of things natural, begins at our Senses; namely, the immediate sense of the things themselves, or the sense of those effects and operations which after by the help of the Understanding are carried up to the discovery of things not perceptible by Sense immediately.

Now there may be many things in Nature unto which we can have neither of these accessions of Sense: How many Stars are now discovered by the Telescope, which were never before known, because not perceived by Sense? And how many more there may be, which are not visible to us by that help, we cannot yet know till that discovery: We

cannot know what the extent of the Universe is, whether there be any Worlds without the compass of this, whether the Heavenly Bodies are inhabited, and with what Creatures: We cannot know the Nature, Constitution, Faculties of created and separate Intelligences, nor the manner of their *Ubi*, Motion, Intellection, mutual Intercourse, or detection of their Minds: These things are out of the reach of our Sense either mediately, or immediately, and consequently without the help of Divine Revelation, we can never upon a natural account, come to any certainty in them; or the most we can otherwise know, is by considering the reflexed acts of our Understanding, whereby we know many acts of our own minds and Soul, which are not perceptible to our external Senses; and upon that account, we may think that there their perception may be something analogical: But Man is an Object of greatest vicinity to himself, and hath thereby, and by other contributions, the best opportunity to know and understand himself with the greatest certainty and evidence.

And yet it cannot be denied, that notwithstanding this great proximity of Man to himself, yea, and notwithstanding the many and great Essayes, Attempts, Enquiries and Observations that have been made in all successions of Ages, by men of excellent Parts, Learning and Industry, we still remain, and are like still to remain ignorant of many things of importance concerning our selves: The great and wise God whose Glory it is to conceal a matter, having lodged many things in the Humane Nature, and Fabrick, and Constitution thereof so secretly and so closely, that notwithstanding the Experience and Observation of near 6000 years, and the search and industry of the best Judgments in all Ages, and the close proximity of Man to himself, there are very many things in our Nature, whereof we neither can, and probably never shall be able to give any account to our selves or others, with any evident, nay with any tolerable certainty; as if the Divine Wisdom meant hereby to give to the Children of Men an instance to keep them humble, that cannot find out the certainty of what they hourly most intimately converse withal; and an indication of his own profound and infinite Wisdom, that can thus keep secret those things, which in regard of their proximity to us, we have great opportunity to know.

And of this nature are many things which we know to be, but we cannot give our selves any sufficient explication of the manner or reason of them. We are certain we have a vital, active Principle in us, by which we see, understand, remember, which we call the Soul. But whence that Soul comes, or how, and when, and in what manner it is united to the Body, whether it be extended with the Body, or indivisible, and in every point of the Body, how and in what manner it exerciseth its nobler acts of Intellection and Volition, or how far forth it stands in need of the Organs actually to exert any of those operations; or how far forth it doth or may exert them without it: how or by what means the *species* not only of sensible Objects, but even of Notions of the Mind are preserved in the Memory without confusion and dissipation, notwithstanding lapse of time, and intervention of infinite variety of Objects: whether it be the same individual principle that exerciseth the acts of Intellection, and likewise of Sense and Vegetation; and if it be, what become of these Faculties subservient to a temporal Life, in the state of

of separation of the Soul: where it is that the exercise of Sense is performed; whether in the Brain, or by the Soul, by the mediation of the Spirits in the extremity of the Nerves; and if the former, how the *species* of Visibles are carried through those dark Caverns between the *Organ* and *Cerebellum*, supposed to be the Seat of the common Sense. These and many more difficulties, scarce explicable with any sufficient certainty, do occur in the little Shop of the Fabrick of Humane Nature: We must not therefore think, that because of this nearness to our selves, all the *Phenomena* of our Nature can be rendered as evidently explicable as we do or may understand the Fabrick of our Hand by Anatomical Dissection.

But though this vicinity of our selves to our selves, cannot give us the full prospect of all the Intrigues of our Nature, yet we have thereby, and by other opportunities, much more advantage to know our selves, than to know other things without us, and by that opportunity of knowing of our selves, to know the truth or falshood, or analogy of very many things without us, which otherwise could not be so well known or explicated.

1. We have hereby an opportunity to know the Constitutions, Frame and Order of our Bodies: It is true, the great advance of the practice and skill of Anatomy hath laid open to ocular inspection the Fabrick of the Bodies, as well of Brutes and Birds, as Men; and therein they seem to be equally obvious to our knowledge: But a Brute or a Man are another thing, when they are alive, from what they are when dead; Anatomy can give us the Position, Frame, Situation, Figure and connexion of all the several Integrals of the Body of Man or Beast; but it is the living Mans observation of himself, that must give account of those Vital motions that are in the Body when living; as the Pulsations of the Heart, the Circulation of the Blood, the Communication of the Parts, the Congruity or Disagreement between my Nature and other things variously qualified: The Humor that separates, divides, attenuates and digests the Nourishment; the several exertions of the several Organs relating to their several Functions, the things that impede or advance the vital or sensible operations in a man, what impressions are made upon the Blood and Spirits by the several passions of the Mind, what things increase or advance the Spirits, what disorder or discompose them, the immediate and agil subservience of the Spirits to the Empire of the Mind or Soul: These and infinite more touching the Body, are discoverable by Observation, and by no other Observation, so well as by a mans Observation of himself.

2. We have hereby an opportunity to know much more of the Nature, Operations and other things relating to our Souls, than we can touching other things or Natures. There hath been much Dispute among Learned men, concerning the manner of the Intellection of Spirits and Intelligences; and by others, touching the knowledge of Brutes, touching their remembring Faculty; whether they have a kind of Discursive Faculty, which some call Reason; whether they do prescind or abstract, touching their Voyces; how far they are significant, and whether they intentionally signify by them, how far their Animal motions are spontaneous, or merely mechanical, and which are of one kind, which of another; or whether, as *Des Cartes* would have it, all are purely Mechanical. Many

Many vain things have been asserted by men that would be counted eminent Wits; but without debating in this place the truth of any of these things, it is no marvel if we are to seek what are the manner of these operations of abstract Spirits or Brutes; we cannot know them, unless we were in them, so as to be acquainted with their inward motions, or at least, unless they had some such way of communicating their Perceptions and Phantasms unto us, as we have to our selves, or one to another: But whatever can be known of them, we may easily by inspecting and observing our selves, know much concerning our own Souls and the operations of them: We may know that we have a principle within, which we do, as it were, feel distinct from our Bodies, whereby we think, and we know we think; whereby we do discursively, and by way of ratiocination deduce one thing from another; whereby we abstract, divide and define, whereby we have notions of things which were never derived to us by Sense, as the Substance or the *Substratum* of those Accidents of things which are derived to us by our Sense; whereby we do correct the errors of our Sense, and judge otherwise touching things represented, than the Sense represents them. The Sense represents the Sun no bigger than a Bushel; there is somewhat within us tells, and that truly; that it is bigger than the Earth, because we find Distance diminisheth the appearance of Bodies: Our Sense tells us that the representation in the Looking-Glass, hath all the motions, the bulk, figure, colour of that corporeal *Moles* it represents, and represents the same under all the renditions of a Body, as it doth the thing it self reflected; but there is that within tells us, and that truly, that it is but a meer shadow, and no real *Substratum* under that appearance of any such corporeal *Moles*: We do most certainly know that there is that within us, that doth exercise a rational Empire over our passions and sensual appetite; that believes, hopes and acts in order to ends that respect another Life than that of Sense. We do find, as it were, the principal seats of these operations, we feel our selves to understand in our Head, and that we will, and resolve, and love, and hate, and pity in our Heart, almost as plainly as we find our selves see with our Eyes, or hear with our Ears: I feel the propensions and inclinations of my Mind as really as I feel my Body to be cold or warm. I find in my self that this inward principle doth exert many of its actions intentionally and purposely; I resolve and cast about to remember things that I would remember; I cast about for all circumstances that may revive my Memory or Reminiscence: When I command any Muscle of my most remote Limb to move, it doth it in an instant, in the moment I will it; and hereby I understand the motions of my Mind are no way Mechanical, though the motion of the Muscle be such, I move, ride, run, or speak, because I will do it; without any other physical impulse upon me, and when I see many analogal motions in Animals, which though I cannot call them voluntary, yet I see them spontaneous; I have reason to conclude that these in their principle are not simply mechanical, although a Mouse-trap, or *Archit* as his Dove moved mechanically, from an artificial principle. And because I find that the remotest Muscle in my Body moves at the command of my Will, and since I see the energy of my Soul in every particle of my Body, though not using intellectual actions in every part, yet using some that are imperate, as Local Motion;

some

some that are natural and involuntary, as the Pulse of my Heart, the Circulation of my Blood, my Digestion, Sanguification, Distribution, Augmentation: And because at the same time I understand, consider, determine, speak, walk, digest, and exercise, as well intellectual, imperate and involuntary actions, and all from the same vital Principle, though operating differently in several Faculties and Operations: I therefore experimentally feel that my Soul, though it hath the residence of the exercise of his nobler Faculties in my Head and Heart, yet it pervades my whole Body, and exerciseth Vital Offices, proportionate to the Exigences or Use of every part, the Flesh, the Bones, the Blood, the Spirits, Nerves, Veins, Arteries, Seminal Parts; and this I feel to be through my whole Body, and if I find any part of my Body be so mortified as it becomes like a rotten Branch of a Tree, whether it be Nerve or Joint, whereby that principle cannot communicate it self to it, it putrifies and corrupts, and is not participant of the motion or influence derived from my Soul, because it is now no longer in it to quicken it. And as I find my whole Body the Province or Territory of my Soul, in which it universally acts according to the different organization and use of every part, so I find that my Soul, as to its substantial existence, is confined within the precincts of it, and doth not physically act without it, and by all this I learn, that my Soul, if it be a Spirit, may be circumscribed within the compass of a determinate space, that though it be a Spirit, yet its operations while it is in the Body, may be, if not altogether, yet in a great measure, organical. I understand, remember and reason better in my health, than in my sickness; and better in my riper years, than when I was a Child, and had my organical Parts less digested and concocted: And though it be a Spirit, yet I find it is no inconvenience to have some analogy, at least of co-extension, with my Body. And although it may be a simple Spirit, and univocally and essentially the same, as well in my Toe, as my Head, yet according to the variety of the disposition and organization of the several parts of my organical Body, it exerciseth variety of operations; the same Soul that understands in the Brain, and sees in the Eye, and hears in the Ear, neither understands, nor sees, nor hears in the Fingers, but moves and feels.

These and many such Perceptions I have touching that principle of Life, Sense and Intellection within me; and of these I have as great a certainty as possibly I can have of any thing in the world. First, Although I cannot immediately have any immediate sight of my Soul, or of its immediate operations, or internal actings, yet I sensibly see and feel the effects thereof with as great an evidence and demonstration that it is such, as if I saw the Principle it self, and its immediate operations. I sensibly see and feel that my Hand or Foot moves upon the command of that principle within me: And when that principle is removed by a total deprivation, as Death; or by a partial deprivation, as in a mortified Limb or Member; or by a temporary suspension, as in an *Apoplexy* or *Deliquium Animi*; I am sure there is no such motion, because that principle is absent in Death, or its operation suspended in case of such Diseases: It was therefore a principle that was within, distinct from my Body, that while it was there, exerted this Empire, and was obeyed in it. Secondly, In those actings of my Soul, which are not in themselves perceptible by any sensible

ble

ble effect, yet I have as firm and certain an evidence that they are such, as if I had a sensible perception of them: When I think, or understand, or remember, or abstract, or divide, or define, or purpose, or will, it is most certain these effects or intrinsic operations of my mind are not possibly perceptible by my sight, or hearing, or taste, or smell, or feeling; they are objects of such a nature, that fall not under any perception of any of those Senses; yet I am as certain, if not much more certain, that I do think, or remember, or abstract, or reason, or resolve, or will, as that I hear, or see, or feel; and I do as certainly know before I write, what I am now writing, that I think or reason touching the things I am writing, or that I resolve or purpose to write them, as I am certain that I have written them when I have written them; for the motions of my mind are as certainly obvious to a perception in me answerable to them (which I call the reflex act of the Soul, or the turning of the intellectual eye inward upon its own actions) as the motions or rather passions of my Sense are certainly obvious to my Sense; I see the Object, and I perceive that I see it: And therefore though he was a little too positive that said, *Ego cogito*, was, as it were, the *primum cognitum*, yet certainly herein he was irrefragably true, that there cannot be anything more certain and evident to a man that thinks, than that he doth think; and yet that Thinking is not perceptible by any of our five Senses. Thirdly, But there is yet a farther opportunity of very much certainty in that knowledge that a man may have of himself, and of those things concerning himself; by that conversation, by the help of speech or signs that he hath, or may have with other men. Man only, of all visible Creatures, having this privilege of communicating his thoughts and conceptions by instituted signs of speech or writing; and by this a man acquires a threefold super-added certainty of what he may or doth know concerning himself: Namely,

1. He thereby knows that there is a specific Identity between him and other men, and that they agree in one common rational Nature; for by mutual speech we find that we have both alike an intellectual, discursive Faculty, as I do reason, so doth he; as I divide, define, abstract, purpose, determine, will, so doth he use the like operations of his Mind; and although oftentimes interest and misapprehension make us differ in our conclusion, yet he endeavours to maintain his Conclusion by the like method of Reason and discursive Ratiocination as I do; and most times when prejudice and misapprehensions are removed, that which seems reasonable to him, seems so to me; whereby it appears that we concenter in one common Nature, and that the Principle of Reason and Reasonable Soul is common to us both, and that we meet in one common rational Nature.

2. He likewise knows that as they concenter in one common rational Nature, so every one of that *species*, hath yet an individual Principle of his own, that individuates, and personally discriminates one from another: For till we mutually communicate our thoughts by instituted signs, he knows not what I think or purpose, nor I what he thinks or purposeth.

3. This adds a certainty to me that I am not deceived in those reflections that I make upon my self, and the collections I make from them;

them; for as I do find I think, I reason, abstract, divide, define, purpose, so I find by the help of Speech and Signs that he hath the very like internal operations; and as I do find that those do arise from a principle different and distinct from that *moles Corporca* which I have, so I find that he hath the same perception of the original of these internal operations, and attributes them to a Principle in him distinct from the Body: So that if I might have any imaginable doubt of those reflexed perceptions which I have touching those appropriate operations of my own Mind, I am confirmed in them, because I find the like perceptions in all the men I converse with. And thus far touching the third Commendable in the search of our selves, namely, Certainty and Evidence.

4. The fourth advantage of this subject and the knowledge thereof is, the profit and usefulness thereof: Next to the knowledge of Almighty God, and our Blessed Saviour, and the Sacred Scriptures, there is not any subject in the World that is more necessary and useful to be known than the Humane nature, with those incidents that do necessarily fall into that consideration; and of all the knowledge that relates to man, there is nothing of greater moment or use to be known than Man under the Physical notion of his Body and Soul, and both united together. And the usefulness of this Consideration distributes it self into these two kinds; Usefulness in reference to Speculation or Knowledge, and Usefulness in relation to Practice or Exercise.

1. Touching the Speculative Usefulness there is this to be said, that there is in the contemplation of Man a means of discovery and explication of very great and momentous truths. And although possibly the very same truths may be elicited, and in some measure explicated by parallel *Phenomena* in the contemplation of Animals, yet they are more clearly and eminently evidenced in the contemplation of Man, who, by how much the more excellent and noble a Creature he is above Brutes, and by how much he is the more observable to himself than they can be, by so much the more useful and excellent is the knowledge of himself.

Now these Speculative truths which I shall chuse to instance in shall be these.

1. The due contemplation of the Humane nature doth by a necessary connexion and chain of Causes, carry us up to the unavoidable acknowledgement of the Deity; because it carries every thinking man to an original of every successive individual thereof by a course of generation, till it come to a common Parent of the whole *species*, the immediate workmanship of the Glorious God.

2. Consequently, it gives every considering man a sound and full conviction that the efficient of this first Parent of Mankind, is a most wise, most powerful and beneficent Being. For the true prospect of the Humane Fabrick in its essential and integral parts, in the fabrick of his Body, and the faculties and operation of his Soul must needs convince any man of ordinary reason, that can observe but clear and evident consequences, that the Efficient that first made this first root of Mankind was not only an intelligent Being, but a Being of most admirable Power, Wisdom, and Goodness; for such this effect doth necessarily declare its Efficient to be.

3. As the contemplation of the Origination of the *Species* of Mankind gives us an assurance of the Existence of the first Cause, and of his Attributes

bute of Wisdom, Power, and Goodness; so the contemplation of the secondary origination of Mankind, or the production of the Individuals by generation gives us an evidence of the like power, wisdom, and goodness of God, and a little Emblem of the Divine Power in the Creation of the World. Any man that attentively considers the progress of the generative production of mankind, will find, that this goodly and noble Creature called Man hath its gradual formation and complement from a small, almost imperceptible vital principle, which by the Divine institution is endued with such a regular, orderly, and unerring power, that from most inconsiderable and unlikely materials builds up gradually the goodly frame of the Body, cloaths it self with it, and exerciseth an admirable Oeconomy over it: And this it doth not by such a kind of choice, deliberation and forecast as the Watch-maker makes his Watch; for as yet this vital rational principle doth not exercise an actual ratiocination or discursive deliberation, neither hath those organs of Heart, and Brain, and Spirits, and Vessels (by the help of which we exercise our Acts of Reason) till it hath made and framed them. And yet this admirable Frame is immediately wrought by this little particle which we call the Soul, and moulded, formed and perfected with an incomparable and unerring dexterity, skill, elegance, and curiosity more and greater than the most exquisite Artist can shew in the most polished piece of Artificial work.

Now if this little spark of Life that in this work of generation and formation is *Vicarius Dei*, the Instrument of his power and wisdom; if this little imperceptible *Archeus* is endowed by the Divine power, wisdom, and institution with this admirable, regular, and effective power out of so small, inconsiderable and unlikely materials to mould up and fashion the goodly Fabrick of Humane Nature, and to perfect it for a complete habitation for it self, wherein to exercise its most excellent oeconomy and operations; if this *Puillus divinae lucis radius, ex tantilla & tam improbabili materia particula mirandam naturam humanam fabricam tam affabre, eleganter, & incerrabundè formaverit*. If we find in so small a particle of a created Being this admirable energy, why should we make a question whether that God that at first gave this admirable energy to the Soul to frame so goodly a piece out of matter so near to nothing, should not have power to create a World of matter out of nothing.

2. Again, since I do see as plainly as I see my Paper that I now write upon, that this fabrication of the Humane Body is the immediate work of a Vital principle that prepareth, disposeth, digesteth, distributeth and formeth the first rudiments of the Humane nature when it is no bigger than a little Bean; that afterwards gradually augmenteth and perfecteth it to the goodly complement of a Man: And the same thing I see in the first rudiments of all generations as well vegetable as animal. It doth give to me (notwithstanding all the bold confidence and conjectures of *Epicurus*, and those that follow him as far as for shame they durst) I say it doth give me not only an undeniable evidence, but an exemplar in analogy and explication, that the coalition of the goodly frame of the Universe was not the product of chance, or fortuitous concurrence of particles of matter, nor the single effect of matter and motion; but of the most wise and powerful ordination of the most wise and glorious God, who thus ordered

ordered the World, and instituted that Rule, Order, or Law which we call Nature to be the Law of its future being and operation; if I see that the Coagmentation of a Man, nay of a Chicken or a grain of Wheat is not by casualty, but the wise and powerful God hath committed the Coagmentation, Disposition, and Formation thereof to their Seminal Principles, *tanquam Vicariis & substitutis Divini Numinis Instrumentis*, as it were to Vicegerents and subservient Instruments of the Deity: I have no reason to think that the goodly Frame of the Universe was the production of Chance, or Accident, or bare Matter, or its casual motion or modification thereof; but that the same was the Contrivance and Work of the Great, Wise, and Glorious God, as a Work in a great measure answerable to the Excellency of such an Efficient.

3. Again, I find a sort of Men that pretend to much severity of Wit, and would be thought too wise to be imposed upon by Credulity, where they think they have not evidence enough of Sense or Reason to convince them; that would be thought to be Men above the common rate; these have gone about, as far as they durst, to exclude God out of the World, and pity those Men as troubled with Credulity, and of weak Parts, that believe the Regiment of Divine Providence; a business that they think, or pretend to think may be made use of to impose upon the weaker part of Mankind, think it a Fiction, and such as is utterly inexplicable to the satisfaction of a reasonable and impartial judgment. Now the due contemplation of the Humane Nature, and that Oeconomy that the Active Principle in it ordinarily called the Soul doth exercise therein to my Understanding, gives me both a reasonable evidence of the Divine Providence governing the World, and a fair explication of it to me.

I mean not in this place to examine the truth or falsity of the Plurality of Subordinate Forms, or whether there be two or three distinct Substantial Forms or Souls in Man, whereby he is *Vivens, Sentiens, & Intellexens*; for they are proper for a farther Examination in their proper place: But at present I do suppose, that that one Soul, whereby Man is constituted in *Esse Hominis*, is the single Principle of all his operations of Life, Sense, and Intellection; because, as to this purpose which I am now upon, it comes all to one whether there be a Unity or Plurality of Subordinate Forms, or of Souls in the Humane Nature.

I say therefore, in the Humane Fabrick we may observe two kinds of Forms, if I may so call them; the one, the *Forma Corporis*, as such whereby it hath those Properties or Operations which are common to Bodies of the like make or composition; whereby it is weighty and descends as other Bodies, it is figured, it hath dimensions and qualities common to other Bodies; it hath in it some parts more active and fiery, others more passive and waterish, or earthy; it hath its tendencies to corruption and dissipation: And though after the separation of the Soul from the Body, it perchance loseth some of those particular Qualities, Figurations and Properties that it had before, yet it retaineth many of them; for many of these Proprieties of a Body as such, do not depend upon the Specific Form of the Humane Nature as such: Again, there is in this Body a certain Active Specific Form, whereby it is constituted in *Esse Hominis*, which hath in it, and doth communicate to the Body certain operations specific to it; by this he exerciseth those operations which either flow from or

are communicated by that Form, as Life, Sense, Intellection, Volition, and the like: And though Life and Sense be common to Man and Brutes, and their operations in many things alike, yet by this Form he lives the Life of a Man and not of a Brute, and hath the Sense of a Man and not of a Brute: For there is no such thing as *Animal*, or *Vivens*, nor determined unto some particular *Species*, as there is no such thing as a Man not determined in some individual: For Universals are but Notions and *Entia Rationis*, having their existence only in the understanding power, and not in reality.

And these Operations and Faculties of Humane Life, Humane Sense, and Humane Understanding and Volition flow not from the corporeal *Moles*, but from some other active regent Principle that resides in the Body, and governs it while it lives, which we call the Soul. And therefore although the corporeal *Moles* after some kinds of Deaths retain the same bulky Integrals, the same Figure, Colour, and many other accidents, yet the Soul being removed, the Faculties and Operations of Life, Sense, and Intellection cease from that *Moles corporea*, and are no longer in it.

This Principle of Life, Sense, and Intellection in Man called the Soul, hath the Body as its Province and *Districtus*, wherein it exerciseth these Faculties and Operations: and we shall find the Actions which are performed by it in the Body are of three kinds or natures; 1. Some are immanent, and not terminated immediately in any external or corporeal action. 2. Some are transient and spontaneous, terminating in the Body, or some parts or motions thereof. 3. Some transient, but involuntary, and exercised and terminated in or upon the Body.

These seem to be the several kinds of Actions of the Soul, at least relating to the Regiment and Oeconomical Government of the Soul upon the Body.

1. The internal and immanent Faculties and Acts of the reasonable Soul (besides those of Common Sense, Phantasia, Memory, Passion and Appetite, common to Men and inferiour Animals) are Intellect and Will; and the proper Acts of the Intellect are Intellection, Deliberation, and Determination or Decision: The proper Acts of the Will are Volition, Nolition, Choice, Purpose or Resolution, and Command in relation to Subordinate Faculties: And although there be many actings both of the Intellect and Will that are relative to other things or objects than what immediately concern the Microcosm it self; yet the principal part of that analogical Providence that the Soul exerciseth in relation to the Microcosm or Humane *Compositum* are Intellection, Deliberation, and Determination in the Understanding; and Choice, Volition, Nolition, and Purpose in the Will; and these do or should regularly precede all those imperate Acts of the Soul that relate to the *Compositum*: Before I write, or speak, or go a journey, or eat, or any the like action, there is the deliberation of the Understanding, whether I shall do this action; the decision of the Understanding, that it is fit to be done; the choice of the Will to do it, the purpose of the Will that it shall be done: And although many times the distinction of these several procedures of the Soul do not always appear distinct, especially in sudden or ordinary actions, which seem to have but one act antecedent to the thing done, namely, the willing of it to be done; yet

yet in actions of weight and importance all these have their distinct order and procedure. For although in the most incomprehensible and perfect Will of Almighty God there is no such succession of procedure; yet in the operations of the rational Soul that is linked to the Body, there is ordinarily that successive procedure of those immanent acts of the Soul that relate to any thing to be done. This therefore is the first part of that analogical Providence that the Soul exerciseth in relation to the Body, namely, deliberation or counsel, and decision in the Intellect; and choice and purpose in the Will.

2. The next Act, which immediately succeeds Purpose, is the Command that is given by the volitive Faculty of the Soul, and the Execution thereof: and herein are considerable, First, The Power commanding, which is the Will, now determined by purpose or resolution. Secondly, The things to which these commands relate, or the Object of them, which in relation to the Body is in effect nothing but motion of the Spirits, Nerves, Muscles, parts of the Body, or the entire *Compositum*; by virtue of this command the Muscles, the Hand, the Eye, the Tongue perform those imperate commands of the Will; I do not digest, sanguify, nor my Heart move, nor my Blood circulate, nor my Meat digest by any immediate command of my Will; but I eat, I drink, I move my Eye, my Hand, my Muscles, my whole Body in pursuance of this command of my Will. Thirdly, The executive Instrument of this command mediately are my Nerves and Muscles, but immediately those subtil, invisible and forcible Engins which we call the Animal Spirits, these being the most subtil parts in Nature, and parts of matter subtilized, next in degree of purity to that Soul that commands them, are in their nature proper, fit, and suitable to be the first recipients of the Empire of the Soul; they are the nimblest, agil, strongest Instruments, fittest to be executive of the commands of the Soul; they are a middle nature between the Soul and the Body, the *nexus anima* to the Body; and these subtil Messengers speedily dispatch themselves through the Nerves to the Muscles, which are by these Spirits and the native *Indoles* that is in them and the exact texture of them fitted to move those Integrals of the Body to which they serve; and as the Spirits shot through the Nerves are the first and immediate Instruments of the Soul in its imperate acts, so the Muscles are as it were the Instruments of the Spirits, or the remote Instruments of these imperate motions: And by this means the Soul hath the actual *imperium* and command of all those motions of the Body which are spontaneous or capable of being commanded by the volitive Power of the Soul; 'tis by this the Eye-lid opens or shuts, the Eye is converted to this or that object, the Lungs are intended or remitted, the Tongue speaks, the Hand strikes or moves, the Foot walks, the Mouth opens or shuts, and all these spontaneous motions subject to the Empire of the Will are performed: And though I chuse my Instance in the subject in hand, yet the like imperate motions are in Brutes and Animals, though not by the Empire of Will, which they have not, yet by a Faculty that moves in many things spontaneously in some analogy and adumbration of the Empire of the Will in Man, but incomparably below it both in perfection and freedom.

3. Again, there be very many Operations, that although they flow from

from this active Principle, yet they are not acts that are imperate by the Will, but they are in a manner natural and involuntary; and therefore I call them sometimes Involuntary, sometimes Natural, and they are very many and various; such are many of the acts of Sense, especially the external. Though I do by the Empire of my Will direct the Motion or *Actus* of my Organ to this or that Object, yet my Eye, my Ear, my Touch, my Smell, my Taste exercise their office of perception upon the Object duly applied to them, without any act of my Will commanding them so to do when they are joyned to their Object: So my Heart moves; my Blood circulates, my Meat digests, my Body is augmented, without any intention of mind to assist their actions. So if there be an ill humour in my Body, or a wound in my Hand or Leg, the Vital energy of my Soul thrusts out the Balsamical humour of my Blood to heal the latter, and useth all that Oeconomy that is proper for the expulsion or subduing of the former; sometimes by *pustula* or eruptions in the flesh, sometimes by sweat, sometimes by urine, sometimes by seige; and all this it doth in the most congruous way imaginable; so that the best Physicians have not better direction ordinarily in their applications, than to follow Nature in those motions. And all this is done most exquisitely, and yet without any deliberation or rational decision of the Understanding or Empire of the Will in relation to those Natural motions. I shall only therefore observe concerning these Involuntary motions, 1. That though they are without any *dictamen Rationis*, yet they are done in a way of as great congruity to its end, as if they were directed by the wisest counsel of the wisest Soul; and it is reason good it should, for it is a standing and most wise Law of exercise planted by the most wise God in this Vital Principle for the regiment of the Body: And therefore though it be not directed by deliberation of the Humane Intellect, or choice of Humane Will, it is settled, contrived, implanted and directed there by a higher Wisdom, even the Wisdom of the most wise God: And this indeed is the reason of that Excellency that is seen in Instincts, even of Brutes, and the Formative process in generation; that they so aptly and excellently attain their Ends: namely, because these Instincts and Powers are the immediate Impressions, Signatures and Energies placed in them by the Great and Glorious God, whose very foolishness, as the Apostle tells us (namely the seemingly vilest and lowest Impressions of his Wisdom) is wiser than men. 2. The second thing to be observed herein, is, That those Natural and Involuntary actions are not done as the former, by deliberation and formal command, yet they are done by the virtue, energy, and influx of the Soul, and the instrumentality of the Spirits as well as those Imperate acts before spoken of, wherein we see the immediate empire of the Soul: That Soul that moves my hand, my tongue, my foot by way of express command and empire; digests, sanguifies, carnifies, excerns and doth all those Involuntary operations by its influence and presence: remove but the Soul, there is no more digestion, sanguification, or any other acts of that kind, than there is speech in the tongue. And although in some Insects there appears a palpitation of the Heart for some little space after it is severed from the Body; and in Chicken and other Fowl, after the separation of the Head from the Body there is a motion of the parts divided, yet it lasts not long, and they are but the irregular and

and convulsive motions or struglings of those Spirits which could not so hastily dismiss themselves from the vessels wherein they were inclosed.

I would now observe some generals in relation to this Adumbration of Providence and analogical Oeconomy of the Soul in the Body, which are these: 1. That this analogical Providence of the Soul in relation to its Province the *Compositum* or Microcosm is universal to every part of it; there is not the most inconsiderable particle of Flesh, Bone or Artery, nor the smallest Capillary Vein but it is present with, and auxiliary to it, according to its use and exigence, and the congruity of its constitution; it accommodates it self to the Eye for seeing, to the Ear for hearing; and though it accommodate not it self to the Finger in those exertings of those Senses of Seeing or Hearing, yet it equally accommodates it self to those remote and small Organs as perfectly in relation to Feeling, and to those motions that are suitable to them. 2. That even those Exertions of the active Energy of the Soul that seem most remote from the deliberation of the Understanding and immediate active Empire of the Will, are guided and directed with all imaginable congruity to their several Ends and Uses. 3. That this very same individual Soul may, and oftentimes doth exert all those operations at the same time without any difficulty or confusion: At the same time I think, I deliberate, I purpose, I command: in inferior Faculties, I walk, I see, I hear, I digest, I sanguify, I carnify, my Lungs move swifter or slower by the empire and command of my Will, my Heart moves naturally by the motion of Palpitation, my Blood by the motion of Circulation, Excretion, Perspiration; my Guts by the motion of Vermiculation, my Stomach and Intestines digest, the good ejects and expulses the bad, my Disease is resisted and expelled, my Wound cured, and a thousand more concurrent, coincident Motions; and all these performed at the same time by the Power, Energy and Oeconomy of one individual Soul; and yet all this done easily, and sweetly, and perfectly; without either lassitude, confusion, or perturbation.

And all this done by a little spark of Life, which in its first appearance might be inclosed in the hollow of a Cherry-stone; yet this little active Principle as the Body increaseth and dilateth, evolvet, diffuseth and expandeth if not his Substantial Existence, yet his Energy and Virtue, to the utmost confines of his little Province and every particle and atom thereof; yea and it is of that absolute necessity that it should do so, that without it the *Compositum* would be dissolved, and the Body dissipated into corruption and its first principles, as we see it falls out suddenly after the separation of the Soul from the Body: As the Body could not be reduced into that orderly frame in which it is constituted, without the Plastick and Formative power of the Soul, so it could never be upheld in that state of Order and Convenience without the continued Influence of the Soul: The latter is as absolutely necessary for its continuance and conservation, as the former for its constitution.

I easily foresee two Objections against the Method proposed, 1. That the *Hypothesis* it self is not sufficiently evidenced: How do we know that this Oeconomy is the effect of a Power, or Nature, or Being distinct from the Body? and why may it not be the result of this Disposition, Harmony, or Contemperation of qualities or parts of that Matter that constitutes the

the Body? 2. And if it be, what need we magnifie the Humane Nature as the great Instructor in this business, since we may with a little observation find very much the like in Brutes as well as Men? For there we find a sensible Perception and Phantasia answering the Intellect in Man; an Estimative or Judicial faculty, an Appetition or Averfation and Locomotive faculty answering the Will; and the very Oeconomy of the animal Soul or Spirits managing as well their spontaneous actions as these natural or involuntary exertions of Digestion, Egestion, Circulation, and the rest of those Motions called Involuntary or Natural.

To the First of these I say, That this is not the place for a large reduction of these Operations to the regiment of the Soul as a distinct active Faculty, distinct from the Corporeal *Moles* and its contemperation, that shall, God willing, in its due place be at large discussed, which I am not here willing to anticipate. In the mean time, let the Objector but honestly and impartially examine and observe Himself, and he will need no other evidence of this truth but his own experience to satisfy him, that all those effects proceed from an active, regnant Principle within him, distinct from the *Moles corporea*, or the contemperation thereof. The distemper of the humours of the Body cause sometimes such sickness as disorders the Phantasia and Reason, but sometimes though it distempers the Body, the Intellectual faculty and operations are nevertheless free and sound, as Experience shews. If this Objector was ever under a Sickness or Distemper of the latter kind, let him give an account what it is that gives him under such a Disease the use of his Reason.

To the Second I need not say more than what I have before observed, namely, 1. That although the Inferiour Natures have a kind of Image of the Humane Nature, yet it is less perfect, and therefore no equal Instance in order to the explication of what I herein design. 2. As it is less perfect, so it is more distant and less evident to us, than our selves are or may be to our selves; the Regiment and Oeconomy of our own Souls in our Bodies and of them are more evident to us and perceptible by us, than that Regiment and Oeconomy that the Souls of Brutes exercise in them, and therefore fitter to be made our Instance of that which I go about thereby to illustrate, namely, the possibility, necessity and explication of the Divine Providence in the governing and influencing of the Universe and all the parts thereof, which I shall in the next place prosecute in the Analogy that this small Regnant Principle bears within its little Province to the Divine Regiment of the Universe.

Sic parvis componere magna.

I come therefore to the illustration of the Divine Providence, and Regiment of the World by the foregoing Emblem thereof.

1. By this smaller Instance of this Regiment of this lesser World by the immediate presidency of the Soul, it seems evident that it is no way impossible but that the greater World may be governed by the Divine Wisdom, Power, and Providence. It is true, there are these two disparities between these, namely, the greater World and the lesser: The greater

greater World is of a more vast extent; and again, the Integrals and Parts thereof are of greater multiplicity and variety; but neither of these are any impediment, because the Regent thereof is of an infinite immensity more than commensurate to the extent of the World, and such as is most intimately present with all the Beings of the World, and of an infinite Understanding, Wisdom, and Power that is able to apply it self to every created Being, and therefore without any difficulty equally able to govern the whole and every part thereof: This we see in Natural agents; that little spark of Life, the Soul, that exerciseth its regiment upon an Infant of a span long, when the Body is grown to its due stature, and together with the extension of the Body this little Vital particle evolves and diffuseth it self to the extent of the enlarged Body, governs it with the same facility as it did before that extension. And the sensible Soul of a vast Whale exerciseth its regiment to every part of that huge structure with the same efficacy and facility as the Soul of a Fly or a Mite doth in that small and almost imperceptible dimension to which it is conigned. For the Soul is expanded and evolved, and present to every part and the uttermost extremity of the greater as well as the lesser Animal. And therefore if my Soul can have its effectual energy and regiment upon my Body with ease and facility, with how much more ease and facility can a Being of immense Existence and Omnipresence, of infinite Wisdom and Power govern and order a great but yet a finite Universe, and all the numerous yet not infinite parts thereof?

2. As there is a possibility of such a regiment of the Divine Wisdom, Power and Influence in the Government of the World, so there is a necessity of it. It is not enough for the Soul of the Humane Nature to form and mould its Corporeal Vehicle, if it gave over its work when that were done, it would soon dissolve, dissipate and corrupt. There is the same necessity for the Divine Influence and regiment to order and govern, conserve and keep together the Universe in that consistence it hath received, as it was at first to give it before it could receive it: The intermission of that Regiment and Divine Providence and Influx but a moment after the constitution of this World would have dissolved its order and consistence; if not annihilated its Being.

And indeed, he that observes the great variety of things in the World, the many junctures and contributions of things that serve to keep up its consistence, the want of any of which (as the disorder of a little Nerve, Vein, or Artery in the Body) would bring it into a great disorder; the continual strife between contrary qualities, the strange activity of the active Fiery Nature that involves it, or at least is disseminated up and down in it; the vast and irregular concretions of Meteors, and those strange and various *Phenomena* that are in the World, which as they proceed from or are found in the Integrals of the Universe, are devoid not only of Reason but of Sense. And he that after all this shall see the World upheld without any considerable decay or defect, in the same state and order as it hath been for many Thousands of years, will upon a due and impartial search find that it were far more impossible that this could be without the Wisdom, Power, and Influx of a most Infinite, Omnipresent, Omniscient and Omnipotent Fixed Being, than for the Humane Body to be kept without dissolution and putrefaction,

faction, being destitute of the influx and regiment of its Vital Principle the Soul.

And therefore, some of the Ancients that were willing to solve the *Phænomena* of the World, have (though erroneously) thought that the World was Animate, and that all these Operations in the World proceeded from that *Anima Mundi*, as the Operations in the Bodies of Men proceeded from that *Anima Humana* that lodged in it; and at length finding so great effects that are and may be done by this supposed *Anima Mundi*, according to their *Hypothesis*, have at last proceeded in plain terms to determine that this *Anima Mundi* was, in truth, no other than the Glorious God; whereas they might with much more ease and truth have attributed all the great Oeconomy of the Universe to the most Glorious God, without dishonouring him into the existence of a *Forma informans*, or a constituent part of that World which he made.

Others to amend that absurdity, and yet out of a piece of mannerliness and respect, as they think, to God, though they deny this Universal Soul or Form informing of the whole Universe, yet without any sufficient ground have devised several Systems of the Universe, and assigned several Souls to each System or *Vortex* at least, which should be the immediate Regent in every such System, as the Soul is in the Body: This, as it supposeth something without evident ground, so it doth without any necessity: For the Divine Wisdom and Power is sufficient for the management and government of the whole Universe; and if such *Anime Systematum* should be granted, yet still there must be some one common Regent of all these Systems and their respective Souls, or otherwise disorder would follow between the Systems themselves.

But thus far even those suppositions bear witness to the necessity of a Providential Regiment of the parts of the Universe; that bare Matter, Motion, and Chance cannot perform this business, but that there is a perfect necessity of a Regent Principle besides it, which may govern and dispose it as the Soul of Man doth his Body: And even that supposed regiment of these particular Souls of every System, as they must needs have it, if they had it at all, from the institution and efficiency of the Wise God, so they are all continually influenced from him, and the whole College of them governed, guided and ordered by him as their sovereign Regent.

3. The Third thing that I design is this, That although it is impossible for any Created Being, or the Operations thereof, to hold a perfect Analogy or adequate Representation of the Divine Wisdom, Power, and Providence in the governing of the World; because the Wisdom and the Ways of Almighty God are unsearchable and past finding out; they are of such a perfection that no Created Being or Operation thereof can be a just Parallel or adequate Resemblance of them; yet there seems to be such an instance in the regiment which the Humane Soul exerciseth in relation to the Body, that with certain correctives and exceptions may give some kind of Explication or Adumbration thereof, whereby though we can never get a complete *Idea* of the Divine Regiment, yet we may attain such a notion thereof as may render it evidently credible, and in some kind explicable.

1. The first act of the Divine Nature relating to the World and his admini-

administration thereof is an immanent act: The most wise counsel and purpose of Almighty God terminated in those two great transeunt or emanant acts or works, the works of Creation and Providence.

The Divine Counsel relating to the work of Creation, is that whereby he purposed to make the World, and all the several Integrals thereof, according to that most excellent Idea or Exemplar which he had designed or chosen, according to his infinite Wisdom, in those several ranks and methods, and in that order and state wherein they were after created and made.

The Divine Counsel relating to his Providence, or Regiment of the World, seems to consist in these two things: 1. A purpose of communication of an incessant influence of his power and goodness for the support and upholding of things created, according to the several essential states and conditions wherein they were made; some being created more durable, some less; some in one rank of being or existence, some in another. 2. A purpose of instituting certain laws, methods, rules, and effluxes, whereby he intended to order and rule all the things he had made with the greatest wisdom and congruity, and according to the natures and orders wherein he had created them.

And this is that which I call the law, rule, and regiment of Divine Providence, and seems to be of two kinds, namely, general Providence and special Providence.

The general Providence I call that whereby every created Being is governed and ordered, according to that essential, connatural, implanted method, rule, and law wherein it was created. And thus the state and several motions and influences of the Heavenly Bodies is that general providential law wherein they were created, and according to which they are governed; and the susceptibility of those influences, and the effects thereof, and of that motion, is the general providential law, whereby other physical Beings are governed in relation thereunto; the activity of the active Elements, and the passiveness of the passive, the methods and vicissitudes of generation and corruption, the efficacy of natural causes, and the proper effects consequential to them, the natural properties or affections of Bodies according to their several constitutions, as motion, alteration; ascent of light, descent of heavy Bodies. These and the like are the general providential Laws relating to them. Again, that things indued with sense should have a sensible perception, and certain instincts connatural to them, that rational and free Agents should move rationally and freely. These and infinite more are the standing and ordinary Rules and Laws of general Providence, and the wise God, who sees all things from the beginning to the end, and therefore can neither be disappointed nor overseen in any of his Counsels, hath with that great and admirable Wisdom so ordered these Laws of his general Providence, that he thereby governs most excellently the World; and they are never totally changed, and but rarely altered in particular, and that only to most wise ends, and upon most eminent occasions.

And the reason is, because the Infinite Wisdom of God hath so instituted and modelled those natural Laws, that they are *ad omnem eventum* fitted to the ordinary administration of the World. When the wisest Counsel of Men in the World have with the greatest care, prudence and foresight,

made Laws, yet frequent emergencies happen which they did not, nor could foresee, and therefore they are necessarily put upon repeals, correctives, and supplements of such their Laws: But Almighty God by one most simple foresight foresaw all Events in Nature, and could therefore fit Laws of Nature that might be proportionate to the things he made, and not stand in need of any change in the ordinary administration of his Providence.

The special Providence of God is so denominated either in relation to the objects which are special, or in relation to the acts themselves.

Special Providence in relation to the objects, is that Providence which Almighty God exerciseth either to Man or Angels in relation to their everlasting ends, such as are Divine Laws and Institutions, the Redemption of Men by Christ Jesus, the Message of the Gospel, and the like.

Special Providence in relation to the acts themselves, are those special actings of the Divine Power and Will, whereby He acts either in things natural or moral, not according to the Rules of general Providence, but above, or besides, or against them: And these I call the Imperate Acts of Divine Providence; whereof in the next place.

2. Analogal to the imperate acts of the Soul upon the Body are the imperate acts of Divine Providence, whereby with greatest wisdom and irresistible power He doth mediately or immediately order some things out of the tract of ordinary Providence. For although the Divine Wisdom hath with great stability settled the Laws of his general Providence, so that ordinarily or lightly they are not altered, yet it could never stand with the Divine Administration of the World, that He should be eternally mancipated to those Laws he hath appointed for the ordinary administration of the World. Neither is this, if it be rightly considered, an infringing of the Law of Nature, since every created Being is most naturally subject to the Sovereign Will of his Creator; therefore though He is sometimes pleased by extraordinary interposition, and *pro imperio voluntatis*, to alter the ordinary method of natural or voluntary Causes and Effects, to interpose by his own immediate Power, He violates no Law of Nature, since it is the most natural thing in the World that every thing should obey the Will of him that gave it being, whatever that Will be, or however manifested.

Now the Instances that I shall give touching these *actus imperati* of Divine special Providence shall be, 1. In things simply natural: 2. In things voluntary or free Agents.

In things natural we have these Instances of the *actus imperati* of the Divine Providence, namely, first those that are real and also appearing Miracles, as *Moses* his Rod turned into a Serpent, our Saviours miraculous curing of all sorts of Diseases, and raising the Dead, and the like: Again, there are other things, that though they are natural effects, and not in themselves apparently miraculous, yet are in truth the *actus imperati* of the Divine Providence; Winds and Storms, Hail and Thunder, and many the like, are things that are in themselves natural, yet when they are in such a season and such a juncture, they may be and are, and possibly more often than we are aware, *actus imperati specialis providentia*: The East Wind that brought the Locusts, and the West Wind that carried them off from *Egypt*, *Exod.* 10. 13, 19. The East Wind that divided

divided the *Red Sea*, *Exod.* 14. 21. The Hail that slew the *Canaanitish* Kings, *Josb.* 10. 12. The Rain and Drought, *1 Kings* 18. *Amos* 4. 7. Thunder and Lightning, *1 Sam.* 13. 18. Yea the very Blasting, and Mildew, and Caterpillar, and Palmer-worm, *Amos* 4. 9. are lent by God. The ravenousness of a Lion or Bear are natural to them, yet the mission of them upon an extraordinary occasion may be an *actus imperatus* of Divine Providence, *1 Kings* 14. 24. *2 Kings* 2. 24. And although we often attribute as well mischiefs as deliverances to accidental natural Causes, yet many times they are *actus imperati* of the Divine special Providence, as much and as really and truly as the motion of my Pen is the *actus imperatus* of my Will at this time.

And if we enquire how these things are effected, though it may be they be sometimes effected by the immediate *Fiat* of the Divine Will, yet I have just reason to think they are most ordinarily done by the Ministration of Angels, as the destruction of the Host of the *Assyrians*, and divers other great Exertions of these imperate acts of Divine Providence. *Psal.* 103. *His Angels that excel in strength, that do his commandments, bearing to the voice of his word.* That as the more refined and efficacious Matter, which we by way of analogy call Spirits, are the executive Instruments of the *actus imperati* of our Will, so these true and essential Spirits are ordinarily the immediate Instruments of the imperate acts of Divine Providence.

And therefore although many times Effects purely natural, that have their Originals merely by the ordinary course of Providence, are ordered by special Providence unto great and wonderful Events; yet it seems to me very plain, that there be many natural productions that it may be in the immediate Cause, or second, or third, may be purely natural, yet at the farthest end of the Chain there is an Agent that is not simply natural (as we use to call natural Causes) but voluntary, sometimes in the first production, sometimes in the restriction, sometimes in the direction of them, for otherwise we must of necessity make all successes in the World purely natural and necessary, and Almighty God would be mancipated to the Fatality of Causes, and to that Natural Law which he gave at first, and Prayers and Invocation upon Him in case of any calamity would be unuseful and ineffectual.

And therefore though Almighty God do not create a Wind for every emergent occasion, but the Wind is a Vapour breaking out of the Earth, yet the Ministration of an Angel may restrain, open, excite, direct or guide that Vapour to the fulfilling of those imperate acts of Divine special Regiment. And it is observable, that although the regular part of Nature is seldom varied, but ordinarily keeps its constant tract, as the Motions of the Heavenly Bodies, yet the Meteors, as the Winds; Rain, Snow, Thunder, Exhalations, and the like, which are in themselves more unstable, and less mancipated to stated and regular motions, are oftentimes employed in the World to very various ends, and in very various methods of the special Divine Providence.

And hence the Winds and Storms are stiled in a peculiar manner, *Winds and storms fulfilling his will*, *Psal.* 148. And, *He bringeth his winds out of his treasury*, *Psal.* 134. And again, *Hath the rain a Father, and who begot the drops of dew?* *Job* 38. 28. And again, *Can any of the vanities of the Gentiles*

Gentiles give rain? Jer. 14. 22. Thus the wise God, who doth nothing vainly or unnecessarily, nor infringeth the more constant Laws of Nature, when those parts thereof that are more anomalous, and more easily applicable to his imperate acts and ends of Providence may serve, more ordinarily chuseth those parts of Nature to execute his special Providences, that may do it without any great fracture of the more stable and fixed parts of Nature, or the infringement of the Laws thereof.

Again, as the Empire of the Divine Will doth exercise its imperate acts in the Methods of special Providence upon things simply in themselves natural, so it doth upon Agents or Natures intellectual and free: Sometimes immediately by Himself, sometimes by the Instrumentality of Angels or proposed Objects.

This Exercise of the imperate Acts of the Divine Providence may be upon the Understanding or Will.

Upon the Understanding principally these ways, 1. By *immediate afflatus*, or impression, as anciently was usual in prophetick Inspirations. 2. By conviction of some Truths, and this may be either by a strong and over-bearing presenting of them to the Understanding with that light and evidence, that it is under a kind of necessity of believing them, which was often seen in the primitive times of Christianity, wherein God was pleased many times irresistibly, and by immediate overpowering the Understanding by the powerful impression of the Object or Truth propounded, to conquer as it were the Understanding into an assent. Or, 2. By advancing and enlightning the understanding Faculty with a super-added light and perception, whereby it was enabled to discern the truth of things delivered: For as the Understanding receives some Truths proposed by reason of the congruity between the Faculty and the Object, as the Eye sees some visible Objects by reason of the congruity between it and them, so the reason why it perceives not all Objects of Truth is because of some defect of the Faculty, whereby it holds not a full and perfect congruity with them, either by reason of the remoteness or sublimity of the Object, or some deficiency of light in the Faculty, which is aided by the *Collyrium* of the Divine Assistance, *Rev. 2.* Or else, 3. By some extraordinary concomitant moral evidence, such was that of the Miracles of our Saviour and his Apostles, the Seals and Credentials of the Truths they delivered: And as thus the imperate acts of the Divine special Providence are exercised upon the Understanding, so they are exercised upon the Will, and that either immediately or mediately.

Immediately, 1. By an immediate determining of the Will: For although the Will be naturally free, yet it is naturally and essentially subject to the *imperium divine voluntatis*, when He is pleased to exercise that empire upon it: This although he rarely doth, yet he may do it, and sometimes doth it irresistibly, determining the Will to chuse this or that good; and yet this without any such force or violence as is simply contrary to the nature of it, because as there is no Power in the World but owes most naturally an obediencial subjection to the Lord of Nature, so even the Will it self is naturally and essentially subject to the determination of the Lord and Author of it. 2. By immediate inclining and inflecting it to determin of it self: This is that secret striving of the Spirit of God with the Will, inflecting and perswading it to this or that good: It differs from

the

the former way because that it is irresistible, this though potent yet in its own nature resistible by the Will of Man, though it many times prevails by its efficacy. *V. Gen. 6. 3. Eph. 4. 30.*

Again, 2. Sometimes it is done Mediatly *more humano*, and yet not without the mediate special Empire and Regiment of the Divine Will: and thus it is done two ways, *viz.* 1. By an irresistible, or at least powerful conviction of the Understanding that the thing in proposal is fit and necessary to be done or omitted; for although some think that the Will hath a power of choosing or refusing or suspending, notwithstanding the final decision of the practical Understanding, yet certain we are that ordinarily and when the Will acts as a Rational faculty, it is or ought to be determined by the last decision of the practical Understanding; and 2. By proposing Moral objects that do *more humano* guide the Will to determine it self accordingly; and these are various, sometimes Intervention, Perswasion, or Examples of others, and sometimes even the junctures of Natural occurrences. For, as I shall have occasion to shew, and is partly touched before, even the Natural occurrences of things are under the guidance and conduct of the Divine Providence, even when to us they seem to be either Accidental, or to be the meer product of Natural Causes.

And surely if we should deny the intervention of Imperate Acts of Divine Providence in relation to actions Natural or Moral that appear in the World, we should exclude his Regiment of the World in a great measure, and chain up all things to a fatal necessity of Second Causes, and allow at most to the glorious God a bare prospect or prescience of things that are or shall be done, without any other Regency of things but meerly according to the instituted nature and operations of things. And thus far of the Imperate Acts of the Divine Providence. Only this farther I must subjoyn as a certain truth, That neither the Empire of the Divine Providence, or his mediate or immediate determinations, perswasions or inflexions of the Understanding or Will of Rational Creatures doth either naturally, morally, or intentionally deceive the Understanding, or pervert the Will, or necessitate or incline either to any falshood or moral evil.

3. The third Analogy that is between the regiment of the Soul over the Body and the Divine regiment of the Universe, is in relation to the acts of general Providence, or that ordinary Law wherein Almighty God governs ordinarily the Universe and the things in it, without the particular mixture of those that I have called the Imperate Acts of special Providence, which seems to consist of two parts: 1. The institution of certain common Laws or Rules for all created Beings, which (without a special intervention of his Will to alter or change) they should regularly observe; as that the Heavenly Bodies should have such Motions and Influences, that the Inferiour or Elementary World should have its several Mixtures and Transmutations by the application of the active principles and particles in it to Passives, and by the virtue of the Heavenly Motions and Influences: That there should be vicissitudes of generations and corruptions; that Vegetables should have the operation of vital vegetation, increase, duration and productions according to their several kinds; that Sensible Natures should enjoy a life of Sense, and those several powers

powers or faculties of Sensation, Phantasia, Memory, Appetition, Digestion, Local Motion, Generation, and those several instincts whereby they should be managed and governed according to the conveniences of a sensitive nature: That the Rational Nature should have those Faculties of a Sensitive Nature, and superadded to it the Faculties of Intellect, Reason and Will, whereby it might govern it self as a reasonable free Agent, and determine it self to this or that action. And these are the instituted Laws of the Divine common Providence.

2. A continued influx of the Divine Goodness, whereby things are upheld and continued in their state of being according to this Law of their Creation: And by virtue of both these acts of common divine Providence all things are enabled to act and operate according to the Laws of their being, without the necessity of any new individual concurrent act of special Providence producing, directing, or determining their several operations. And hence it is that the Will of man by the instituted Law of his Creation, and the common Influence of the Divine goodness and power is enabled to act as a reasonable Creature, to determine it self, and to govern its proper actions according to the Law of his Creation, without any particular, specifying, concurrent, new imperate act of the Divine special Providence to every particular determination of his Will: Even as the continued influx of the reasonable Soul enables those Faculties which we call Natural or Involuntary, without new deliberation, purpose or counsel to every new act thereof: And by this means the World is in an ordinary course of Providence governed according to those standing fixed Laws given to the Universe and the several parts thereof by the Divine Will, wherein it is supported by the common influx and presence of the Divine power and goodness.

And this is that which being duly considered extriceth that Question which hath so much troubled the World, concerning the sinful acts of men, and how far forth the glorious God is at all concerned in them. Certainly the imperate acts of his Blessed Will have nothing to do to enforce or necessitate the Will of man to any sin, it is far from the purity of his Glorious Nature: But the general Law of his Providence is only thus far concerned in it, That he hath made Man an intelligent and free Agent, put him into the power of his own Will, but yet *sub graviore imperio*, to restrain its actions, if he please, by his special Providence; and Man in this state of his liberty, when he doth sin, sins from the Empire of his own Will, and not from a determination of the Divine Regiment.

But though the contemplation of the regiment of the Soul over the Body hath given some analogical explication of the Divine Providence in the Government of the World, yet as this Analogy is but imperfect, the Divine Regiment of the World is infinitely more wise, more powerful, more perfect than the regiment of the Soul over the Body, so in many things this Analogy by no means holds: For instance, The Soul doth what it doth in the Body, though by a kind of efficiency, yet it is but a subordinate efficient, and vicarious and instrumental in the hands of the Almighty, who as it hath endued the Soul with this energy, so the Soul is but his substitute in this regiment of the Body; but Almighty God is the supreme Rector of the World, and of all those subordinate provinces

provinces and parts thereof: Secondly, in the imperate acts of the Souls regency of the Body and the *Compositum*: She cannot in the Body work immediately without the instrumentality of the intermediate animal and vital Spirits: But in the imperate acts of the special Divine Providence though we may justly think he doth most ordinarily use the ministry of those noble natures called Angels, yet he may and oftentimes doth by the immediate *Fiat* of his own Will exercise these imperate acts of special Providence, for his Power is infinite, and all Beings are in an immediate obedience and subjection to it.

3. The Soul cannot by its own Will exercise any immediate imperate act upon those natural and involuntary operations which yet are exercised by an influx from it; indeed it may starve and destroy the Body by its Empire, and thereby consequently impede and determine those natural and involuntary operations, yet it cannot by its Intention or Empire prohibit or suspend their exercise, the natural means being allowed and present; it cannot effectually prohibit the Heart not to move, or the Blood not to circulate, or the Ventricle not to digest: But it is otherwise with the Regent and regiment of the World, even those things wherein he hath set a fixed Law, which by virtue of the common influence of the Divine Power and Goodness they observe and follow, are subject to the Empire of his special Providence and the imperate acts thereof. And this is evident in that Administration of special Providence which is miraculous; he commanded the Fire not to burn, stopped the mouths and appetites of Lions, and prohibited the natural operation and agency of Natural Causes. 2. In all the special Providences that are exercised in the World, though they do not visibly appear to us to be miraculous, yet they most certainly are governed by the *imperium* of special Divine Providence, whereby it sometimes excites second Causes to production of Effects which being thus excited they naturally produce; sometimes impeding them, sometimes diverting them, sometimes directing them, sometimes by contemperation, or uniting other more active or contrary Causes allaying or enforcing them: and although it may be the interposition of the Divine *imperium* or special Providence be not immediately the immediate antecedent Cause, but it may be the third, the fourth, the tenth, the twentieth Cause distant from the Effect. Nay though possibly the conjunction of the immediate *imperium Providentie* be with the First Mover in Nature, the Heavenly, Æthereal, or Fiery Influx, yet the regiment of the Divine Providence is as full and infallible in relation to the imperate regiment of the Effect, as if it were immediately joyned to the designed Effect: So that the Moral of that Poetical fiction, that the uppermost Link of all the *series* of subordinate Causes is fastned to *Jupiter's* Chair, signifies a useful truth; Almighty God doth as powerfully govern and direct when he pleaseth, and how he pleaseth, all subordinate Causes and Effects, as the Soul governs the motion of the Muscle or Limb by those strings of the Nerve which are rooted in the Brain.

4. Again, the regiment of the Soul over the Body is the regiment of the more active part over the more passive, though both making one *Compositum*; but the regiment of Almighty God over the World is not as a part of it, or as a Form or Soul informing it, but as a Rector or Governour, distinct, separate, and essentially differing from it, his regiment

of the World in this respect not so much resembling the regiment of the Soul over the Body, which together with it make one compounded Nature; as the regiment of the Master or Rector over the Ship, or the regiment of a King over his Subjects.

And thus I have gone through the Speculative consideration of the Divine Providence resulting from the contemplation of a Souls regiment of the Body, wherein I have been the longer, because the contemplation of the Divine Providence is a Subject that delights me, and I am contented to dwell upon it as much as I may, and to take up this or any the like occasion to lead me to the contemplation of it.

And thus far touching the Usefulness of the Contemplation of the Humane Nature, in relation to truths Speculative.

II. The Usefulness of it in relation to matters Practical, wherein I shall be shorter. This Contemplation hath these useful Advantages, namely, 1. *Physical*; 2. *Moral*; 3. *Theological or Divine*.

1. For *Physical*, by which I mean that practical part of Physical knowledge that is called Medicinal. The due consideration and knowledge of the structure, fabrick and parts of the Humane Body is necessarily conducive to that excellent Faculty for the preservation of life and health, no one thing being more conducive to the advance and perfection of that Science or Faculty than the knowledge of the Humane Body, wherein the Experience of Anatomy and dissection, and the Observations of the ancient and modern Physicians hath given a large evidence and testimony.

2. The *Moral* Practical consequences deducible from the knowledge of the Humane nature are many and useful. For instance, when I consider the admirable Frame of the Humane Nature, made by the Wisdom, and according to the Image of the Glorious God, 1. How careful should it make me that I do not injure that goodly Structure in others, by offering violence to the life of another, or to corrupt him either by evil example or evil counsels? 2. How careful should it make me in relation to my self, not to embase that excellent Frame either of my Body or Soul, or both, into the image of a Brute by sensuality, luxury, or intemperance; or into the image of a Devil, by malice, envy, or irreligion? How careful should it make me to improve and ennoble those excellent and comprehensive faculties of my Understanding and Will with such Objects as are worthy to be known and desired? The intellectual Faculty is a goodly field, capable of great improvement, and it is the worst husbandry in the world to sow it with trifles or impertinencies, or to let it lye fallow without any seed at all.

3. The *Theological* uses that arise from the knowledge of our selves are great and many. When I consider the admirable Frame of my Body, made up in that elegant, stately, and useful compofure; and when I consider the usefulness, amplitude, and nobleness of my Faculties, an Understanding capable of the knowledge of all things necessary for me to know, accommodate and fitted to the perception and intellection (though not to the full comprehension) of a World full of variety and excellency; of a God full of all conceivable perfection and goodness; a Memory able to retain the notions of what I understand; a Will endued with freedom, whereby I am a subordinate Lord of all my actions, and endued with a

con-

connatural propension and appetite unto rational good; Reason and Conscience to guide and direct me in all the enquiries and actions of my life; and besides all this, a Soul, the stock and root of all those Faculties, endued with immortality, and capable of everlasting blessedness: When I consider that this Soul of mine is not only endued with faculties admirably fitted to the life of Sense which I enjoy in this World, but find in it certain secret connatural rudiments of goodness and virtue, and a connatural desire and endeavour after a state of immortal happiness. And when I consider that this Frame both of Body and Soul had its primitive origination immediately from the great Creator of all things; and although my own immediate origination was from my Parents, yet that very productive virtue was implanted in the primitive Nature by Almighty God, and the derivation of the same specific Nature to me was by virtue of his original Institution and Benediction, and by virtue thereof that excellency and perfection of Humane Nature in its essential which was first formed by the glorious God, is handed over to me, abating only those decays which Sin brought into my nature: I say, when I deeply and intimately consider these things, I cannot but be sensible that that Being from whom I thus derive this being, and such a being, is a most wise, powerful and bountiful Being, that could thus frame the Humane Nature, and thus freely bestow and confer this constitution upon me. 2. And upon this sense of his Wisdom, Power and Goodness, I must needs entertain it with all imaginable admiration of it, and with all possible gratitude, for so great and so free a gift. 3. And consequently I cannot choose but exercise the choicest affections I have towards him, of reverence and fear of his Greatness and Majesty, of dependance and rest upon his Power and Goodness, of love to the excellency of his Essential Perfection and Communicative Goodness and Beneficence. 4. And consequently of entire subjection unto him that upon all the rights imaginable hath the most just sovereignty over me. 5. And consequently of all due inquisitiveness what is the Will and good pleasure of that God that I owe so much gratitude, love and subjection to, that I may serve and please him. 6. A resolved, entire, hearty obedience of that Will of his in all things; thereby to testify to him my love, gratitude, and subjection. 7. An external manifestation to Men and Angels of that internal love and gratitude I owe him by continual praise and thanksgiving to him, invocation of him, reverence of him, and all those acts of Religion, Duty and Obedience which are the natural Proceed of that internal frame of my Soul towards him. 8. A constant desire of my Soul to enjoy as much of this bountiful glorious blessed Being, as it is possible for my nature to be capable of. 9. And because my estate and condition in this life is but a state of mortality, and a temporal life; an earnest endeavour to have my everlasting Soul fitted and qualified to be an everlasting partaker of his presence and goodness in a state of nearer union to him and fruition of him, in that future life of glory and immortality. 10. And consequently abundance of circumspection, care and vigilance that I so behave my self in this state of probation here, that I neither lose his favour from whom I expect this happiness, nor render my self unworthy, unfit, or incapable to enjoy it.

And thus this deep, serious, and comprehensive Consideration of our

G 2

selves

elves and the Humane Nature in its just latitude, doth not run out barely into Notions and Speculations, but is operative and practical; teacheth a man Virtue and Goodness and Religion and Piety, as well as Knowledge, and is operative to make a man such as it teacheth him to be; perfects his nature, enricheth it with practical as well as speculative habits, and fits and moulds and accommodates a man to a conformity to the End of his being.

And these be the Reasons that have especially put me upon the search and enquiry into this Subject, M A N.

I am not without excellent helps and patterns in this Inquiry, nor without the due fruits and effects that it hath had upon the Minds of them that have been exercised in it.

Galen, though he spoke darkly and doubtfully of the Soul, being destitute of much of that light which we now have, yet upon the bare contemplation of the structure of the Body and the parts thereof, in that excellent Book of his *De Usu Partium*, resolves the whole Oeconomy thereof into the Power, Wisdom, Goodness, and Efficiency of the Glorious God; and is transported both with the admiration of the Divine Wisdom appearing therein, and with indignation against the perverseness and stupidity of *Epicurus* and his disciples; which would attribute this one *Phenomenon* to Chance.

And had he, or should any else apply himself to the search of that Intellectual Principle in Man, his Soul, he will find a greater evidence of the Divine Wisdom, Goodness and Power; as will easily appear in a little consideration thereof.

C A P. II.

Touching the Excellency of the Humane Nature in general.

ALthough I intend a more distinct Consideration of the Humane Nature, and the Faculties of the Humane Soul, and the Parts of the Humane Body, yet it may be necessary before we come to the discussion of the origination of Mankind, to premise something concerning the Nature of Mankind, and its preheminece and excellence above all other sublunary Creatures, that we may have a little tast touching that Being whose origination we inquire. This Consideration will be of use to us in the enquiry touching the origination of Man; to evidence, that neither Chance nor furd or inanimate Nature could be the Efficient of such a Being, but a most Wise, Powerful, and Excellent Author thereof.

I shall not at large discuss those Faculties and Organs which he hath in common with Vegetables and Brutes, but those only that belong to him specifically as Man, and those also but briefly.

The Corporeal Beings of this lower World are divided into these two ranks or kinds; such as are Inanimate or not living, and such as are Animate or living.

Life, according to *Aristotle* in 1. *De Anima*, cap. 1. is described by its effects,

effects, viz. *Nutritio*, & *auctio*, & *diminutio qua per seipsum fit*; and the lowest rank of such things as have life are Vegetables: for though Minerals have a kind of analogical nutrition and augmentation, yet it is such as ordinarily *non fit per seipsa*, but rather by accession and digestion from external Principles and coagmentation.

The Principle from whence this Life flows in all Corporeal Natures that have it, is that which they call *Anima*, or at least *vis Animastica*. The Faculties or Operations of this *Anima vegetabilis* are these; 1. *Attractio alimenti*: 2. *Fermentatio & assimilatio nutrimenti sic attracti in succum sibi congenerem*: 3. *Digestio, vel dispersio alimenti sic assimilati in diversas partes individui vegetabilis*: 4. *Augmentatio individui vegetabilis, ex unione & consolidatione succi vegetabilis diversis partibus individui*. 5. *Conformatio hujusmodi particularum unitarum specificae naturae ejusdem individui cujus est augmentatio; ut in trunco, ramis, cortice, fibris, foliis, fructu, &c.* 6. *Seminificatio & propagatio ex semine vel partibus seminalibus*. 1. Attraction of aliment: 2. Fermentation and assimilation of the nourishment so attracted, into a juice of the same kind with it self: 3. Digestion, or dispersion of the aliment so assimilated into the divers parts of the vegetable individual: 4. Augmentation of the vegetable individual, from the union and consolidation of the vegetable juice to the divers parts of the individual: 5. The conformation of these united particles, to the specifical nature of the same Individual, which is augmentation; as in the trunk of a Tree, the bark, fibres, leaves, and fruit: 6. Seminification and propagation from the seed or seminal parts. These seem to be the process of the Vegetable Nature, Soul, and Life.

2. The next rank of living Creatures is that which hath not only a vegetable life, and a vegetable principle of life, but hath also superadded a life of sense, and a sensitive Soul or Principle of that life of Sense, which nevertheless as one specifical Principle exerts the acts as well of the vegetable as sensitive life.

And this nature 1. Includes all those powers and faculties of the Vegetable Nature, as Attraction, Assimilation, Digestion, Augmentation, Conformation, and Propagation or Seminification.

2. It includes them in a far more curious, elegant, and perfect manner, at least in the more perfect Animals. As for instance, the first assimilation of the attracted nourishment in Vegetables converts it into a watry humor or juice; but the assimilation thereof in Animals rectifies this alimental juice into Chyle, and then into Blood: The propagation of Vegetables is without distinction of Sexes, but that of Animals usually with distinction of Sexes; and many more such advances hath the animal nature above the vegetable in those faculties or operations which for the main are common to both.

3. It superadds a greater and higher perfection to the animal nature, by communicating to it certain essential Faculties and Powers that the vegetable nature hath not: And those are these;

1. Sense. It is true, that *Campanella* in his Book *De Sensu rerum*, and some others that have written *de Perceptione substantiae*, attribute a kind of Sense to all created Beings, and therefore much more to those that have a vegetable life: And in some Vegetables we see something that carries a kind of analogy to Sense; they contract their leaves against the cold, they

they open them to the favourable heat; they provide teguments for themselves and their seeds against the injury of the weather, as their *cortices*, shells; and membranes; they seem to be carried with a complacency in the propagation of their kinds as well as Brutes, and therefore many of them being impeded therein, they germinate again, though later in the year: And some Plants seem to have the sense of Touch, as in the Sensitive Plant and some others, which seems to be an advance of the Vegetable Nature to the very confines, or a kind of contiguity to the lowest degree of those Animals that are reckoned in the rank of Sensibles.

But this notwithstanding we deny a real and true sense to Vegetables, indeed, they have a kind of *umbra Sensus*, a shadow of Sense, as we shall hereafter observe, that Sensibles have a kind of *umbra Rationis*, a shadow of Reason, but it is only a shadow thereof. 2. There are also in their natures by the wise God of Nature implanted even in their vegetable natures certain passive Strictures or Signatures of that Wisdom which hath made and ordered all things with the highest reason, even the least inconsiderable Herb; and these Signatures are bound to their natures by certain connatural instincts planted in them; but still they want the active principle of Sense in them.

Now this Sense or Sensitive Faculty in Animals is of two kinds, the external Senses, and the internal. The external Senses are five, all which belong to the more perfect Animals; and that of the Soul to all Animals, *viz.* Seeing, Hearing, Tasting, Smelling, and Touching.

And it is admirable to consider that the great Lord of Nature hath so disposed of sensible Beings, that although (for ought we know) there may be many more impressions or motions of external Bodies that we know not by their communication unto Sense, because we have not Faculties receptive of them. Yet the Faculties of the five Senses are adequate and proportioned to all those impressions of Objects from without that are conducive to the use and well-being of Animals in a sensible station or nature.

The internal Senses are of two kinds, *viz.* 1. Such as concern perception of Objects: 2. Such as concern the motion to them as useful, or from them as noxious.

Those of the first sort have some adumbration of the Rational Nature, as Vegetables have of the Sensible, and they seem to be these, the Common Sense, the Phantasie, the Estimative Faculty, and the Memory.

The Common Sense, or *Commune Sensorium*, which receives the several reports of the several Senses by their several Nerves into that common receptacle or seat of this useful office, the Brain; where it distinguisheth the Objects of the several Sensories.

The Phantasie, that in a way unsearchable unto us, 1. Creates the Images of the things delivered from the several Senses to the *Commune Sensorium*: 2. Compounds those Images into some things not unlike Propositions, though confusedly and indistinctly: 3. Makes particular applications of them one to another, though still darkly and confusedly, whereby it excites the Appetite either to prosecute their attainment, or fly from them.

The Estimative Faculty, which is indeed no other than the last operation or composition of the Phantasie before-mentioned, whereby it concludes

concludes that this is a sensible good or a sensible evil, that it is attainable or feasible, or not attainable; that though it be good, yet sometimes it is not safe to be attempted by reason of the impendence of a greater sensible evil. This seems to be the dark and confused shadow of the decision of the practical Intellect in Man.

The Memory, which is an impression of the Image of some sensible Object made by the Phantasie, which remains some time after the impression, and by the return of a like Object again is sometimes revived and reinforced: But how this Image is made, where it is imprinted, how conserved, are things we cannot at all attain the knowledge of; they are wonderful, though common effects of a most wise and stupendous Wisdom and Power that hath thus constituted even the Faculties of the Animal Nature: Only it seems to me that these Images are not made in the Brain it self, as the Pencil of a Painter or Engraver makes the Image in the Table or Metal, but are imprinted in a wonderful method in the very Soul it self: For it is plain that Sounds and Voices are remembered, and yet no real configurations are possible to be made thereof in the Brain; for what Image can there be of a Sound?

Now as to that Faculty or those Faculties that concern the pursuit or flight of what is thus propounded by the Phantasie or Estimative Faculty, they are generally two: The *Appetitus naturalis*, which bears some analogy to the Will in the Reasonable Nature, and the acts thereof are either prosecution of the Sensible Object propounded, if presented by the Phantasie and Estimative Faculty as good; or else averfation from it, if presented as evil.

This is the Faculty of Empire or Command, for in conformity to the determination of the Appetite the motion of the Body follows.

The other Faculties that concern pursuit or averfation, are the Passions, the *Satellites appetitus*, serving either in the prosecution of the good propounded, as Love, Desire, &c. or in opposition of the evil presented, as Anger, Revenge, &c.

And thus far touching the Senses in Animals, both External and Internal.

2. The second superadded prelation of the sensible nature above the vegetable is the faculty and exercise of animal and local motion, whereas Vegetables have naturally no other motion but that which is determined and natural, and what is within it self, as the motion of Attraction, Digestion, Nourishment, Augmentation and Increase. Animals have the faculty and power of animal motion, which hath these accessions, 1. It is or may be spontaneous; for though the object moves objectively, yet the faculty or power moves *ab intrinseco*, and spontaneously. 2. It moves the parts spontaneously, the Leg, the Eye, the Ear or any other part, which cannot be done by Vegetables. 3. Again, it can move the whole *Compositum* from one *ubi* to another (at least in all Animals except those that are almost in the nature of Plants, called *Zoophyta* or *Plantanimalia*) which cannot be done by Plants, who are mancipated and fixed to the place of their station or growth, unless removed by an extrinsecal agent.

3. The third superadded advantage of Animals is their Instincts, It is true, Vegetables have their instincts radicated in their nature, as we have

have before observed; yea even things Inanimate have certain simple instincts, as in the motions of ascent of light bodies; and descent of heavy bodies: But the instincts of Animals are sensible instincts of a more noble kind and nature than those of Vegetables, and such as seem to favour more of an active principle; as sagacity of Brutes in taking their prey, defending themselves, providing against the inclemency of the weather, care for their young, building their nests, and infinite more, which are too long to name.

These are the superadded Faculties of the Animal Nature; and proportionate and accommodate to their faculties are their organizations of their Bodies. And in as much as there is great varieties in the temperaments, dispositions, faculties and uses of several Animals of several kinds, their organizations are not only fitted to the common natures, uses and powers of sensible Creatures, but every several *Species* hath its several accommodation as well of his Organs as of his Faculties to the exigence, use and convenience of his proper specific nature.

Thus the ranks of the vegetable perfections are not only included within the rank of sensible Beings, but these have greater perfections in what is common to both, and superadditions of other more noble Faculties and Organs not communicable to the former. The Vegetable Nature is indeed like a curious Engin, but it hath but some simple and single motions, like a Watch that gives the hour of the day, or a *Trochea* with one Wheel: But the Animal Nature is like an Engin that hath a greater composition of Wheels, and more variety of motions and appearances; as one of the compound Engins of *Archimedes*, or as a Watch, that besides the hour of the day gives the day of the month, the age of the Moon, the place of the Sun in the Zodiack, and other curious Motions wrought by multiplication of Wheels.

Now touching the Sensitive Natures, there have been two extreme opinions, both of them extremely contrary one to another, and yet both of them, as they are delivered by their Authors, untrue.

1. That Opinion that depresseth the natures of sensible Creatures below their just value and estimate, rendring them no more but barely Mechanisms or Artificial Engins; such as were *Archytas* his Dove, *Regiomontanus* his wooden Eagle, or *walchius* his iron Spider: that they have no vital Principle of all their various Motions but the meer modifications of Matter, or at least the elementary Fire mingled with their other Matter; that they have no other form or internal principle of Life, Motion, or Sense but that which is relative and results from the disposition, texture, organization and composition of their several Limbs, Members or Organs: This fancy began by *Des Cartes* in his *Fundamenta Physica*, and hath been followed and improved by some of his admirers, and particularly much favoured by *Honoratus Faber* in his Book *De Generatione Animalium*; and herein they think they have given a fair solution to all the *Phenomena* of the Sensitive Nature, and given a fair prelation to the Soul of Man, which they agree to be a substantial Principle of humane actions: But in both these they have been disappointed; for this supposition as it gives not at all a tolerable explication of the *Phenomena* of sense and animal motions, so if it did, it would easily administer to a little more confidence and boldness, a temptation to resolve all the Motions of the reasonable Soul into the

the like supposition, only by advancing the Engin or *Automaton humanum* into a more curious and complicated constitution: For he that can once suppose that the various modifications of Matter and Motion, and the due organization of the Bodies of Brutes can produce the admirable operations of Sense, Phantasie, Memory, Appetite, and all those instincts which we find in Brutes; is in a fair way of resolving the operation of the Reasonable Nature into the like supposition, only by supposing the organization of the latter somewhat more curiously and exactly disposed and ordered as much above that of Brutes, as theirs is above that of Vegetables. It is true, the organization of the humane and animal Body, with accommodation to their several functions and offices, is certainly fitted with the most curious and exact Mechanism imaginable; as appears by the structure of the Heart, the Lungs, the Brain, the Tongue, the Hand, the Nerves, the Muscles and all other parts, and the several orders and methods of their motions and adaptations to their several offices, and the exercise by them of those Faculties to whose service they are consigned: This must needs be acknowledged by every man that observes them, or that takes the pains to read the Tracts of those that have written of them; and especially *Galen* his divine Book *De Usu Partium*, *Des Cartes* and *Fabritius* concerning the structure of the Eye, the same *Fabritius* and *Steno* *De motu Muscularum*; and divers others.

But that the Principle that sets on work these Organs, and worketh by them, is nothing else but the modification of Matter, or the natural motion thereof thus or thus posited or disposed, or the bare conformation of the Organs, or the inclusion and expansion of any natural inanimate particles of elementary Fire, is most apparently false, even to the view of any that observes or considers impartially.

It is impossible to resolve Perception, Phantasie, Memory, the sagacities and instincts of Brutes, the spontaneoufness of many of their animal motions into those Principles, nor are they explicable without supposing some active determinate power, force, or virtue connexed to, and inherent in their Spirits or more subtil parts, of a higher extraction than the bare natural modification or texture of Matter, or disposition of Organs, or, as they are often pleased to stile them, their *plexus partium*.

Again, it is visible to the Eye, that that power, or virtue, or principle, whatever it is, that in the generative process first immediately formeth and organizeth the parts of the Body, is that which guides, orders and governs all the animal motions of it after: That power which first forms the Brain, the Heart, the Liver, the Eye, is that which afterward increaseth, augmenteth, exerciseth and employeth them after: And no man living can force himself to imagin that that Principle which forms, organizeth, disposeth, and modifyeth the parts, is any thing that results from the organization or modification of those parts which are not yet moulded or framed, but must have its modification from that Principle which is antecedent to any manner of organization or texture of parts into an animal composition: No man therefore that hath not abjured his Reason, and sworn allegiance to a preconceived fantastical *Hypothesis*, can undertake the defence of such a supposition, if he have but the patience impartially to consider and look about him.

2. The other extreme Opinion seems to advance the Animal Nature

too high, at least without a due allay of their general expression; namely, those who attribute Reason and a reasoning faculty or power to Animals as well as to Men, though not altogether in the same degree of perfection: so that they will not have Reason to be the specific or constitutive difference of the Humane Nature, but common to them and Brutes: This Opinion seems generally to be favoured by the *Pythagoreans*, that held Transmigration of Souls; by *Plutarch*, in *Grillo*, and his second Oration *De Esu Carnium*; by *Sextus Empiricus*, *Contra Mathematicos*; by *Porphyry*, *Lib. 3. de Abstinencia ab Esu Animalium*; which he endeavours to prove and illustrate by divers reasons and instances; and among the latter by *Patricius* in his fifth Book *de Animis irrationalibus*; but above all by the ingenious and learned *De Chambre* in his Book of the Knowledge of Beasts, wherein he asserts not only the simple apprehension of Beasts by phantasms or images wrought by the Phantasie, but the conjunction of images with affirmations and negations, which make up Propositions, and the conjunction of Propositions one to another, and illation of Conclusions upon them, which is Ratiocination or Discourse: And that in farther evidence thereof there is a certain kind of Language whereby Beasts or Birds, especially of the same *Species*, communicate their conceptions one to another; only this discursive Ratiocination of Brutes he calls *Ratio imaginativa*, and differenceth it from *Ratio intellectualis* which belongs properly to Men, principally in this, That the imaginative or brutal Ratiocination keeps still in particulars, and within the verge of particular propositions and conclusions; but intellectual Reason hath to do with universals, and for the most part grounds and directs its Ratiocination by them.

Touching the thing called Reason, we must consider that it hath a double acception: 1. It is taken for every conduct of any thing by fitting means to fitting ends, or the due and convenient ordering and adapting of one thing to another; and this again seems to be of three kinds, *viz.* Active, Passive, or Mixt: 1. That I call Active Reason which from an inward intellectual principle orders and disposeth, as the Watch-maker contrives, orders, and disposeth the several parts of the Watch, so that it excites a regular and useful motion: 2. The Passive Reason (which is more properly Reasonableness) is that order and congruity which is impressed upon the thing thus wrought; as in the Watch I see every thing moves duly and orderly, and the reason of the motion of the Ballance is by the motion of the next Wheel, and that by the motion of the next, and that by the motion of the Fusee, and that by the motion of the Spring; the whole frame, order and contexture of the Watch carries a reasonableness in it, the passive impression of the Reason or intellectual *Idea* that was in the Artift: 3. The Mixt sort of Reason seems to be when a thing concurs actively and from an internal principle, and (in things that have life) vitally, to the production of a reasonable effect, but yet *per modum instrumenti*, and in the virtue of a superiour direction of a reasonable agent: Thus when I plow my ground, my Horse is harnessed and chained to my Plough, and put in his track or furrow, and guided by my Whip and my Tongue, and so draws on my Plough, and this reasonable work is performed actively and vitally by my Brute in the virtue of my direction. And certainly this kind of latter Reason

is evident not only in the brute Beasts in their instincts and operations, but also in Vegetables, and almost in all things in Nature; for they are all indued with a certain inherent activity, which is nevertheless implanted, directed, ordered and determined by the great Creator in the Laws of their several constitutions: The process of nutrition and generation not only in Animals but even in Vegetables is done with the highest Reason, exceeding the imitation of the Humane Reason; the Birds making their Nests, ordering their Eggs and moving them in incubation, feeding and disciplining their young, is done with the most exquisite reason and congruity thereunto, beyond the artifice of the most ingenious man. And it must needs be so; for though they concur actively from an internal Principle to the production of the effect, yet they are determined therein and thereunto, and their track ordered for them and to them by the Laws of their nature instituted and imprinted on them by the unimitable Wisdom of the highest intellectual Being. This mixed or instrumental Reason, as I may call it, therefore all must agree to belong not only to Brutes, but almost to all things in Nature, and herein differs from Reason or Reasonableness which I before call simply passive, in that it immediately proceeds from the internal active Principles implanted by God in their natures.

2. But there is another kind of Reason which we call Ratiocination, or *Discursus rationalis*, which consists principally in these three things; though the two former without the latter make not up a compleat Ratiocination: 1. The simple apprehension of things themselves, which is done by images or representations thereof, made either by the Intellect; or by the representations made thereunto by the Phantasie: 2. The compounding of the images or representation of things with an affirmation or negation; this makes a Proposition: 3. The composition of several Propositions among themselves, and drawing from them Conclusions; and this is called *Syllogismus*, Ratiocination or Discourse.

But though this be the *analysis* of Ratiocination into which by a careful attention it may be resolved, we are not to think all sort of reasoning or ratiocination, even in Men themselves, is presently by way of explicit or formed Syllogisms, or artificial Moods and Figure. Some consecutions are so intimately and evidently connexed to or found in the premisses; that the conclusion is attained *quasi per saltum*, and without any thing of ratiocinative process, and as the Eye sees his object immediately and without any previous discourse; so in objects intellectual many evident truths or principles are *primo intuitu* assented unto: as in objects of Sense the action is elicited *per saltum*; as many times when a Horse is hungry and comes to a good pasture, he falls to his food immediately without forming Mr. *Chambre's* Syllogism,

*This green is grass,
This grass is good to eat,
Therefore this green is good to eat.*

But the *transitus* from the Sense to the Phantasie, and from that to the Appetite, and from that to the motion of Eating is immediate, momentaneous, and *per saltum*.

In brief, as the vegetable nature, as hath been observed, hath a kind of shadow of the sensible nature, so the sensitive nature hath a kind of shadow of the truly rational nature; their Reason is but a low, obscure and imperfect shadow thereof, as the Water-gall is of the Rain-bow; and proportionable to their imaginative Reason is their animal Language, which though it be a kind of natural sign of their Imagination and Passions, yet it is infinitely below the perfection of humane Language: For we see that those Birds who by reason of the analogy of their organs by use are taught some words or sentences, yet they never proportion those words to an explication of any distinct conception signified by them, nor can use or apply those words they learn to the things they signifie, nor can they connex their words or sentences in coherence with the matter which they signifie, and commonly have recourse to their wild natural notes when they would express their imaginations or passions, which notes are at the best but like natural interjections, framed by Nature, not by Art, to discover their passions or impressions; and their artificial language or notes are no other than impressions upon their sensitive Memory by iterated use, and drawn out from them upon the strength of such impression, or by repetition of Objects that excite that Memory.

Thus much I thought good to premise concerning the vegetable and sensitive natures, which may be of some use in the consideration of the rational or humane nature; partly to instance what this latter includes, namely the whole perfection of the vegetable and animal faculties, and partly to discover the preference that the Humane Nature hath above the Animal Life in these most perfect faculties of Intellect, intellectual Reason, and Will.

I shall not here distinctly and fully examine the nature of Man in the whole compass and extent thereof, but shall reserve it to a fuller inquiry; I shall only instance in so much thereof in this place as may be apposite to my purpose, namely, to shew that he is a Creature of most admirable constitution, and such as deserves our inquiry, and such whose first composition and origination requires a higher and nobler Constituent than either Chance or the ordinary method of meer Natural causes and concurrences; and that it is such a piece as in its first constitution and ordination requires an Efficient of infinite Power, Wisdom and Goodness: This is the end and scope of my present Inquiry.

Now to give a brief Inventory of the Excellence of the Humane Nature, I shall observe as near as I can this order.

First, I will briefly consider those Excellencies that he hath in common with the vegetable and sensible nature: Secondly, I shall consider those specific or appropriate Excellencies that he hath above the former, both vegetable and animal nature.

Under the Second general I shall consider Man singly with relation to himself, and then with relation to other things without him.

In relation to himself I shall briefly consider these particulars: 1. The excellency of his Soul or intellectual nature in its nature, faculties, acts and habits; 2. The peculiar excellency of his Body; 3. The peculiar excellency of the *Compositum*, consisting of both his former essential parts.

In relation to things without him, I shall consider him with relation
1. To God, 2. To Mankind, 3. To the other integrals of the World;
and

and therein 1. Of their serviceableness and accommodation to him; 2. Of his dominion and sovereignty over them, and the means and instruments thereof.

This is the brief Scheme that I intend of those specific and appropriate preeminences that the Nature of Man hath above other visible Creatures.

First therefore, touching those Excellencies that the humane Nature hath above the vegetable and animal Nature, I shall subjoin these ensuing Positions.

1. There is no excellent vegetable or animal Faculty in the vegetable or animal Nature, as such, but it is found in the humane Nature; such as are attraction, nutrition, digestion, conformation of parts digested, proportionable augmentation, generation, sensible perception, common sense, estimative faculty, sensible appetite, locomotive faculty, and animal motion: I meddle not herein with all those smaller sort of Faculties, which are peculiarly appropriate to Vegetables or Animals, as swiftness, sagacity, strength, and special artifices, which belong not to them in the common nature of Vegetables or Animals, but by certain specific Instincts or Faculties, because though it may be some of them are not found in the same kind and degree in the humane Nature, yet they are such as are abundantly recompensed by that art and ingeny which appropriately belongs to the humane Nature.

2. There are no Organs in the sensible Nature (which yet are more perfect than those of the vegetable Nature) subservient to the Faculties of Life and Sense, which are wanting in the constitution of the humane Body, at least in substance and equivalence.

3. Those very Faculties and Organs subservient unto them in the vegetable or sensible Nature, which are found in them, are lodged in the humane Nature in far more excellency and perfection than they are in the vegetable or animal Nature: So that if the Faculties or Organs subservient to the vegetable or animal Life in Man, do differ in their state or composition from those of Brutes, it differs for the better, as obtaining a more exquisite perfection, usefulness, beauty, and contexture, than those of Brutes; as may appear in the Hand of Man compared with the Foot of Beasts or Birds; the Foot, the Leg, the Thigh of Man, with those of Beasts, and the like. It is true, the constitution of some Faculties and Organs of Sensibles, is more accommodate to their fabrick and use than the like Organs of Man would be to the use of Brutes; but simply comparing one with another, the Organs of the humane Body are more curious and excellent than the Organs of the bare animal Nature. And from hence it comes to pass, that the full knowledge of the humane Faculties and Organs, subservient to the animal Life in Man, comprehends in effect all the like Faculties and Organs in the animal Nature, though differing in some particular textures and positions, with a proportionable advance by the access of excellence of the humane Nature.

2. As to the specific or appropriate Excellencies of the humane Nature above the most perfect Animals, they come next to be considered.

It is true, that Animals in proportion to the length of their Life attain their complement of their specific perfection sooner in proportion than the humane Nature: The animal Soul sooner expands and evolves it self
to

to its full orb and extent than the humane Soul: Therefore the Horse that lives naturally about thirty years, comes to his full growth and perfect exercise of its animal Faculties in four years; but Man, that lives not ordinarily above seventy years, comes not to the ripeness of his Intellectual Life 'till two and twenty or three and twenty years at least, nor even to his full growth 'till nineteen or twenty: So that what we say concerning Man, in relation to the actings of his Mind, must be applied to that state and age wherein his Soul hath fully as it were evolved it self, and its Organs fully mature and disposed for the actings of his Soul: He is long ripening, but then his maturity, and the complement thereof, recompenseth the slowness of his maturation.

Now the Excellencies appropriate to the humane Nature are, as before, observed of two kinds; 1. such as immediately concern the humane Nature it self; or 2. such as are extrinsecal, but yet relating to it.

Those things that are immediately residing in, or part of the humane Nature, come first to be considered: And they are three: 1. His Soul, or intellectual and volitive Principle. 2. His Body, or corporeal part. 3. The *Compositum* or *Coalitum* of both those Principles, which complete the humane Nature.

The Soul comes first to be considered, and therein these four things: 1. Its Constitution or Nature. 2. Its Original. 3. Its Faculties. 4. Its congenite Habits or rational Instincts.

1. Touching the Constitution of the Intellectual Soul of Man, I shall not in this place enter into a large discourse concerning it, but reserve that consideration to its proper place, only in general it is 1. An active principle; 2. It is a substantial principle; 3. It is not corporeal or material; 4. It is not corruptible or mortal.

2. Touching its Original, whether it be by traduction, or creation, or participation, I shall not here dispute, but reserve it to its proper place for a fuller disquisition. But whether the one way or the other it had its original, there is no inconsistency but that it hath those essential qualifications above-mentioned.

3. Touching its Faculties, they are two, the Understanding and the Will: And here I shall not concern my self in the Inquiry, whether the Faculties are the same with the Soul it self, or the same one with the other, and only distinct in notion? whether the Will be any more than the complete or ultimate act of the Understanding determined? It is sufficient, that the acting of the Soul as it relates to perception and decision, and as it relates to choice and pursuit, or aversion, are distinguishable to us, and those notions serve to explicate what we mean in the things we discourse of, as the supposed Circles in the Heavens serve to explicate the appearances thereof. The Understanding or the Intellectual Faculty (the shadow whereof only is the Phantasia in Brutes, but it is but a shadow of this of Intellect) is a Faculty that not only gradually but essentially differs from and exceeds the perceptive Faculty in Brutes.

Three things there are that give us the best notion we can have of the humane Intellect, and the discrimination thereof from the animal perception and imagination: 1. The Objects thereof: 2. The Acts thereof: And 3. The Habits thereof.

1. The Object of the humane Intellect is *omne intelligibile*, which is of a far

a far larger extent than the Object of sensible perception or imagination, which as it exceeds not the province of sensible Objects, so it is in order to the convenience of a sensible Life. For instance: When a Brute sees a Man, it sees his colour, figure, motion, bulk, and by the advantage of Memory or Instinct it comes to him, or flies from him, as it hath received, or thinks it like to receive good or evil by him, but it perceives not substance. These Objects, among many other that might be instanced, fall under the perception of the Intellective, which seem not to be within the verge of Imagination or sensible perception: 1. The Notion of a Spirit, or substance void of corporeity. 2. Universals, or conception of things as conjoined in one common nature or notion, abstracted from the Individuals thereof. 3. Abstracted conceptions, as entity, corporeity, &c. 4. Though Brutes may be able to apprehend multitude, as things more than singular, yet they cannot have a distinct notion of Number. 5. Though they may have a confused imagination of something as past, or future, yet it is without distinction of Time, or the notion of it. 6. The truth of consequence in or from the antecedent. 7. The actings of the Mind or Imagination it self, by way of reflection or introspection of themselves, are discernible by Man distinctly, but at least not distinctly by Brutes. 8. The truth and evidence of Geometrical Demonstration. 9. The reason or just estimate of connexion of things to their Causes. 10. The moral goodness and congruity, or evilness, unfitness, and unreasonableness of moral or natural actions, which falls not within the verge of a brutal faculty. 11. The Notions of a Deity, and the result thereupon, namely, Religion, is not to be found in Brutes, but seems connatural to the humane Nature, as shall be shewn.

2. The Intellectual Acts, and they are many:

1. Intellectual Perception, which greatly differs from imaginative or sensitive perception, as far above it: For in those things where the root of intellective perception is in the sense and phantasia, the perception intellective oftentimes departs from and corrects the report of the phantasia, as in the apparent bigness of the Sun, the apparent crookedness of the Staff in a double *medium* of Air and Water, though this kind of Intellectual Perception be not without the help of Ratiocination.

2. Intellectual Ratiocination, which infinitely exceeds that imaginative Ratiocination which some have attributed to Brutes. 1. It is distinct, and with a distinct knowledge of the terms, which in Brutes is confused. 2. It is founded for the most part in Universals, which is not compatible to imaginative Ratiocination. 3. The thread and train of Consequences in intellective Ratiocination is often long, and chained together by divers Links, which cannot be done in imaginative discourse or ratiocination by some attributed to Brutes, which if the *transitus* from the premisses to the conclusion be not very speedy and short, that imperfect Ratiocination is lost in Brutes.

And here I shall again a little resume the former Consideration touching the imaginary Reasoning of Brutes, which I have before called the Image of Reason, and not truly Reason; for it is not a distinct reasoning, but performed in a physical moment: And though we suppose Subject, and Predicate, and Copula, and Propositions, and Syllogistical Connexions

in their Reasoning, there is no such matter, but the entire business is at the same moment present with them without deducing one thing from another, though we form them into notions of distinct acts; and this acting of the sentient Phantasia is performed, 1. By a presence of sense, as the Horse is under the sense of hunger, and that without any formal Syllogism presseth him to eat: the fire burns the Cats foot, and therefore it pulleth it away because the immediate sense of pain enforceth it. 2. By the presence of Memory; the Dog hath been beaten for taking the meat out of the dish, and the next time he sees it there, though he be hungry yet he dares not venture, for his imaginative Memory makes the past strokes as present to him as if he felt them. 3. By the presence of Instinct, which puts him upon those motions that are most evidently as reasonable as any thing can be, and yet without the intervention of Ratiocination. For instance, Every Creature almost hath certain Instruments for its defence, and the offence of its enemies, exactly fitted for their use, and they have that singular dexterity in using them that the most disciplined Fencer cannot equal: The Cock, for instance, hath his Spurs, and he strikes his Feet inward with singular strength and order, and it is not possible he should use his Spurs with greater reason for his advantage; yet he doth not this by any syllogistical method, or by Ratiocination, but is merely tutored to it by Instinct, which is present with him, and at hand without any discursive Reasoning. And this appears, because while it is yet a Chick, and hath no Spurs, nor cannot hurt by it, nor yet hath seen the like motion before to imitate or learn it; yet he readily practiseth it. And to these three present impulses of Sense, Memory, and Instinct, most if not all the sagacities of Brutes may be reduced without the help of true Ratiocination or discursive Reason; though witty men by Analytical resolution have Chymically extracted an artificial Logick out of all their actions.

3. Intellectual Memory, which I call an act of the intellectual faculty because it is wrought by it, though I do not inquire how or where, because it is not solvable: The specific preferences that it hath above the sensible Memory are these, 1. That it remembers and retains such things as were never at all in the Sense, as the conceptions, enuntiations and actions of the Intellect and Will; the conviction of truth or falshood of propositions or reasonings; the conceptions of universals: whereas the sensitive Memory retains nothing but sensible Objects, or their Images wrought by the Phantasia. 2. In that it is more complicated and complex than the sensitive Memory, retaining the series of propositions, argumentations, and a long tract of historical narratives. 3. In that it is more distinct and unconfused than the sensitive Memory. 4. In that it is firmer, and more fixed and permanent than the sensitive Memory. 5. In that it can resuscitate and stir up it self to remember and call together other Images or media to retrieve what it once remembered; which is Reminiscence, an act of intention, which therefore Aristotle in his Book De Memoria & Reminiscencia makes an act peculiar to Man; whereas the Memory of Brutes is either conserved by the Images impressed by the Imagination, and there continued, or revived and reinforced by the occurrence of external Objects bearing an identity or resemblance to the Images at first impressed by the Phantasia.

4. Deli-

4. Deliberation; a staid and attentive consideration of things to be known and their media, and of their several weights, conclusiveness, or evidence; and of things to be done and their media, their congruity, suitableness, possibility and convenience, and of the several circumstances aptly conducive thereunto; which is an act far above the animal actions, which are sudden and transient, and admit not of that attention, mora, and propendency of actions.

5. Judgment; either concerning things to be known, of the weight and conclusiveness of them and ends in decision; or of things done or to be done, of their congruity, fitness, rightness, appositiveness: and this if it refers to things to be done, ends in determination or purpose; if in relation to things already done, then in sentence of approbation or disapprobation; And hither that which we call Conscience is to be referred, namely, if by a due comparison of things done with the rule, there be a consonancy follows the sentence of Approbation; if discordant from it, the sentence of Condemnation.

And this act of the Judgment in relation to things to be done, and the determination thereupon, is that which is usually styled the last decision of the practical Understanding immediately antecedent to the decree of the Will, which it must follow by a kind of moral necessity, when it acts as a reasonable Faculty, and in the due state and order of its nature; though by its liberty and empire it sometimes suspends its concurrence. And thus far concerning the Acts of the Understanding.

3. Concerning intellectual Habits or the genuine effects of these acts in the understanding Faculty, and they are divers and diversly expressed by those that have treated thereof.

1. Opinion, when the assent of the Understanding is so far gained by evidence of probability, that it rather inclines to one persuasion than to another, yet not altogether without a mixture of uncertainty or doubting.

2. Science or Knowledge effected by such evidence, *cui non potest subesse falsum*; as in case of demonstrative evidence.

3. Fides, or Faith, or Belief, which rests upon the relation of another that we have no reasonable cause to suspect; and upon this account we believe Divine Revelation when we are sufficiently convinced that it is Divine Revelation; we also believe our Senses, because we have the greatest Moral evidence that we can reasonably have of the truth of their reports, when they are not controlled by apparent Reason, impossibility, or improbability: We believe good and credible persons, and this principally refers to matter of fact, which we cannot or do not controll by our Senses or other weighty evidence; as that there was such a man as Julius Caesar, that there is such a place as Rome, though we never saw the one or the other; because delivered over to us by credible persons; and such who could probably have no end to deceive us.

4. Wisdom; which is a complicated habit referring to all things to be known and done, the due comparison of things and actions, and the preference of them according to their various natures and degrees.

5. Prudence; which is principally in reference to actions to be done, the due means, order, season, method of doing or not doing.

6. Moral Virtues; as Justice; Temperance, Sobriety, Fortitude, Patience,

Patience, &c. for these begin in the Intellect, though their exercise belong principally to the faculty of the Will.

7. Arts Liberal or Mechanical, for though the exercise of those (in which the formal nature of an Art consists) be external, yet the Ideal notion and habit of them begins in the Understanding; and a man is first a Geometrician in his Brain, before he be such in his Hand.

And all these habits of the intellectual Faculty are far advanced above what is found in Sensible Natures, take the last for instance. It is true, we find a rare dexterity in the Spider and Silkworm in framing of their threads, but this proceeds not from any Intellectual principle in them, but from an Instinct connatural to them, and whereunto they are determined by the Law of their nature; again, we find in the Fox, the Hawk, and other Animals admirable sagacities, wiles and subtilties in getting their prey and in defending themselves: But when we consider the sagacity of the Humane Understanding, although the particular Instincts of some Animals are scarce imitable by it, yet it exceeds them in other things almost of the same nature, and so by way of equivalence, or rather prelation in those very Instincts, witness the Arts of Painting, Tapestry, Fortification, Architecture, the Engines whereby noxious and subtil Animals are subdued, and infinite more arising from the fruitfulness of the Understanding and the dexterity of the Hand. And thus much touching the Intellectual Faculty, the seat of intellectual Perception and Counsel: I come to consider of that other Faculty, the Will, the seat of Empire and Authority.

The Will therefore is that other great Faculty of the Reasonable Soul, and it is not a bare appetitive power as that of the sensual appetite, but is a rational appetite, and is considerable, 1. In its Nature, 2. In its Object, 3. In its Acts.

1. The Nature of this Faculty is that it is free, *domina suarum actionum*, free from compulsion, and so spontaneous, and free from determination by the particular Object, wherein it differs from the sensitive appetite, which though spontaneous, because moving from an inward principle, yet is, if not altogether, yet for the most part determined in its choice by the external Object. But how far forth the Will is determined by the last act of the practick Understanding, or how far such a determination is, or is not consistent with the essential or natural liberty of the Will, is not seasonable here to dispute. This liberty of Will, together with that other Faculty of Understanding, is that which renders the humane Nature properly capable of a Law, and of the consequence of Law, Rewards and Punishments, which doth not properly belong to the animal Nature, because destitute of these two Faculties.

2. The Object of the Will is not confined to a sensible Good, but is much larger, namely, such a Good as is compatible to an Intellectual Nature in its full latitude, such as are moral and supernatural Good.

3. The Acts of this Faculty are generally divided into Volition, Notion, and Suspension: That division that herein better suits with my purpose are these, Election and Empire.

1. Election or choice, and this in reference both to means and end; for though the Schools tell us, that *Electio* is only *mediorum & non finis*, this is to be intended of the general end or good at large, and in its universal

verfal conception, for when several particular ends are in proposal, there is belonging to the Will a power of Election of these, as well as of the means to attain them.

2. The *Imperium voluntatis* over the Body and the Faculties: We may observe in the humane as well as the animal Body two kinds of motions or exertions of Faculties; some are stiled natural or involuntary, such is the motion of the Heart, the Circulation of the Blood, the perception of the Senses; when the Organs are open, and the Object applied, these natural, though vital Faculties and Motions, are not under the command of the Will immediately, for whether I will or will not, while I live, my Heart beats, my Blood circulates, my Ventricle digests what is in it, my Eye sees when open. But there be other Motions in the humane, and also in the animal Nature, that are subject to the command of the Will in Man, and to the appetite in Brutes, as local motion, which in Animals is under the regiment of the Appetite, in Man under the regiment of the Will.

Now this *Imperium voluntatis* may be considered in relation,

1. To it self: It can suspend its own acting, either of electing or rejecting.

2. To the Understanding: Though it cannot suspend its perception; *omnibus ad percipiendum requisitis adhibitis*, yet it may suspend its decision or determination, or at least its *obsequium* to such decision.

3. The Passions, which are as it were the *Satellites voluntatis*, and follow the command of the Will, where the Will acts according to its power and authority.

4. To the animal Spirits, and the Vessels in which they are received when designed to Motion, namely the Nerves and Muscles, these are all subject to the Empire of the Will, as to Local Motion of the whole Body or any part thereof, when the Spirits, Nerves and Muscles are in their due and natural state.

5. To the sensual Appetite: And indeed herein is evident both the Empire and Sovereignty of the Will, and also the visible discrimination between the Humane Nature and the Animal or Brutal Nature, and its preference before it. In the animal Nature it is evident that the sensual Appetite is that which hath and exerciseth the sovereignty and dominion over the spontaneous actions of the animal Nature, that commands the Foot to go, the Mouth to eat, and all other the spontaneous motions in order to a sensible good: But in Man the sensual Appetite is *Regimen sub graviore regimine*, the government of the Appetite is under the government of the Will and controlled by it, at least where the reasonable Faculty is not embased and captived by ill custom or disorder. And this appears two ways:

1. Sometimes the very motion of the Appetite it self is restrained by the Empire of the Will, so that a man doth not *appetere* that sensible good which otherwise he might or would, because he will not; and this is the most natural and noble regiment of the Will over the sensual Appetite.

2. Though it may fall out that the sensual Appetite may *appetere bonum sensibile*, yet the Will may and doth controll the empire of the Appetite in the execution of that appetite: As for instance, A man sees delicious

fruit, and he desires it; in so much, that were there not a controll over the empire of his Appetite, it would command the Hand to reach it, and the Mouth to eat it: But the contrary command of the Will supercedes the command of the Appetite; the Appetite desires it, but the Hand is forbidden by the Will to reach it.

Now if any man shall say this contradiction appears, not only in the reasonable Nature, but even in the sensible: The sensible Appetite is checked in its execution oftentimes by sensual Fear, as in Dogs and Horses, and other Brutes, yea sometimes by the remembrance of a former suffering for the like attempt to gratifie his sensual Appetite; and yet they are destitute of any superior faculty of Will to interpose a prohibition upon the Appetite. I answer, this is true, for in such cases the impendent Fear is either present or in memory, and so expected; and it being of a sensible evil, hath the same influence upon the sensual Appetite as the present good; and therefore if the evil feared or impendent be a greater sensible evil than the good, it over-rules the Appetite to averfation; as the Fish that loves the bait, yet feareth the hook, which it discerns as a greater sensible evil, the very Appetite is thereby determined to averfation.

But the controll of the Will upon the Appetite in the reasonable Nature, is many times, and indeed most often done, not upon the account of a sensible evil felt or feared, which of it self were sufficient to determine the Appetite; but sometimes upon the account of such hopes or fears as fall not under a sensitive notice, as of the command or prohibition by God; yea many times upon a bare Moral account of the *indecorum*, unreasonableness, unseasonableness or utter unfitness of the thing it self, without any other motive of fear either of a present or future sensible inconvenience thereby; which Moral consideration can no way move the sensible Appetite, were it not for the Will, which being a rational Faculty is moved by it.

And this is all that I shall say touching the two great Faculties of the Soul, the Understanding and Will: I shall not add any thing here touching Passions or Affections of the Mind, 1. Because they are but a kind of appendices to the Will, the *Satellites voluntatis*; those of the concupiscible kind being as it were the flowers of the motion of Volition, those of the irascible kind the flowers of the motion of Averfation. 2. Because the Passions for the most part are found in the sensible Nature, namely those of love, hatred, delight, grief, expectation and fear; and therefore I shall not here treat of them.

3. I come now to consider of those rational Instincts as I call them, the connate Principles engraven in the humane Soul; which though they are Truths acquirable and deducible by rational consequence and argumentation, yet they seem to be inscribed in the very *crasis* and texture of the Soul antecedent to any acquisition by industry or the exercise of the discursive Faculty in Man, and therefore they may be well called anticipations, prenotions, or sentiments characterized and engraven in the Soul, born with it, and growing up with it till they receive a check by ill customs or educations, or an improvement and advancement by the due exercise of the Faculties. I shall shew first what they are: Secondly, what moves me to think that such are connatural.

1. Touching

1. Touching the former, I think those implanted and connatural anticipations are these, namely, That there is a God; that he is of greatest Power, Wisdom, Goodness, and Perfection; that he is pleased with good, and displeased with evil; that he is placable; that he is to be feared, honoured, loved, worshipped, and obeyed; that he will reward the good, and punish the evil; a secret sentiment of the immortality of the Soul, or that it survives the Body to be capable of rewards and punishments, according to its deportment in this life; certain common notions of Moral good and evil, of *decorum* and *turpe*; that faith and promises are to be kept; that a man must do as he would be done by; that the obscene parts and actions, though otherwise natural, are not to be exposed to publick view, *obvelatio pudendorum*; that a man must be grateful for benefit received: These, and some such common notions or intimate propensities seem to be connaturally engraven in the Soul antecedently to any discursive Ratiocination; and though they are not so distinct and explicit, yet they are secret Byasses inclining the humane Nature primarily to what is useful and convenient for it in proportion to the state of an intellectual Nature: That as we see in Brutes, besides the exercise of their Faculties of sensitive Perception and Imagination, there are lodged in them certain sensible Instincts antecedent to their imaginative Faculty, whereby they are pre-determined to the good and convenience of the sensible Life: So there are lodged in the very *crasis* and constitution of the Soul certain rational Instincts whereby it is pre-disposed, inclined, and byassed to the good and convenience proportionable to a rational and intellectual Life; a certain congenite stock of rational Sentiments and Inclinations which may go along with him, and fairly incline him to such a trade and way as is suitable to the good of his Nature; so that he is not left barely to the undetermination, incertainty, and unsteadiness of the operation of his Faculties, without a certain secret and gentle pre-disposition of them to what is right, decent, and convenient for their manage and guidance by these common anticipations, inclinations; and connatural Characters engraven in the Soul. 2. And that which inclines me to believe this, is not only the congruity of the supposition to the convenience of the humane Nature, and the instance of the sensible Instincts in the animal Nature proportionate to their convenience; and the great importance of them to the convenience thereof: But also that which is observable in the attentive consideration of the manners of Mankind in general, which seems to have those common sentiments in them, and to accord in them in a very great measure; and though evil Customs and Education much prevails among men, yet it doth not wholly obliterate these sentiments, at least from the generality of Mankind.

It must be agreed that these rational Instincts, as I call them, are not always so vigorous and uniform in their actings as the animal Instincts of Brutes are in their kind, which partly proceeds from that liberty of Will that is in the humane Nature which many times suspends or interrupts their energy and operation, partly from that mixture of the sentient Appetite with the actings of the reasonable Soul, which oftentimes transport it: Even the more simple and uncompounded any Nature is, the more uniform are its motions and actings; the natural Instincts and Proportions even of things inanimate (as of heavy Bodies to descend) are

more

more uniform than the very Instincts of Brutes, who have a more complicated form or nature: But as this accidental interruption of rational Instincts doth not disprove their existences, so Man hath a greater advantage by the exercise of his Reason and intellectual Faculties, to remove those interruptions, and improve those connatural Sentiments or rational Instincts to his singular use and benefit, which abundantly recompenseth those Interruptions.

And if any shall say that there are or may be other means of propagation of those motions and inclinations in Men, namely, 1. A Traditional traduction of them into the World; and 2. The Exercise of the humane Intellectual Faculties upon the occurrence and observation of external Objects and Events: I answer,

1. As touching Traditional communication and traduction of those Truths that I call connatural and engraven, I do not doubt but many of those Truths have had the help of that derivation: But, first, such a Tradition possibly hath not been without interruptions by evil Education, and yet these Sentiments have obtained almost in all Ages and Places, though not without interspersions of certain corrupt additions, obtained likewise by evil Custom or Education. But secondly, it cannot reasonably be supposed that a Tradition could so constantly and universally prevail and obtain among Mankind, unless there were some common consonancy and congruity of somewhat inherent in Nature which suits, corresponds and suffragates to that Tradition, and closeth with it, and accepts it.

2. As to the other, concerning the Exercise and Actings of our Intellectual Faculties, it must needs be agreed that those that I call Connatural Principles are in themselves highly reasonable, and deducible by a strong process of Ratiocination to be most true and most convenient; and consequently the high exercise of Ratiocination or intellectual Discourse might evince their truth and excellency, though there were no such originally inscribed in the Mind: But this no more concludes against the supposition, than it would conclude against the supposition of implanted Instincts in Brutes; which as they are in themselves highly reasonable and useful to their ends, and evincible by true Reason to be such, as it may be any thing we know: So also many, though not all the actings of those Instincts might possibly in the Brutes themselves be elicited by a strong intention and exercise of their Phantasie and sensible Perception, Ratiocination, and Connatural Implantation, are but several means or discoveries of the same thing which in it self is most highly reasonable; only the latter is for the most part less difficult, and readier at hand. But to the Objection.

1. Let any man but duly consider how few men there are in the World that are capable in respect of the meanness of their Parts and Education, to act and improve their Intellects or Faculties to so high a strain as the eliciting of those that I call Connatural Principles by the strength of their Intellectual Operation; this requires very choice Parts, great attention of Mind, sequestration from the importunity of Secular employments, and a long advertent and deliberate connexing of Consequents; which falls not in the common road of ordinary men, but of Philosophers, Metaphysical heads, and such as have had a more refined education, which

which is not the thousandth part of Mankind; Other men require a more easie and familiar access to these Truths and Inclinations; and yet we see that these Sentiments are not confined to the *Literati* of mankind.

2. Again, I appeal to the most knowing men in the World that have but had the leisure to think seriously and converse with themselves, and that have kept their Minds free from the fumes of intemperance and excess, passion and perturbation; whether next under Divine Revelation their best and clearest sentiments of Morality at least have not been gathered from the due animadversion and inspection of their own Minds, and the improving of that stock of Morals that they there find, and the transcribing of that Original which they found first written there: It is true, that it is with the connatural Principles inscribed in our Minds as it is with our Faculties, they lye more torpid, and inactive, and inevident, unless they are awakened and exercised, like a spark involved in ashes; and being either suppressed or neglected they seem little better than dead, but being diligently attended, inspected and exercised, they expand and evolve themselves into more distinction and evidence of themselves. And therefore it was not without some kind of probability that some of the Ancients thought that Science was little else than Memory or Reminiscence, a discovery of what was in the Soul before. But whatever may be said of other matters, certainly the first draughts and strictures of Natural Religion and Morality are naturally in the Mind.

And hence some thinking men have thought that the specific difference of the humane Nature is Propension to Religion, and therefore define Man to be *Animal religiosum*, which could not be from any habit barely acquiste by the exercise of Faculties, unless the same were radically engraven in the very texture of his Soul.

I shall add but this one thing more: It is plain that the existence of a Deity as a Being of infinite Perfection, and consequently of infinite Goodness and Justice to reward and punish, and of infinite Power and Wisdom, is a truth that is highly rational and demonstrable by the exercise of intellectual Faculties upon the consideration of the Universe and its several parts, and possibly the Immortality of the Soul is evincible by very great reason: But these great truths are not communicated barely by one kind of means, and it is needful, in respect of their use, they should all have all contributions, and not only Brains to pursue a long train of consequences. And yet we shall find in the generality of mankind (especially when death begins to draw towards them) a very quick and active demonstration of these convictions, and possibly many times more vigorous and active than that rational conviction that is wrought by Speculation and Syllogisms, which evidenceth that these Principles of the existence of a most righteous and powerful God, and a state of rewards and punishments after death, are more universally engraven in the *Crafts* of the Soul by Almighty God in its natural constitution than barely by the exercise of Faculties in Speculation and Ratiocination.

And herein it must be remembered that I am in this Discourse still in the outward Court of the Gentiles, discoursing only as a reasonable Man, and not taking in the assistance of the Christian Doctrine and those *subsidia divina gratia* that relate thereunto.

There-

Therefore to conclude this point, There seems to be two means of communicating and preserving in the Soul and Conscience these great speculative and moral Principles whereof I have even now treated, viz.

1. That which I here call Connatural, or a certain rational Instinct engraven in the very Make and constitution of it: And as those that write of Conscience tell; us it hath three offices or acts, *Synteresis*, *Syneidesis*, and *Epicrisis*; so those Principles are lodged in that Chest of the Conscience called *Synteresis*.

2. A second means of attaining and keeping and improving these connatural Sentiments or rational Instincts both speculative and moral, is that admirable adaptation of the Faculties of the humane Soul to those Principles and Sentiments, that as the Eye discerns light and colour by a congruity between the visive Faculty and the visible Object, and as the Palate tastes and relisheth its meat by the congruity between the Faculty and the Object, whereby it judgeth of what is good and embraceth it, and what is evil to it, and rejecteth it: So in the humane Faculties, those of his Intellect and Will there is a proportioning of the Faculties to the Object, whereby the former discerns truth from falsehood, and moral good from moral evil, *honestum & decorum* from *indecent & turpe*; and accordingly the Will, when it acts regularly and as it should, accepts or rejecteth it: But as the estimative Faculty in Brutes is nevertheless consistent with their connatural Instincts, which latter have still excellent use in the sentient Province, so this adaptation of the Faculties in Man to their Objects doth not exclude those connatural, implanted, rational Instincts in the humane Nature, but both consist together, and are of admirable use to the humane Soul.

And thus far concerning the Soul of Man, its Faculties and Instincts.

I come now to consider of the structure and fabrick of the humane Body, and that not at large, for that will be for another place, but briefly and summarily to give an account of some of those appropriate and discriminating notices wherein it differs from and hath preference above the most perfect brutal Nature: And they are such as either concern the entire Fabrick of the Body, or such as concern some special Parts or Integrals thereof: but I shall mingle them together as followeth.

1. There is in the humane Fabrick a greater Majesty and Beauty than in any Animal in the World besides, and that appears, 1. In the erectness of his posture, all other Animals have transverse Bodies, as Birds and Beasts, and though some do raise themselves upon their hinder legs to an upright posture, yet they cannot endure it long, it is unnatural and uneasy to them, neither are the figures or junctures or order of their Bones, Nerves, and Muscles fitted to such a posture. And it is observable, that the structure of Man's Body is with that equilibration (notwithstanding divers prominences therein) the composition of his Nerves and Muscles for the due motion of his Spirits, the structure of his Feet are so singularly accommodated, that he maintains this erect posture standing or walking, though his Feet, the *Basis* of the Pillar of his Body, be much narrower than the latitude of his Body. 2. In the Majesty of his Face and Eyes. 3. In the Beauty of his Face: Beauty consists principally in these things, Figure, Symmetry, and Colour. No Bird, or terrestrial Animal

Animal exhibits its Face in the native colour of its Skin but Man, all others are covered with Feathers, or Hair, or a *Cortex* that is obduced over the *Cutis*, as in Elephants and some sort of *Indian* Dogs; and though in the torrid Climates the common colour is black or swarthy, yet the natural colour of the temperate Climates is more transparent and beautiful.

2. There is no Animal hath any Organ of equal use to the Arm and Hand of a Man, that *Organum organerum*, an Organ accommodate to all the useful motions, operations, arts and uses of his life: Man is born without any offensive or defensive weapons like to those of other Animals, but by the usefulness and accommodation of this Organ and his Intellectual faculty he maketh weapons and useth them, he forgeth and mouldeth Metals, builds Houses and Ships, makes his Cloaths and Ornaments, and exerciseth all Arts for use and ornament.

3. There is no Creature that I know of, hath the like structure of his Leg and Foot; the former being only two to support his Body, have greater and larger Muscles than any Animal of no greater proportionable bigness; and the latter being the *Basis* of those Pillars, are admirably fitted by their length and figure for his *gressus progressivus*.

4. Since the Brain is the great Organ of Intellection in Man, and of Imagination in Brutes, which are the two noblest Faculties of either Nature, it will not be amiss to examine the differences between the Brain of either, and the Nerves proceeding from either, wherein none that I know hath given more light than Doctor *Willis* in his Anatomy of the Head; all therefore that I shall do herein shall be to gather up the most of those observable differences that lye dispersed in that Book.

1. The humane Brain is in proportion to the Body much greater and larger than the Brains of Brutes, having regard to the size and proportion of their Bodies, and fuller of *anfractus* or sinuations, and so more capable of greater diversity of employments and uses in the Perceptive Faculties.

2. There are in the Brain certain portions called *protuberantia annularis*, *nates*, & *testes*; and that in those Brutes wherein this *protuberantia annularis* is largest in proportion, those Brutes are of greatest sagacity and subtilty, as Foxes, Apes, &c. that though in Man those prominences called *nates* and *testes* are the least, yet the *protuberantia annularis* is greater in proportion in Man than in any Animal, the structure of this Organ being fitted to a greater degree of natural sagacity.

3. That whereas in Brutes the only communication of the Brain with the Heart is by the *nervus paris vagi* derived from the *Cerebellum*, and spreading its branches into the Muscle of the Heart, in Man there is not only the same communication of that Nerve, but a ramification of the *nervus intercostalis* is also inserted into the Muscle of the Heart, whereby a greater communication between the Brain and Heart is maintained in Man than in Brutes.

4. That other ramifications of this *nervus intercostalis* are derived into the Chest and *Diaphragma*, whereby principally that peculiar affection of Laughter is excited, more appropriate to Man, together also those others of Sternutation and other natural actions common to Men and Beasts are excited, but not from the like communication of that Nerve in Brutes.

And thus much shall serve to be spoken of the peculiarities of the Humane Body, though what I before said touching the Faculties of the Animal Nature in Man must also be remembered touching the organical parts of his Body: There is no Organ in the Brutal Body subservient to the Animal Faculties, which is not found in the Humane Body, with such variations and additions as render them more curious, perfect, useful, and admirably accommodate to his Animal Life and Faculties: But of this more fully hereafter.

3. I shall now subjoin a Consideration of Man in his whole *Compositum*, consisting of both his essential parts of Body and Soul, and of the aggregation of the Faculties and Organs belonging to either, so far forth as they evidence his appropriate and specific Excellency above the Animal Nature.

The appropriate or specific acts of the humane *compositum*, are the capacity and faculty of instituted Signs, expressive of the inward conceptions of the Mind, which are of two kinds: 1. Audible, 2. Visible Signs.

The Audible Signs are instituted Speech or Language, the formal nature whereof consists in two things: 1. Articulate Voice, 2. The accommodation of the Articulate Voice to the rendring or expressing of the inward thoughts or intentions of the Mind: And herein is the great preference of the language of Man above that of Brutes or Birds, who though they have audible signs that express something of their Imaginations or Appetites; yet they extremely differ from humane speech: 1. They are but short and transient, like Interjections in speech, whereby though they express the sudden motions of their Phantasie, Appetite, or Passions, yet they carry not with them any distinct *series* or long train of their Imaginations; they are short and sudden, somewhat like Sighs or Ejulations in Man. 2. They are not articulate, nor orderly, but short, natural and broken. 3. When Birds, especially by the fabrick of their Tongue and Palate, are taught to use articulate words, yet they understand not their import, nor do render any conceptions of their Phantasie by them, nor can answer a question by them, but use them insignificantly, as the Organ or Pipe renders the Tune which it understands not.

And by the help of significant and articulate speech, one Man expresseth the notions or conceptions of his Mind to another, instructs another, mutual commerce and society is maintained, which could never be without instituted signs.

And this Act of instituted signs, especially those of Speech or Language, proceeds from the entire *compositum*, the Mind instituting the signs, and communicating its notions and desires by it, and the Palate, *Larinx*, Tongue, and Lips, forming the Voice according to such institution, whereunto they are most admirably accommodated by their Apertures, Nerves, and Muscles.

2. The instituted visible Signs, are Writings, Gestures, Tears, Motions of the Eye, Mouth, and Face, which were long to enumerate: By means of writing, former Ages transmit the Memorials of ancient times and things to posterity; Men understand the sentiments, purposes, and desires of one another, though absent, and the living converse with those ancient Philosophers, and others, that are long since dead.

And

And now in this composition of the humane Nature, we have these things observable:

1. That in this contexture of the Humane Body and Intellectual Soul we have a Creature made up, that is, *nexus utriusque mundi, intellectualis scilicet & corporei*. The next Range of Beings above him are the pure and immaterial Intelligences, the next below him is the sensible Nature. Man is as it were the *Comes limitancus* of each Nature, participating of both. And we may observe, that in the process of Natural Beings, there seem some to be Creatures placed as it were in the Confines of several Provinces, and participating something of either, as in things that have life and that have not; there is placed the Minerals between the inanimate and vegetable Province, participating something analogical to either: Between the vegetable and sensitive Province there are Plant-animals, and some kind of Insects arising from Vegetables, that seem to participate of both: Between the animal and rational Province, there seem to be some Animals that have a dark Image or resemblance of the Influxes of Reason. So between the corporeal and intellectual World, there is constituted Man, participating much of both Natures: *Ita quod non transitur ad extrema nisi per media.*

2. That Man in his constitution seems admirably fitted to the convenience of his Nature, a little World accommodated with Faculties and Organs admirably convenient to it self, a kind of entire State, Kingdom, or Republick within himself, fitted with all accommodations and requisites for the due Regiment of himself, as a Sensible and Intellectual Being: He hath the Council or Senate of his Intellect, and her subservient Acts and Faculties to advise him, the Empire and Regiment of his Will to command the *Satellites* and Ministers of his Passions and Animal Spirits to execute his Conscience for his Tribunal: There wants nothing within this little Circle of himself, which may be requisite to order that little compacted Province for its Political Regiment.

And thus far concerning Man, as relating to himself, his Parts, Faculties, and entire Composition: It remains, that we take a little survey of him, as he stands in relation to things without him, which is the last Consideration that I promised in this brief Inventory of the Humane Nature and Excellencies.

The Humane Nature, thus fitted with these Faculties, is admirably accommodated to a threefold relation to somewhat without him, namely, To Almighty God: To the rest of Mankind: And to this *mundus spectabilis* wherein he lives.

1. To Almighty God; for being a Creature endued with an Immortal Soul, endued with those great Faculties of Understanding and Will, and those *Facultates Ancillares* of his Affections, he is rendred into a capacity, 1. Of knowing Him: 2. Of knowing his Will, and what is acceptable to Him; for it is in a great measure inscribed in his Soul: 3. Of being a fit Subject to Him, and to obey Him: 4. Of loving and trusting in Him: 5. Of glorifying of Him, especially in the Contemplation of His Works, which are proposed to his Sense and Understanding: 6. Of Invoking and Worshipping: And 7. Finally, to enjoy the Blessed Vision of Him, by reason of the congruity of his Immortal and Intellectual Nature to such a fruition. And thus we have him in his Duty, Religion, and in his Happiness, Immortal Life. K 2 2. To

2. To the rest of mankind he is accommodated with Moral principles inherent in his Nature, and improvable by the exercise of his Faculties, as is before shewn; he is accommodated with Speech and Intellectual signs to maintain intercourse and mutual communion and commerce; and his very disposition and the mutual necessities of humane Nature necessarily maintain mutual offices and correspondence between them; and the accommodations of Government and Laws are the fruit and productions of his Intellectual nature, and the support of society.

3. To the rest of the visible World; there is an admirable accommodation of the humane Nature and Faculties to the *Mundus aspectabilis*, and of the several parts of it, and of them to it.

1. Of the Faculties of the humane Nature to the visible Universe, especially the vegetable and animal Natures, which by means of the admirable advantage of his Intellect, and that singular Engin of the Hand, he hath skill and power to subdue and bring under, whereby he exerciseth dominion over them and protection of them, as the Vicegerent and Deputy of Almighty God.

2. Of the Universe and parts thereof to the humane Nature and Faculties, which were infinite to enumerate; I shall only insert some of them.

1. A kind of awful subjection and fear of the greatest part of the animal Nature, of him and to him; and though some be so hardy and unruly as to resist him, yet he wants not power by the advantage of his Understanding and Hand to subdue and master them.

2. An accommodation of most of the things within the compass of the visible Universe to his use and convenience, which though I cannot say it is the only or the prime end of their being, yet they are singularly accommodated to the use, delight and benefit of mankind, as might easily appear by an enumeration of particulars: The light, motion, and influence of the Sun and Stars; the nature, position and frame of Elements; the variety and concurrence of the Meteors; the fertility of the Land; the position of the Ocean; the interspersion of the Rivers; the various Minerals, Vegetables and Animals, some serving for his food, some for his clothing; some for his labour and travel; some for his delight; the whole compass of Nature affording infinite variety of Instances of this kind.

3. An admirable accommodation of all the things in the World to his Faculties, and for their delight, advancement and improvement. He hath the perception of Sense, to which all the visible Objects of the World are presented, and he hath the light and searching Faculty of his Understanding, which as it is qualified for such an employment of Contemplation, so it hath a fruitful exhibition of Objects of great variety and excellency, the knowledge whereof doth not only delight and enrich his Faculties, but are so many manuductions to the knowledge and admiration of the infinite Wisdom, Power and Goodness of the Creator and Upholder of them.

And thus I have given a short and brief estimate of the peculiar Excellencies of the Humane Nature: I did not design a large or exact enumeration or description of them: There is not any one particular above-mentioned but would take up the business of a just Volume, and

I am

I am easily conscious that I have omitted many things that possibly might be of as great importance as any that I have mentioned: But this brief Inventory I have here given as preparatory to what follows, and to pre-possess the Reader, 1. That a natural Indagation according to the light of natural Reason touching the Origination of such a Creature as this, is no contemptible or unworthy enquiry: 2. That surely such a Creature as this thus accommodated could not have his Origination from any less than an Intellectual, most Wise, Powerful and Beneficent Being, the great God, Creator and Governour of Heaven and Earth: And this is the scope and end of my business in this Tract, the short *Synopsis* whereof is as followeth.

There are two grand Opinions among the Ancients touching the Origination of Man; The first is, That Humane *Species* had no beginning, but was Eternal; the second, That it had a beginning.

In the first place, I examine the supposition of the Eternity of Mankind in their successive Generations; And in order thereunto I take up the consideration of the Eternity of the World as it is now constituted, and, whether it be in Nature possible that it should be so: I then descend to the particular consideration of the Eternity of Mankind, whether although there should be a possibility of an eternity of some permanent created Beings, whether yet there be a possibility in Nature, or any probability of evidence that Mankind can be eternal *à parte ante*, or without beginning.

This I oppose by Arguments of two kinds; 1. From the very repugnancy in Nature of successive Beings to be without an inception, or eternal, and upon these kind of evidences I do indeed lay the principal weight and stress of my Conclusion, because though these kind of Arguments may seem more obscure, yet upon a due consideration of them they are highly consequential and concludent to my purpose.

2. The second sort of evidences are Moral evidences, wherein I take into consideration most of those Moral evidences that have been collected by others or thought of by my self against the Eternity of Mankind: Whereupon I do conclude, 1. That singly and apart many of them are subject to exception, yet collectively they make up a good moral evidence touching a temporary inception of the humane Nature: 2. I do consider the particular deficiencies of those moral evidences taken singly and apart: 3. I substitute other moral evidences that even singly and apart have each of them a great moral and topical evidence of this truth, and are not capable of any considerable Objection against them, though taken *sigillatim* and apart.

But when all is done, I lay the great stress of my Conclusion upon the first sort of Evidences natural, or metaphysical, which seem to me no less than demonstrative; and therefore if no other moral evidences were added thereunto, or if those moral evidences should be capable of exception (as some of them are) yet the truth of the Conclusion against the eternity of Mankind is sufficiently supported by those that I offer in the first place, which I call Physical and Metaphysical.

2. Again, I then come to consider that Opinion which supposeth an Inception of the Humane Nature.

I consider the various *Hypotheses* that the Ancients entertained touching the manner

manner of that Origination, and shew the absurdity of them in their several orders.

I then consider the Mosaical *Hypothesis*, and the great reasonableness thereof upon a bare Natural or Moral account, without taking in the Infallibility of Divine Revelation.

In order to that, I consider the whole Mosaical Systeme or History of the Creation of the World, the admirable congruity it hath, both with it self, and with a due and unprejudiced and considerate Reason.

And lastly, I deduce certain Corollaries or Consequences from the whole Discourse, both Theoretical and Moral, and this is in effect the whole Method of what these Papers contain: Wherein I proceed merely upon an account of Natural Reason and Light, because in this Discourse I deal with such as are either only or most commonly guided and governed by such Sentiments, and therefore I do not call in to my assistance the Authority of Divine Revelation, though that of it self doth and ought to carry the full and unquestionable Assent of all good Men that are acquainted therewith.

C A P. III.

A brief Consideration of the Hypotheses that concern the Eternity of the World.

Although I intend not a large Discourse touching their Suppositions that hold the Eternity of the World, yet it will be convenient a little to consider it, for the better application of what follows in the ensuing Discourse, touching the Eternity of the Successions of Mankind, and the possibility or impossibility thereof.

The Supposition of the Eternity of the World is considerable under a double relation: 1. With relation to the Notion of Eternity: 2. With relation to the Subject it self, which they would have eternal, namely, the World, either wholly or in some parts thereof.

In relation to Eternity it self, two things are to be premised: 1. What it is; 2. What its Kinds are. 1. As to the former, in all this Discourse I call that Eternal which is without beginning, or eternal *à parte ante*. 2. Things thus supposed Eternal may be of two kinds, either such as have an Eternity simply independent upon any thing without it, or from which it should derive that Eternal Being, as we and all good Men say that Almighty God is Eternal: Or else, such an Eternity as yet supposeth its dependence upon Almighty God as its Cause. And they that attribute the first kind of Eternity to the World, must do it upon one of these two grounds, *viz.* That there is no other first Being, no first Cause, no God, upon whom the World should depend, or from whom it should derive this its Eternal Existence: And this is the grossest and most irrational Supposition, as well as the foulest Atheism, that can be imagined. Or else, That although there be in truth such a Being as God, yet the World had not this its Eternal Existence by any derivation or influx from Him,

Him, but hath it absolutely and independently. This is the *Epicurean* Atheism, which though it oppose the Eternity of the World in that consistency that now it hath, yet it asserts the Eternity of those small and infinite particles of Matter, and the coalition of them into that state wherein they now are in process and succession of time and motion, yet without any dependence of the one or the other upon Almighty God, whom he totally secludes from the concerns of the World.

Others there are again, that attribute an Eternity to the World, but yet withall acknowledge Almighty God, and also Him to be the Efficient thereof: And therefore though they attribute an Eternity to it, yet it is but a dependent Eternity, and so though it be Eternal, yet it is but an Eternal Effect of an Eternal Cause. These are much more tolerable than either of the former, for they assert a God, and likewise the dependence of the World in its Eternal Existence and Duration upon Almighty God, as the Cause and Root of that Being of the World.

But among those that thus assert this dependent Eternity of the World upon Almighty God as its Cause or Efficient, there seems to be two Parties, namely, 1. Such as suppose Almighty God the Necessary Cause of the World as his Necessary Effect. 2. Such as suppose Him merely the Voluntary Cause of the World and of its Eternity. Of the former sort, that suppose Almighty God the Necessary Cause of the World and of its Eternal Existence, there seem to be these two Parties or different Opinions.

1. Such as suppose the World a meer natural and necessary Emanation from God as its necessary Cause, without any manner of intrinsecal freedom in Himself to do or be otherwise, and consequently it being a necessary and connatural Effect of the first Cause, it must be necessarily as ancient as Himself, and if Almighty God be (as He is) most necessarily, so upon the same necessity He is the Cause of the World, and the World a necessary, and consequently Eternal, Production necessarily flowing from the same; as if the Sun be Eternal, his Light, which necessarily flows from the Existence of the Sun, is likewise necessarily Eternal. This seems to be the Opinion of *Aristotle*, and some others that follow him.

2. Again some there have been, who will not have Almighty God to be a meer natural and necessary Cause of the World, but such a Cause as is a free Agent, *agens per intellectum & voluntatem*, and that the World was an Effect of Him, not as a natural or necessary, but as a voluntary and free Agent: And yet the World was necessarily Eternal, though freely willed to be Eternal. For they do suppose, that in as much as God Almighty is necessarily Good and Wise, and it is part of his Perfection to will what is best, and always to will it, therefore the Divine Will was always determined, even eternally, to will the Existence of the World, as a thing eternally consonant to the Perfection of his Nature, to will and always to will what is best: And there was never, in all the vast and boundless Period of Eternity, any one moment wherein he willed not to communicate his own Benignity and Bounty to something without Him; and therefore though he freely willed the World to be, as a free Agent, yet that freedom of his Will was from all Eternity determin'd, by the Perfect Goodness and Beneficence of his Nature, ever to will what He once willed, and consequently to will the World to be Eternally: Herein confounding the Divine Goodness with the Divine Beneficence, and

and Benignity, the former being indeed necessary, but the latter under the Conduct and Guidance of his Free Will, indetermined by any thing but it self.

Others there are that attribute the Being of the World to the meer *benepiacitum voluntatis divine*, neither determined as a meer Natural cause, nor determined by any intrinsic obligation of his own Goodness; but only that he willed it because he willed it, though most wisely and bountifully: Many of these do not indeed conclude the World to have been eternal, but in conformity to the truth of the Sacred Scriptures conclude it to be created in the beginning of time, but yet do again conclude that there is nothing in the nature of the thing either on the part of Almighty God, or on the part of the World it self, or on the part of the manner of its Creation which is instantanous and *per modum emanationis*; but that such parts of the World at least as have a permanent existence, and are not in a flux of succession, might have been not only in some period antecedent to that point of time wherein *de facto* it was created, but also that it might have been thus eternally created if the Divine *benepiacitum* had so pleased: And therefore many of those do not conclude that it was so, but that it might have been so eternally created, yet freely and voluntarily without any of the two foregoing necessities. Thus *Aquinas, Suarez* and some others.

And thus having considered these various suppositions touching the divers qualities or qualifications of this eternal Existence of the World, I shall now consider the subject Matter which men would thus have to be eternal, or at least possible to be such, namely the World. And herein even many of the assertors of the Eternity of the World, or the possibility thereof, have (and not without cause) fallen into divers conclusions.

By the World therefore we must understand either the Matter of the World simply in it self, without being determined to this determinate Fabrick wherein it is; and thus it should seem that all those ancient Philosophers that have asserted the Eternity of the World, as *Aristotle*, and before him *Otelius Lucanus*: or, that have asserted *novitatem mundi in hac constitutione*, have agreed; thus *Epicurus*, that asserts the coalition of Atoms into this Fabrick that we see, was of later edition than Eternity, yet asserts that these Atoms were eternal: and those Ancients mentioned by *Aristotle* in the 8th of his *Physicks*, that held that the World was made, and unmade and made again by eternal vicissitudes of *Amor & Inimicitia*, yet held the constituent Matter thereof eternal. And this seems to be the most comprehensive acceptation of the World.

2. Again, by the World we may understand the World as it is now framed, the visible World in that form and constitution as it now is: And thus it seems, *Aristotle* and those others that hold it proceeds necessarily from God as a necessary cause, or as a cause determined by his intrinsic Goodness, have held the World to be eternal; but yet we must rest here. The World is like a goodly Palace, a fair large Building; but as in such a Palace there is first the case or fabrick or *moles* of the Structure it self, and besides that there are certain additaments that contribute to its ornament and use; as various Furniture, rare Fountains and Aqueducts, curious Motions of divers things appendicated to it, as
Clocks,

Clocks, Engines, &c. so in the goodly Universe there are the great Structure it self, and its great integrals the Heavenly and Elementary Bodies, framed in such a position and situation, the great Sceleton, as I may call it, of the World: But besides this there are very various and curious furnitures and accommodations of the Universe, as for instance, in our inferior World various Animals, Vegetables, Meteors, Minerals, Mixtures, and Men; and in the Heavenly Bodies various Motions and Aspects.

Now it will be necessary for him that asserts the Eternity of the World as now it stands, or the possibility of such an eternity, to consider whether he applies his assertion to the whole World, as consisting not only of the greater integrals whereof it consists, as the Heavenly and possibly the Elementary Bodies; but also of that furniture thereof consisting of Men, Animals, Vegetables, Meteors, Minerals, and those accommodations that are to it, as the Motions of the Heavenly Bodies; or whether he intends only some parts of it which seem more capable of an eternal existence, as being more fixed, and in themselves permanent, and so more able to sustain an eternal and consequently an immutable existence.

And upon examination we shall find either of these choices full of incurable difficulties, if not utter impossibilities, in relation to an eternal existence of the World or any parts thereof.

And this I shall in the order of this Discourse evince against all those former suppositions of Eternity; namely, 1. Against those that assert an independent eternal existence of the World: 2. Against those that assert an eternal but dependent existence thereof upon Almighty God, as a meer natural and necessary Cause thereof: 3. Against those that assert an eternal existence of the World dependent upon God as a free intellectual and voluntary Agent, but yet determined in his external emanations by the necessity of the Goodness and Beneficence of his nature: 4. Against those that assert at least a possibility of an eternal existence of the World, but dependent upon the freedom of the Divine Will undetermined by the necessity of his Beneficence.

First therefore concerning the supposition of the Eternity of the World in general; I shall not in this place dispute whether there be an utter impossibility of any material Being to be either independently or dependently eternal; enough may be said against it from the incapacity of any material Being to sustain such a kind of duration *à parte ante*, and yet without any derogation to the Divine Omnipotence or Goodness, which though infinite, yet cannot communicate such a duration to that which in its own intrinsic nature is not capable of it: Nor secondly, shall I dispute whether there be any such material or corporeal Being or Beings within the compass of the Universe, that hath or may have such a kind of permanence or fixedness in being that may be capable of an eternal existence *à parte ante*, either dependently or independently upon Almighty God; admitting by way of argument, but not granting it possible, that in the nature of the thing some material or corporeal Being may be of such a fixed, permanent consistence as may sustain such an eternal existence; and I here omit this dispute not because I make the least doubt of the beginning thereof by Creation, but because these are matters that
I require

require a longer and stricter process of enquiry and debate than I intend in this place: and therefore I shall descend to things that are more plain and evident, and yet such as will abundantly serve my design in the inquiry in hand.

And therefore for the present I shall *gratia argumenti* admit or suppose,
 1. That there are or may be some corporeal things in the compass of the Universe that may possibly be of such a fixedness, stability and permanent nature that may sustain an eternal existence, at least dependently upon the supreme Cause. 2. And that possibly Matter it self undetermined to any particular form, or under any particular constitution; the Heavenly Bodies, the Elementary Bodies, and such as seem to have a simple nature, and possibly their figure, position, and situation may be such as might have this eternal existence, as the Sun, the Stars, the *Aether*, the four Elements; we will, for avoiding dispute touching it for the present, admit them to have been, or that possibly they might have been of that nature, quality, distance each from other eternally as now they are, like the great integrals and contignations, figure and concenterations of a goodly Palace: These things I say, though in themselves most certainly untrue, I shall for avoidance of difficult disputes admit at present. Yet I farther say, that though all these things were admitted, yet there are some great and considerable parts and integrals, and appendications unto the *Mundus spectabilis* that we see, that are purely impossible to be eternal, and *de facto* appear so to be; and consequently it is apparent that the World in its full latitude and comprehension cannot be eternal.

And herein I shall not fix upon little or inconsiderable things, but upon such as highly contribute to the excellency, beauty and usefulness thereof; neither shall I fix upon individuals which are apparently transient, and necessarily have their beginning, duration and end in certain known determinate portions of time, as is evident in the individuals of all kinds or *species* of mixed, sublunary Natures: But I shall apply my self to the *species* themselves, which most that assert the eternity of the World assert to be eternal, or to such individuals as are the single Conservators of their own *species*.

And in this debate I shall take my measure from things in Nature as I find them; and it is reasonable I should do so, especially considering that this Discourse concerns principally the Judgments or Opinions of those men that are the great assertors of Nature, and the eternity of those Laws, Rules, Orders, or Methods of Nature which they now find and observe in it: And it were a great vanity and rashness especially for such men to reject those reasons which are drawn from the nature of things as now they appear, or for them to go about to answer those reasons by suppositions of a variety in things from what they now appear. If therefore the state and method of things to be instanced in, as they now appear, do involve a repugnancy to an eternal existence, the Arguments drawn from that Supposition must be conclusive, at least to those great Priests and Venerators of Nature and its appearances.

Those things therefore that I would instance in, as in their own nature incapable of eternal existence *à parte ante*, are these:

1. All things that are of all hands agreed to be concentered of other things, and necessarily in their own nature require a pre-existence of those

those more simple Bodies out of which they are concentered, and a pre-existence of some preparatory antecedent motion for their coalition, mixtion and concenterion; as Animals, Vegetables, Minerals, Meteors, and regularly all mixt Bodies.

2. All things that are in their own nature successive, as all Motion, Alteration, Generations, Corruptions, and all things that in their own constitution have as it were intrinsically annexed to them, or at least necessarily belonging to them in respect of their situation and position, and juxta-position to other things, a necessary subjection to alteration or corruption.

3. All things that do not, nor (their nature considered) cannot persist in one immutable state, but have variety in the nature and manner of their existence necessarily by the laws of their nature annexed to them.

These things constituted and being in that state we find them, cannot without a total alteration of their nature and being from what in truth they are, nor in the state of nature wherein they are placed, can they be eternal or without beginning: And these are very considerable and momentous parts or appendices of the World, and if it had been eternally without these, it had been a very lame and defective World, and such as the wisest man under Heaven could hardly understand for what use it would be, or why it should have continued in such a defective condition from the endless period of Eternity: Or at least if it had its use and beauty, certainly it had nor had the same use that now it hath, nor the same beauty that now it hath.

And the consequence thereof is of great moment and importance; *viz.* If these great accessions to the World, whereof I am speaking, could not be eternal, and yet without them the World would have been greatly deficient from what it is, the greatest Arguments for the Eternity of the rest of the World will necessarily fall off: for the same reason that concludes for the necessity of an eternal existence of the World, would as effectually conclude for the eternal existence of that which highly conduceth to the beauty, use, and ends of the Universe, which yet we shall find cannot be eternally existing, as it concludes for the eternity of such integrals of the World which possibly might be eternal. Again, if it be inconsistent with the nature of many of those things eternally to be, which yet contribute much to the glory, beauty, usefulness and excellency of the World, as mixt Bodies, motion, and alteration; how can we think that there is a necessity in the Divine Nature to have made that Case or Skeleton of the World from eternity which should have been in so great a measure useless, and wanting that beauty, order, use and perfection which it obtains from the contribution of mixt Bodies, motions, and alterations? And what could be thought a sufficient motive to have had an eternal Carcass of an Universe wherein the materials and positions of it were eternally laid together, and to consist infinite millions of Ages; and yet that which gives it its beauty and ornament and use, at least in a great measure, must be brought to a beginning five, or six, or ten thousand years since, and not before? The nearness or novelty therefore that is necessarily required in these great contributions to the beauty and use of the Universe is a great evidence of the novelty of all the rest:

And therefore although the House must be built some time before it be furnished, and the Watch must be made, the materials formed, adapted and fitted, and the whole put together before it be put in motion; yet it were unnecessary and vain to suppose the Case or Fabrick of the House, or the Fabrick and Composition of the Watch, were an infinite time before its furnishing and setting into motion.

But to the business it self, and the Instances above given:

1. It seems inconsistent with the Nature of mixed Bodies that they should be eternal, for then they must be as ancient as those simple Bodies out of which they are taken.

That there are in our inferior World divers Bodies, that are concreated out of others, is beyond all dispute. We see it in the Meteors, the Clouds are attracted out of moist and watry, and also earthy Vapours, Stones and Minerals do grow and arise in the Earth, out of the *succum terrestres* digested by the heat of the Sun: Divers Vegetables, and some Animals, *sponte nata*, arise from the temperament of the terrestriall and watry Matter, the insinuations of the *Aether* and Air into it, and the influence of the Sun: Other Animals, and some Vegetables, have a more regular production from Seed, as some of the perfecter sort of Vegetables, and the nobler Animals, and Men; which seminal Principle is a mixture of the divers particles of Matter and Spirits, derived and elicited from the Plant or Animal.

And as it is apparent, that there are such mixt Concretions, so it is apparent, that before the actual concretion of these mixt Bodies there must be pre-existent to it: 1. The Matter, or more simple Bodies out of which they are concreated: Again, 2. There must be antecedent to it that Ethereal or Solar heat, that must digest, influence, irradiate, and put these more simple parts of Matter into motion and coalition: And 3. Before the full and perfect formation of this concrete, there must be a preparation, and digestion, and formation of this Matter, before it come into a perfect Concrete, be it of what kind soever; and this preparation, digestion, and formation, requires a competent *tempus*, or time, antecedent to its complete and full constitution. All these are evident, in a more special and eminent manner in the production of Animals and Vegetables, but I shall at present take the Instance, that is obvious every day in our Gardens, in the production of a common Flint or Pebble: First; there is the more simple Matter, out of which it borrows its substance; namely, the Earth, and the Water or Moisture; then there is the heat of the Sun, that digests and concocts both; then there is the conjunction and cohesion of the Matter into a more loose, or indigested and softer consistency like Mortar or Clay, and thereby it is prepared to the concrement of a Pebble or Flint, which possibly in a week or a month it perfectly obtains. Every Man must needs see, that in the natural course of things this Pebble doth suppose, as pre-existent to it, the more simple Matter out of which it is desumed, the heat and influence of the Sun, and the due preparation of the Matter, which takes up a competent time, and that necessarily, before this Pebble had its complete Being: And consequently, in the course of Nature, it is impossible that any Pebble was eternal, for it necessarily required these things to have been before it could be, and yet if it were eternal, it must have been as ancient as that

that Earth, and that Water, which was its material constituent, and as that Sun, whose heat digested it, or coagulated it, or as that preparation which preceded its constitution.

And though this Instance be of one Individual, and that of the basest nature, yet the very same reason holds in all mixed Bodies, as in Meteors, Comets, Minerals, Vegetables, Animals, their Seeds and Productions. The consequence of this is, that it is impossible that mixed or compounded Bodies can be eternal, because there is necessarily, according to the Rules of Nature, a pre-existence of the simple Bodies out of which they are desumed, and an antecedence of their constitution preceding the existence of mixed Bodies.

If any Man shall object against this Reason, and say, That it destroyeth my own Foundation, which supposeth a creation or concrement of those very Bodies which I suppose to be mixed, as Animals, Vegetables, &c. without all this preliminary process, or orderly antecedency of such circumstances, as are now in the course of Nature, as it stands settled, necessary to their production: And that, as I do suppose, all created Beings had at first their primitive production by the *Fiat* of the Divine Will and Power, so in the defence of that Supposition or Conclusion, I must suppose another method of production of mixed Bodies, than what we now find in Nature as it stands settled.

I answer, That it is true; I must and do suppose another kind of method in the first and primitive Constitution of things by Creation: But it stands and consists with, and is consonant to my whole Supposition, and indeed my general Supposition cannot possibly be or consist without a Supposition also, That the first constitution and coalition of mixed Bodies was quite of another frame or method, than what now obtains in settled Nature.

But the Objector must consider against whom and what kind of Opinions the Reason above given is levelled; who take all their Measures from things as they now see them in settled Nature, and do thereupon assert, That the order and method of the existence and production of all things was eternally the same as now it is. And therefore certainly this Reason is fully concludent against those persons that would suppose an Eternity in all things in the World, independent upon the first Cause and Efficient: For certainly those of their Principles do and must needs suppose, that things had no other method of their production than what we now see they have, and therefore they must (if they hold to their Principles) agree that they had their production always as now they have: The necessary consequence whereof is, that if such a kind of production of mixt Bodies cannot in the nature of the thing be eternal, they cannot have an eternal production.

But it is true, that this doth not answer the Supposition of those, that though they suppose an Eternity in mixt Bodies, do attribute even that Eternity to an eternal Creation, and therefore to another kind of production than what we now suppose to be natural, and consequently as they suppose, at first in an eternal moment Almighty God created simple Bodies, as the Heavenly or Elementary Bodies, so in the same instant He might and did create other Bodies, which though in their constitution they were or might be composed of such particles, as had they been asunder and

and divided, might have been of the simple nature of those simpler Bodies, yet they were in the same eternal moment or instant created and put together without any priority of existence in those simple Bodies whereof they might otherwise consist; nor were such mixt eternal Bodies successively delumed or compounded out of the pre-existing simple Bodies, but con-created and put together in the same eternal and indivisible moment or instant: so that a Mineral for the purpose might be created in the same moment wherein the elementary Earth was created. And although after the completing of the whole Frame of Nature in that eternal, indivisible, intelligible moment, the production of mixt Bodies either by spontaneous or contingent coalition of various particles of Matter, or by an univocal generation, the course that is now held in Nature might be observed, and that Priority of particles of simple Matter, Influx of the Heavens, and Preparation of Matter might be antecedent and precedent not only in order but in time to their ordinary productions; yet at first it might be, and was otherwise in the primitive constitution of such mixt Bodies as had their original by Creation.

I do confess this Supposition may evade the illation made upon the Natural production of mixt Bodies, but then we must remember that this quite departs from the method of things as they now stand in the course of Nature; neither can any man conclude that it was or could be so from the observation of the Order or Cause of Nature, or any rational deduction from the same, but must have recourse either to bare Notion or Conjecture, or else to Divine Revelation; the former seems somewhat too light, soundly to ground any *Hypothesis*; and the latter, namely, Divine Revelation, though it doth discover unto us that things had their production in a different way in their first Constitution or Origination, namely, by the almighty Power of God creating them, yet withal it informs us that that origination was not from Eternity, but in the beginning of Time, which wholly overthrows the *Hypothesis* of an Eternal Creation of the World: If therefore they will appeal to Revelation for their Creation, they must be concluded by it, not to say it was eternal.

2. My second Reason is this, Because all things that are in their nature successive must have a first beginning of their being, and cannot be eternal. But there are in the World many things of great note and moment (and without which the Order and Usefulness of the Universe would be deficient) which have a successive nature; and therefore such things cannot be eternal or without beginning: And this reason concludes forcibly as well against that independent Eternity supposed by some of the Ancients, as that Eternity dependent upon Almighty God, whether as a necessary Cause, or as a free voluntary intellectual Cause determined by the necessary Goodness and Beneficence of his nature; or as a perfectly free Agent, determining his Will by his own *beneplacitum* thus eternally to produce the World.

The Assumption or minor Proposition, That there are many things in the World of great moment and importance to it that are in their own nature successive, is apparent, such are all the Individuals of *Species* of corruptible things, that yet notwithstanding have a continued succession in their individuals, as Vegetables, Animals, and Men, that successively propagate their

their kind. 2. All kinds of Motions to which all natural Bodies are in some kind or other subject, as the motions of Generation and Corruption, Augmentation, Diminution, and Alteration that are incessantly incident to all sublunary Bodies, and they must change their nature and cease to be what they are, before they can cease to be actually subject to alterations; such is also Local motion, communicable not only to the inferior and sublunary Bodies, but also to celestial Bodies, and this motion even of the Heavenly Bodies themselves seems to be partly continued and uninterrupted, as that motion of the First Moveable; partly interpolated and interrupted, as some affirm of that *Motus trepidationis*; sometimes of access and recess, as the Annual motion of the Sun, wherein some have thought there is a small, though impeceptible, rest in the very point of returning, which we call Solstices.

The major Proposition, namely, that such successive things cannot be eternal, includes two Affirmations, *viz.* 1. That the motions or successions themselves cannot be eternal or without beginning: 2. That the things that have necessarily and inseparably these motions or alterations annexed to their nature cannot be eternal, so long as we suppose them necessarily accompanied with these alterations: The former of these is considerable in this place, the other is considerable under the next Reason.

Now touching the impossibility of the eternal succession of the *Species*, whether of Men, Animals, or Vegetables by natural propagation or pro-femination, the same and the Reasons thereof shall be fully delivered when we come to the particular consideration of the Origination of Mankind, and the necessity of fixing in some common Parents of the individuals of Mankind, and thither I shall refer my self.

As touching the eternity of any kind of Motion, especially even of that of the Heavenly Bodies, I shall say somewhat briefly in this place which will be easily reducible to any other of the motions in the World, as namely the motions of Generation, Corruption or Alteration, all which are in some respect but the effects of Local motion of one kind or another.

And there seem to be two special Reasons even from the intrinsecal nature of the things that encounter the possibility of an eternal successive duration in them: The first concludes against all imaginable eternity of Motion of the Heavenly Bodies, whether independent or dependent upon Almighty God; the latter indeed principally concludes against the possibility of the created or dependent eternity thereof. And they are these:

1. If the circular motion of the Sun or Heavens were eternal, then there must be two circulations of the Heavens immediately succeeding on the other Eternal; the consequence whereof yet would be, That the one of those circulations would be necessarily before the other by the space of twenty four Hours, which would be impossible; for then the next succeeding circulation would not be so ancient as the first, and yet both should be eternal, which is impossible and repugnant.

This Reason a late Philosopher hath made use of in substance, but in a different method, namely, That if the circular Motion of the Heaven were eternal, then of necessity there must be granted some one circulation of