

The Method to Science

(1696)

BOOK I, LESSONS I-XI

JOHN SERGEANT (1622-1707)

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Editor's Preface to the First Edition of Book I

This work is part of a larger effort for making John Sergeant's philosophical and theological texts available in full, electronically. In this edition of the text, my intent was to keep the body of the text (wording, numeration, references, etc.) very close to the original, perhaps, one might say, to a fault. This means that I have retained the author's original capitalization, italicization, spelling variations, typographical errors, Latin phrases, and archaisms. The brackets in the text ('[' and ']') are original, and frequently introduce technical terms or distinguish between mention vs. use of a word. The author's marginal notes (references to other portions of his books) have become footnotes; I have thus changed the original asterisks, daggers, double-daggers, etc. to superscripted numbers corresponding to notes. My own annotations are also in footnotes, clarifying lesser-known Latin phrases, archaisms, or references to historical figures.

Though I do not intend to endorse John Sergeant's philosophy or theology expressed below, my hope is that this edition becomes a resource that spurs on scholarship of lesser-known figures in the Early Modern period.

I imagine that I may have introduced errors of my own, despite my efforts to be rigorous. So, I welcome feedback and corrections where this text differs from the original extant copies. More details about this text's provenance, as well as my principles in editing methods, textual criticism, and other considerations I applied for the preparation of this text, are available either by request (jonathan.vajda@gmail.com) or on my website (jonathanvajda.com).

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The Method to Science

Book I.

Lesson I. *Of Notions, or the very First Ground on which all Science is built.*

1. We experience, that Impressions are made upon our Senses, and that those Impressions are Different, according to the different Nature of the Objects that imprint them.
2. We experience also, that those Impressions do not stay in the *Outward* Senses, but reach the *Soul*, and effect *it*.
3. Every thing being received according to the nature of the Subject that receives it, and the nature of the Soul being a Capacity of Knowledge; hence, those Impressions must affect the Soul, as to cause some kind of Knowledge in her, how rude and Imperfect soever it may yet be.
4. The Impressions from the Objects that affect the Senses, and by them the Soul, do carry the very *Nature* of those Objects along with them, and imprint them on the Soul: which Prints, or, as it were, Stamps, as received in the Understanding, we call **Notions**.
5. Wherefore *Notions* are the First and Rudest Draughts of Knowledge; being most *Simple*, and Naturally wrought in the Soul by the strokes of occurring Objects, without any Industry or Active Concurrence on our part.
6. That these *Notions* are the very *Natures* of the Thing, or the *Thing* it self existing in us *intellectually*, and not a bare *Idea* or Similitude of it, appears hence evidently, that when we say interiorly, or judge *A Stone is hard*, we do not intend to affirm, That the *Likeness* or *Idea* of a Stone is *hard*, but the very *Stone it self*. And were it not so, the Proposition would be *false*; (for the Similitude of a Stone in our *Mind* is *not Hard*;) whereas yet we are assur'd that Proposition is *True*.
7. Again, we experience, that we *consider, judge, and discourse* of the very *Thing it self*, and of its very *Nature*; which (these being Interior or Immanent Acts, bred and perfected *within* our Soul) we could not do, unless the *Objects* of those Acts, or the very *Things* themselves were *there*.
8. Lastly, It cannot be deny'd, but that we have in our Soul the full and compleat Sense of *this* Proposition, and Notions of every distinct part of it, *viz.* [*There is in me the Idea or Likeness of a Stone.*] Therefore there is *in* me something signified by the word [*Stone*] not only distinct from *Idea* and *Likeness*, but moreover Relatively *Opposite* to it; which can be nothing but *the very Stone it self*.
9. Nor need it cause and Wonder, that the same *Ens* or *Thing* may have diverse *Manners* of Existing; one Corporeal, the other Intellectual or Spiritual; since the Thing (*v.g. Peter*)¹ abstracts even from Existence *it self*; for 'tis not found in the Notion or Meaning of that word, that the Thing signified by it *Exists, or not Exists*; much more than does the Notion of *Thing* abstract from (that is, is Indifferent to) all *Manners* of Existing.
10. The words *Notion, Simple Apprehension, Conception, and Meaning*, are all synonymous terms. They are called *Notions*, because they are the Parts or Elements of Knowledge; which, put and consider'd together, make *Cognition*, which is Proper and Compleat Knowledge. They are call'd *Simple Apprehension*, to distinguish them from *Judgment*, which are compounded of *more*

¹ See Book 3. Less. 7. Sect. 3, 4.

Notions, and belong to the *Second* Operation of our Understanding. Or rather, because by them we simple or barely *Apprehend*, that is, lay hold of, or take into us the thing, about which we afterwards Judge or Discourse. They are call'd *Meanings*, because they affect the *Mind*, which only can *mean* or *intend*; or else, in relation to the Words whose *Meanings* they are. They are called *Conceptions*, in order to the Power, which, impregnated by the Objection, *conceives* or (as it were) *breeds* them as the *Embryo's* of Knowledge. Lastly, they are said to be *the Natures of the Things*, because (as was shewn) they are such essentially and formally; in nothing differing from them, but only that they connote a new *Manner of Existing*, which² is Extrinsic to the Thing, and to the *Nature* or *Essence* of it.

The word [Idea] is the least proper, because it seems to signifie a bare *Similitude*; unless the Users of it would express themselves to take it in the sence in which we take the word [Notion] here; or, as we use to understand it when we say, that the *Idea's* of all things were in the Divine Intellect before they were created; that is, their very *Essences*.

11. *Notions* are called *Simple Apprehensions*, not from their Fewness of the words that express them, nor from their not having any Grammatical Composition or *Syntax* in them: but, from the nature or manner of this Operation of our Understanding. For, since (as was said) they are called *Simple Apprehensions*, because by them we simply or barely apprehend or lay hold of the Nature of the Thing intellectually; it matters not how *many* or how *few* the words are, so we do no more than merely *Apprehend* or *Take* the Meaning of the Words, or the Notions, into our minds, without *Judging* or *Discoursing* of them. Whence, we may have a *simple Apprehension* of a long Sentence, nay, of a whole Sermon or a great Book as long as we do not set our selves to *judge* or *Discourse* of the Truth or Falsehood of what's said or writ; but purely to *Apprehend* the Sence or Meaning of the Speaker or Writer.
12. *Notions* being the Natures of the Things in us, have neither Truth nor Falsehood in them *formally*; since they do neither *affirm* or *deny* (only with Speeches are capable of *Formal Verity* or Falsity) any more than does the Thing it self as it stands in Nature, or out of the Understanding.
13. All the Verity they have is in their *Metaphysical Verity*, or their *being truly what they are*. And they partake this from the *Idea's* in the Divine Understanding, from which they unerringly flow, and which are essentially Unchangeable. By which we see how the God of Truth is the sole Author of all the Truth that is in us, and how he does (ordinarily) communicate it to us, *viz.* by *Fixing* unalterably the Natures or *Essences* of Things; from which, being *thus Establish'd* and imprinted on our Minds by our Senses, all Science and Truth in us have their Certainty originally.
14. All true *Science* being thus built on the Immovable Stability of the Essences or Natures of Created Beings, it follows necessarily, that all Discourses that are not Agreeable to the Natures of Things, and *Grounded* on them, are Frothy, Incoherent, and False, and if pursued home, must be found to have a Contradiction for their First Principle, in regard they make the Natures of the Things *to be what they are not*.
15. Wherefore *Notions* being the Natures of the Things in our Understanding, the Method to pursue True Science is, to attend and hold heedfully and steadily to those *Notions* which the Things without us have imprinted or stamp'd in our Minds; and to be very careful lest Imaginations (which are the Offsprings of Fancy, and do oft misrepresent the Thing) do delude us, or the Equivocation of Words draw us aside, and make us deviate from those Genuine and Nature instill'd Notions.

² B. 3. L. 7. S. 4, 6.

Corollaries.

Corol. I. Hence is seen how Unreasonable the Scepticks are who endeavour to undermine all Science, by pretending that all our Notions are Uncertain. For they being caus'd by Natural Impressions on our Senses, those Men may as well pretend, that Water does not wet, or Fire burn, as that the Objects work not their several Effects upon our Senses. If they contend, that, every Man's individual Temper being different, our Notions must therefore differ *to some Degree* in every Man, they oppose not us, who say the same; nor will this break any square, in our Discoursing and our Understanding one another; for few Men (perhaps none) can reach these Individual Differences, nor consequently *mean* them or intend to speak of them when they discourse. But, if they say they are not the same in all Men (whose Senses of imagination are not disordered by some Accidental Disease) substantially and *in the main*; then, besides what has been now alledged, they are confuted by this, that Mankind has now for some thousands of Years held Conversation with one another, yet it was never observ'd that they could not understand one anothers Meaning in Discourse about Natural Objects; or if any hap'd to occur which was Ambiguous, that they could not make their *Notions* known by Explications; or if there had been some notable variation in their *Notions*, (as when to Icteric³ persons, all things seem yellow, or sweet things bitter to depraved Tasts) the Mistake can easily be made manifest and corrected by the Standard of the Generality of Mankind, who assure them of their Misapprehension; and of Learned Men particularly, who find the Cause of their Mistake to proceed from some Disease perverting Nature, or some Circumstances of the unduly-proposed Object, or of the *Medium*; or from our Inability to reach to some minute Considerations belonging to its Composition, Figure. &c. which hinder not our having Science of it in other Cases.

Corol. II. Hence also is shewn the Vanity of that Tenet that maintains the Pre-existence of Souls, as far as it depends on this Ground, That Knowledges are only *Excited* or Awaken'd (as it were) by the Objects working on the Senses, and not *Imprinted* there by them. For, this Ground shakes, by manifesting the Ways and Means laid by Nature to *beget* those Knowledges in the Soul, and convey them thither from the Objects. Besides, (which overthrows all their *Hypothesis*) the Knowledge that I am *hic & nunc* thus affected, cannot with any sence be pretended to have been Pre-existent to the Time and Place in which that Particular Knowledge was made; since neither what⁴ Time nor (perhaps) Place was then in Being. Whence it follows, that the Soul can gain *some* new Knowledges, and this by the Senses; and if *any* or *some*, why not, with equal reason, *all* that the same Senses can receive from Objects imprinted in her; which (as far as it depends on this way of instilling Knowledge) may reach in a manner all Nature, and by the assistance of Reflexion, Discourse and Art improving it, may stretch it self much farther.

Corol. III. From this whole Discourse it appears, that whatever other Method of attaining Science some may propose, however it may seem witty, and one piece of their Doctrine be consonant to the other, and all of them consequent to the Principles they lay; yet it will, I say, evidently appear, that the way they take can never be that which GOD and Nature have laid to ingraft Knowledge in us. Whence, tho' such Discoursers may shew much Art, yet, in reality, and if it be examin'd to the bottom, all their Plausible Contexture and Explication of

³ Icteric is a dated term referring to jaundice (Latin 'icterus', means *jaundice*).

⁴ Sic. Probably 'that'.

their own Scheme, will be found no better than the *running pretty strains of Division upon no Ground*; since their pretended Knowledges do not begin with, nor grow up orderly from the Natures of the Things themselves, or from our *Natural Notions*, which are the *Seeds of Science*.

Corol. IV. Our Discourse here abstracts from that Question, Whether sensible Qualities are Inherent in the *Object* or in the *Sentient*? It is enough for my purpose that the Objects work upon the Senses, so as to imprint by their means several Notions in the Mind. Yet, I do not see how Mr. *Hobbs*⁵ proves (for he does not so much as attempt it) that Light coming from the Object does not carry away with it some Particles of it; since we experience, that the Sun beams dry up great Ponds, which they could not do, unless they did, when reflected, dip their dry Wings in that moist Element, and return with some Particles of Water into the Air; which, when multiply'd, are condensed afterwards into Clouds: And I believe it will be granted, that the Sun-beams reflected from the Moon bring along with them moist Vapours. Much less is it conceivable, that in Smells and Tasts nothing at all of the *Nature* of those Objects should be convey'd by the Nerves to the Brain, but only a certain kind of *Motion*. 'Tis not my task to defend the Opinions of Schoolmen, nor those of vulgar Philosophers, which he impugns, but to mind my own business. Tho' had I a mind to lose a little time, it were easie to shew, that he seems to mistake all-along our *Perceptions* for what is *perceiv'd* of the Object: And I might as easily deny, that Colour (for example) is *nothing but Light*; and affirm that 'tis such a disposition in the surface of a Body, Figur'd thus or thus with Parts and Pores, as is apt to reflect more or less of the Light, and then to assert, that that Disposition of the Surface is truly and really *Inherent* in the *Object* or Body it self, —*sed haec obiter*.

Lesson II. *Of the Distinction of Natural Notions, and of the Reducing them under Ten Common Heads.*

1. Every individual Thing not only (as was said)⁶ imprints a Notion of it self in our Minds, but *many* diverse Notions, according to the Various Impressions it makes upon the same or diverse Senses. This is manifest by Experience; for we find that an Orange (for example) causes in us the several Notions of Yellow, Heavy, Round, Juicy, Hard, &c.
2. We can consider *One* of those Notions, without considering the *Others*. For we experience, that we can *abstract* the Notion of *Round* from the notion of *Heavy*, (or any of the rest) and Consider it *apart*, and Discourse of it accordingly.

Note, That since the Object or Thing in our Understanding is capable of being consider'd diversly, hence [*Notion*] gets the name of [*Considerability*] and diverse *Notions* are said to be diverse *Considerabilities* of the Thing; which yet is no more but *the same Thing as diversly consider'd*.

3. Whether or no there be any Knower of a superiour Order, that can at one Intuitive View comprehend the whole thing, yet 'tis certain that our Soul, in this state, can have no Science of any thing, otherwise than by these *Abstracted Notions*. For since⁷ our Notions are the

⁵ Thomas Hobbes, 1588-1679, was polymath and philosopher, perhaps best known for his materialist physics, contractarian political philosophy, and unorthodox theism.

⁶ Less. 1. S. 1, 2.

⁷ Less. 1. Sect. 13, 14, 15.

Ground of all our Knowledge or Science, and (as will be seen shortly) we have *no Notion* of any Object, but by Impressions on the *Senses*, and those Impressions do *differently* affect us, and so breed *Different* or *Abstracted Notions*; 'tis manifest that we can no otherwise know any thing here, but by *Different*, that is, *Abstracted*, Partial or Inadequate *Notions*.

4. 'Tis necessary to Science, that it be *Distinct* and *Clear*, and not *Gross* and *Confused*. This is evident from the very Terms; for *Science* signifies a *Distinct* and *Clear* Knowledge.
5. Our Soul cannot in this state wield *more* Notions *at once*, nor *consider* them, or *Discourse clearly* of them *together*; or rather, indeed, *not at all*. This will appear evidently, by an easie reflexion on our Interiour: For, we shall find, that we can Discourse of each *single* abstracted Notion in an Orange viz. on its Bigness, Roundness, Colour, 'Tast, &c. But if we would go about to Consider or Discourse of us Roundness and 'Tast both together, (and the same may be said of any *other* two that are Disparate, or not included one in the other) we shall find our selves at a loss, and in Confusion, not knowing how to begin, nor how to proceed.
6. We cannot in this state know, even singly, *every* particular Considerability found in the thing: For, tho' (for example) we can by our Common Sight discern the Colour or Figure of a thing, or of its Grosser parts, yet a Microscope will discover to us innumerable Particularities which escap'd our Common View; and had we a Glass that magnified more, there would be found still more and more Particularities than did appear when we observ'd it formerly. Wherefore, since every New Observation we can possibly make begets a New Notion in us,⁸ and all our Knowledge is grounded on our Notions, we can no more know the last Considerability, which is in the thing, than we can know the least Part that is to be found in Quantity, or in the Differences of Figure, Colour, and other Respects which each of those very least parts may have; and therefore they are not All knowable by us in this state.
7. Much less can we, in this state, know *perfectly*, or discourse *scientifically* of any *Whole* Individual thing, or (as the Schools call it) the *Suppositum*, taken *in bulk*. For,⁹ since all the Considerabilities that integrate it, and consequently the Notions it begets in us, are blended confusedly in the entire Notion of the *Suppositum* or Thing. Again, since these are¹⁰ innumerable, and many of them Unknowable by us; it follows, that *no one* of them (that is, *Nothing* in that whole *Suppositum*) can be *distinctly* or *clearly* known, while we discourse of that which has them all *in bulk*; that is, while we discourse of them *all at once*; and consequently, the Notion of the *Suppositum*, which contains them all, cannot be *clearly* or *perfectly* known by us, nor discoursed of *scientifically*.
8. Wherefore we cannot know in this state any *One entire* Thing perfectly, since we can never have any perfect Science of it,¹¹ either taking it *in bulk*,¹² or by Detail.
9. Wherefore all we can do in this state, is to glean from the Objects by our Senses so many Notions of them as may suffice to distinguish them from one another; and may serve for our Common Use, Needful Speculation; or, lastly, for our Contemplation.
10. Notwithstanding this, the Science attainable in this State may arrive to be in a manner *Infinit*. For, since our Notions¹³ are the very *Natures* of the Things, and the¹⁴ *Natures* of the Things are the Seeds of all Science, and diverse Truths spring from them, and other Truths do still

⁸ L. 1. S. 13, 14, 15.

⁹ The marginal note appears to be missing.

¹⁰ Sect. 6.

¹¹ S. 7.

¹² S. 6.

¹³ L. 1. S. 6, 7, 8.

¹⁴ L. 1. S. 13, 14.

follow by Connexion with the former; and,¹⁵ since no stint is assignable of the Connexion of Truths, or of our Deduction of one Truth from another; it follows that there is no Bound or Limit of our Science attainable here, but that (if Art and Industry be used) it may be in a manner *Infinit*.

11. 'Tis a most Fundamental Errour to fancy that there are many kinds of *little Things* in the Object, corresponding to all the different Notions or Considerations which we make of it. For, since the least Particle that is in it does ground diverse Notions of it, and every various Consideration of each Particle, either according to what is Intrinsic or Extrinsic to it, does still beget *more*: Again, since no Particle can be so small, but we can *conceive* or have distinct Notions of 'Two Halves, and many other proportionate Parts in it, and the Particles that are or may be conceiv'd to be in Quantitative Things are Numberless; it follows, that, were all the Distinct Considerabilities in the Object distinct Things, we could never pitch upon any of those Things (they still including others in them) which we could say is *One* or *Undivided in its self*; nor consequently could we know what *Ens* or *Thing* meant in Corporeal or Quantitative Things, with which we converse; which would Fundamentally destroy and pervert all Human Speech and Discourse about *any Thing*, and make all Science impossible.
12. From what's said 'tis deduced, that it is one necessary and main Part of the **Method to Science**, to *distinguish* our Notions *Clearly*, and to *keep* them distinct *Carefully*. For,¹⁶ since all Science is grounded on our *Notions*, and Science must be *Clear*, and this cannot be¹⁷ if any *Two* of them be confounded, or taken together *at once*; it is manifest, that 'tis one necessary and main part of the **Method to Science**, to *distinguish* our Notions *Clearly*, and to *keep* them distinct *carefully*.
13. The best way to do this, is to rank all our Notions under distinct common Heads. For, this done, it will be easie to know, to which of those *common Heads* they belong; and those common Heads being easily distinguish't from one another, because they differ *most vastly*, or (as the Schools phrase it) *toto genere*, it will follow that the several Notions *compriz'd* under each of those Heads, must likewise, to a fair degree, be clearly known to be *Distinct* also.
14. There is but one onely Notion that is *perfectly Absolute*, viz. that of *Existence*, and all the rest are in some manner or other, *Respective*: For, since all Notions that are, must be either of the *Thing it self*, or of what *relates* or *belongs* to it, and the Thing it self *relates* to *Existence*, of which (since only a Thing can be) it is a *Capacity*; and *Existence*, as being the last Actuality conceivable in the Line of Being, *relates* to no *other* or *farther* Notion; it follows that only the Notion of *Existence* is *perfectly Absolute*, and all the rest are some way or other *Respective*.
15. Whence it follows, that the Notion of *Existence* is imprinted in the Soul before any other in priority of Nature. For, since¹⁸ all other Notions are *Respective*, and so consist in some (at least confused or rude) Comparisons, as it were, of that Notion to what it respects; to have which is much *harder* than to have that which is perfectly *Absolute*, more Simple and not Comparative at all; hence the Notion of *Existence* is the most Easie, and therefore the first in priority of nature. Again, since (as¹⁹ will be shewn hereafter) the substance of all *Operation* is nothing but the *Existence* of the Object imprinted on the Patient, and the Soul must have a Notion of the *Operation* made upon her, that is, a Notion of the *Existence* of the thing

¹⁵ See B.3. L.4. S.12, 13, 14.

¹⁶ L. 1. S. 13, 14.

¹⁷ S. 5.

¹⁸ Sect. 14.

¹⁹ Less. 8. Sect. 7.

imprinting it; it follows necessarily, that the Notion of the *Existence* of that thing is first in her.

16. From this last Reason it is evinced, that the Notion of the Man's own Existence is wrought in the Soul before the Notion of things *without him*, and this by the Man himself as his own Object, and is not imprinted by Outward ones. For ²⁰ since the Soul has Notions of Objects, not by Emission of its Virtue to them, but by their being Receiv'd in it, and Existing in it Intellectually; nor could it have a Notion of them, that is, they could not *exist in* the Soul, without its having a Notion first (in priority of Nature) of *its own* or the *Man's* Existence; it follows, that the Notion of the Man's Existence comes into the Soul before the Notion of other things, and consequently that it is imprinted by the Man himself, as his own Object, and is not caused by Outward ones. Again, since the Existence of the Man is Naturally *in him*, and consequently *in the Soul*, (when she has a Notion of him) after its manner, that is, intellectually; it follows, that it has (as it were) *Naturally* a Notion of the Man's Existence, and consequently, before it has the Notion of any other thing.

Note 1. To explicate *how* this is done, and why it *must* be so, Anatomists tell us, that the *Embryo* lies in a manner *round* in the Womb; whence some parts of it do continually and necessarily touch some others. Wherefore as soon as the Soul is infus'd, and it is now from a meer Animal become a *Man*, and has got an Understanding Power capable to receive *Notions* of Objects; those Touches or Impressions of some parts of himself upon others, do naturally affect the Sense, and by it the Soul, and beget a blind Notion there of the *Man*; and by a natural kind of Consciousness or Experience, that he *Operates* thus upon himself,²¹ of his own *Existence*.

Note 2d. Hence follows, against the *Cartesians*, that there is no kind of Necessity of *Innate Idea's*: For, having once got, by this means, the Notion of *Existence*, and all other Notions being *Respective* or *Comparative* to it; and the Soul being of its own nature a Comparative Power, since (as will be seen hereafter) both our Acts of Judging and of Discoursing are Comparative Acts; hence the Soul becomes provided with Means to have all other Natural Notions whatever, by what it has from the Object, and by it self. But of this Point more towards the end of this Lesson. Only it is to be remark'd, that it is not here intended that the Soul has only the Notion of Existence alone, and *afterwards* others; for at the same time it has the Notion of the *Man existing*, and existing *thus* by his *operating thus*. We only discourse which of those Notions is first in priority of Nature, that is, of its own Nature most Knowable or Perceptible.

17. All other Notions of the Thing besides Existence, being *Respective*, are either of something *Intrinsically* belonging to it, or else of something *Extrinsically* refer'd to it by our Understanding. This is evident; for we can have no Notion of *Non-Ens*, or *Nothing*, nor consequently of what belongs to it.
18. *Intrinsical* Notions are but Four. For, since Existence is the only *Absolute* Notion, and can be refer'd to no other, all other Notions must either Immediately or Mediate refer to *it*; Wherefore all *Intrinsical* Notions must either refer the Thing it self immediately to its Existence, by considering the *Ens* to be of such an *Essence*, as it is capable to receive it; and then *Essence* being the Immediate Power to *Existence*, they are Essential Notions, and belong

²⁰ Less. 1. Sect. 1, 3, 5.

²¹ L. 8. S. 1.

to that Common Head we call *Ens* or **Substance**. Or else they refer the Thing to some *Common* Manner or Modification (that is, Consideration) of it, in which *all* things we converse with do agree; that is, to its Bigness or **Quantity**. Or else they refer the thing to some Modification or Consideration belonging to its own *peculiar* Nature, denoting how it is *well* or *ill* dispos'd in that respect; which Common Head is called **Quality**. Or, lastly, they refer some one *Individuum*, according to something Intrinsic to it, to another *Individuum*; which constitutes the Common Head of **Relation**. And more Common Heads of Intrinsic Respects cannot be invented; therefore there are only Four Common Heads of *Intrinsic Notions*.

19. Those Notions that refer not something that is Intrinsic to the thing, but what's *Extrinsic* to it, are conceiv'd to apply that Extrinsic to it either by way of *Motion*, or *in Rest*. If by way of *Motion*, then, since Motion has two terms, it may be consider'd either as coming from the *Mover*, and 'tis the Notion of **Action**; or as affecting the thing *Moved*, and then 'tis called **Passion**. And, because the most Regular and most Equable, Motion, to our apprehension is that of the Sun, call'd *Time*, and therefore all Sublunary Motions must bear a proportion to it, and be measur'd by it, being perform'd while such a proportionable part of it was Flowing; and Mankind is forced to need and make use of such a *Measure* to Adjust, Proportion, and Design all their Motions or Actions by, and to know the determinate distance of them from known and notorious Periods; hence there must be a Common Head of the time *When* those Motions were perform'd, which we call **Quando**.

If the Extrinsic application be conceiv'd to be made to the Subject or thing *in Rest*, then, either that Extrinsic thing is conceiv'd to be barely apply'd to the *whole*, that is, to be Immediate to it, or merely to *Contain* it, which grounds the Notion, and answers to the Question *Where*, or **Ubi**: Or, it denotes some certain determinate Manners *how* it is apply'd to the whole or to some parts of it; and then either the whole, or at least some Parts of the Subject or thing, must be conceiv'd to be ply'd and accommodated to the parts of the Extrinsic thing, and 'tis call'd its Site or **Situation**; or else the Extrinsic thing, or its parts, are conceiv'd to be Fitted, Ply'd, or Accommodated to the Subject or Thing, and then 'tis call'd **Habit**.

20. These ten Common Heads are call'd **Predicaments**, that is, Common Receptacles, which *Contain*, and whence we may draw, all our *Predicates* for the Common Subject, *Thing*: which we may briefly exemplifie thus: Peter₁, tho' but a yard₂ and half high, yet a Valiant₃ Subject₄, fought₅ and was wounded₆ yesterday₇, in₈ the Field, standing₉ upon his guard, armed₁₀.
21. All these Notions, under whatever Head, if they be Corporeal ones, are *Natural* and *Common* to all Mankind. For, since they are made by Impressions on the Senses, which are Common to all Mankind, it follows, that the Notions which are the Effects of those Impressions, must be such also; since the same Causes upon the same-natur'd Subjects, must work the same Effects.
22. Our Soul has in it a Power of *Compounding* those several Notions together, of *Considering* them diverse ways, of *Reflecting* on its own Thoughts and Affections; and, lastly, of joyning a *Negative* to its Natural Notions if there be occasion; such as are the Notions of Indivisible, Immaterial, Incorruptible, Unactive, Insignificant, &c. which particularly happens when we would strive to frame Notions of spiritual Things. All which is manifest by plain Experience, if we reflect never so little on what passes in our own Interiour.
23. No Notions can be imagin'd that do not arise from one of these Heads: For *Corporeal Notions* are imprinted directly; *Spiritual Notions* by *Reflexion* on our Mind, and on its Operations or Affections; or else by joyning a *Negative* to our Positive natural Notions. And *Mix'd* or *Compound* Notions are framed by joyning our former simple Notions. Wherefore, since there

can be nothing imagin'd which is not either Corporeal, Spiritual, or Mix'd, or Compounded of Former Notions, 'tis manifest, that all the Notions we have or can have, do arise from one of those Heads.

24. Wherefore 'tis hence farther shewn, that there is no necessity at all of making some Notions to be *Innate*; and consequently that Conceit of the *Cartesians* is Groundless, who affirm, That by a *Motion* made on the Senses, the Soul, by an unknown Vertue peculiar to its self, Excites or awakens such and such an Innate *Idea*, which till then lay dormant in it, because they find that that Notion is nothing like to the *Idea* it excites: For, first, how do they prove that only Motion is communicated to the Brain from the Object, or, that that Motion does not carry along with it different-natur'd Particles or Effluvioms of these several Bodies, which are (as it were) little Models of their Nature? It is certain this passes thus in the grosser Senses, and no more is requisite to do it in the subtler, but that the Particles emitted be more subtil; which cannot shock the Fancy or Reason of a Natural Philosopher, who knows well into what almost-infinite smallness Body is Divisible: And, of all Men in the World, the Cartesians should not be startled at it: whose Principles do allow lesser Particles than those Effluvioms, and to pass thro' far lesser Pores than those within the Nerves, or even than such as are in the substance of the Nerves themselves. Now, this being granted, the whole contexture of this Doctrine of ours has a clear Coherence. For, such Particles bearing the nature of the thing along with them, are apt, when they are carried to the Seat of Knowledge, to breed in the Mind, or convey into it the Nature, (or an Intellectual Notion) of the Thing it self. To do which, there can need no more, than that every thing (according to the Maxim) be receiv'd according to the Nature or Manner of the Receiver; viz. that those Effluvioms, by affecting the Body Corporeally, do affect the Soul Intellectually.
25. Secondly, How is it conceivable, or any way Explicable, that a Motion, which they confess is utterly Unlike the *Idea* in the Mind, should be the Proper Exciter of such an *Idea*? Indeed, were those Motions of the Nature of our *Signs*, that are voluntarily agreed on and fore-known to the Users of them, they might have a Power to make such a peculiar Excitation of those *Ideas*, as our Words do now; or as any odd and disagreeing Things are made use of by us when we practise the Art of Memory. But here things are quite otherwise; for we have no Foreknowledge either by Agreement, nor by our voluntary Designation, that such Motions shall excite such *Idea's* or *Notions*; nor, as is confess'd, are they Naturally alike; wherefore it is altogether inexplicable how they should ever come to excite such particular *Idea's*. Add, That this hidden Virtue in the Soul, to make such a particular *Idea* start up as soon as that Motion is made in the Nerve, is both said *gratis*, and is as Obscure as an Occult Quality; and so far from Explicable, that even themselves (as far as I can learn) have not so much as *attempted* to explain it: but it seems to be in part taken up *gratis*, to make good their Doctrine of innate *Idea's*, as the Tenet of such *Idea's* is to prove the Soul is a distinct Thing from the Body. Lastly, Their Argument drawn from Experience, that the *Idea* in the Mind is quite different from that Impression in the Senses or any Bodily Faculty, is shewn to be Inconclusive, by alledging, (as was said lately) that the Nature of the Object found in those emitted Particles, and the Nature of it found in the Soul Intellectually (or as standing under Notion) are the *self-same*, and not so *Unlike* as they imagin. Add, That their Argument falters in this too, that the makers of it did not duly reflect, when they advanced it, on that 'foresaid Axiom, *Quicquid recipitur, recipitur ad modum recipientis*:²² For, had they done this, they could not have wonder'd that an Affection of the Body (which is imprinted *directly*) and an Affection of the

²² Latin: "Whatever is received is received according to the manner of the receiver." 'Quicquid' is an alternative spelling of 'quidquid.'

Soul which is spiritual (and known only by Reflexion) should have a Different Appearance: The two Manners of Existing, with which the same Nature is vested, differing *toto genere*,²³ that is as far as *Body* and *Spirit* (their subjects) can distance them.

To explicate this more fully, and to shew the difference between Corporeal and Spiritual *Idea*'s, I offer to their thoughts this Reflexion concerning the distinct nature of a *Phantasm*, which is a *Corporeal Resemblance*, and the nature of the thing in the *Mind* (that is its *Notion*) express'd by a *Definition*, which is *Intellectual* and *Spiritual*. The Phantasm or Corporeal Resemblance of a Man is a kind of Picture of a thing with two Legs, two Arms, such a Face, with a Head placed uprightly, that grows, moves itself, &c. Let us regard next the *Definition* of a Man, or rather (which is, abating the Expression, the same) the *Notion* of him; which is, that he is a *Rational Creature*; and we shall easily discern of how different a shape it is from the other; how it abstracts from many Corporeal Qualities, Figures of the Parts, and other Considerations, which were Essential Ingredients to the Picture or *Phantasm*, and not at all Essential to *It*, nor found in the *Definition*; and how some Considerations too are added in the *Definition*, or imply'd in it (as to *Apprehend*, *Judge*, *Discourse*, &c.) which no more belong to the *Phantasm*, than it did to *Zeuxis's* Grapes, to have the Definition of the *Fruit of such a Vegetable* predicated of them. In a word, one of them is a kind of Portraiture, *outwardly* resembling; the other speaks the most *Intrinsecal Essence* of the thing *Defin'd*. The one signifies *Bodily Parts* belonging to such an Animal, and therefore is *Corporeal*: the other does not signify, but *is* the Nature *signified*; and this too by *Words* which denote to us the *Mind* or *Meaning* (that is, the *Notion*) of the speaker; which is therefore *Spiritual*, at least in part. Whence the Compleat Essence of *Man* could not be understood, nor a Definition of it fram'd, without making use of some of these *Notions* or *Idea's*, which are made by our Understanding, *reflecting* upon its own *Spiritual* Operations.

Lesson III. *How these Common Heads of Notions are to be Divided.*

1. THE *Differences* that divide each Common Head must be *Intrinsecal* to it. For, since²⁴ we cannot discourse of two *Disparate* Notions at once; and since were those Heads divided by Differences that are *Extrinsecal* to the Common *Genus*, (or taken from *another* Head) each *Species* of it would consist of two *Disparate* Notions; hence it is absolutely necessary to Science that the Differences which divide these Common Heads be such as belong to *no other* Common Head, but be *within* the Limits of that Head, or *Intrinsecal* to it. Again, since the *Difference* is most *Formal* in constituting the *Species*, and the *Genus* only *Material*; were the Differences *Extrinsecal* or Borrow'd from *another* Head, it would follow, that all the *Species* of the Head divided by such Differences would belong to another Head, *viz.* to *that* Head whence those Differences are taken: Which would put all our Notions into Confusion, and involve a direct Contradiction, as making *Substances* to be *Quantities*, *Qualities*, &c.
2. *Intrinsecal* Differences can be no other but *more* and *less* of the Common Notion: For since, being *Intrinsecal*,²⁵ they cannot be taken from any *other* Head, it follows, that they must partake of the *Common* Notion of *their own* respective Heads. Again, since, if they did partake of the *Common Notion* Equally, they would not *differ* in that Notion, and so would not be *Differences* of it; it follows, that they must partake of it *Unequally*; that is, they must be *more* and *less* of the *Common* Notion.

²³ Latin: 'entirely'; 'on the whole'; 'in all of its kind.'

²⁴ Less. 2. Sect. 5.

²⁵ S. 1.

3. Hence the Common Notion of *Ens*, Thing or *Substance* being that which is *capable of Existence*, is Immediately, *Intrinsecally*, or *Essentially* divided into what's *more* and *less* capable of Existence. Wherefore,
4. *Divisible* and *Indivisible*, which constitute *Body* and *Spirit*, are the proper and *intrinsecal* Differences of the Common Head of **Substance**: For, since Actual Division of the Entity makes the thing to be no longer *indivisum in se*;²⁶ that is, to be *unum*; that is, to be *Ens*; that is, to be *capable of Existence*; it follows, that that *Ens* which is *Divisible* (or *Body*) is *less* capable of Existence, that is, has *less* of the nature of *Ens* or *Substance*; and the *Ens* that is *Indivisible* (or *Spirit*) has *more*. Again, since Things *Divisible*, or *Bodies*, can only have their *own* Being or Existence, whereas Things *indivisible*, or *Spirits*, are capable of being *Other* things also, or of having in them the Natures and Existences of all the things they *know*; hence they have a *greater* Capacity of Existence than *Bodies* have; since they have enough for themselves, and can impart it to Millions of *Other* things besides; and, consequently, *Body* and *Spirit* are constituted by *Divisible* and *Indivisible*, as by the proper, immediate, and *Intrinsecal* Differences that divide *Substance* or *Ens*.
5. The *Divisibility* and *Indivisibility* that are the *Intrinsecal* Differences of **Ens**, are not those of being *Quantitative* and *not Quantitative*. For, were it so, it would follow, that some *Intrinsecal* Differences of *Ens* in Common would be taken from some *other* Head, *viz.* that of *Quantity*, and²⁷ so, the Differences being what's most Formal in the *Species*, hence those *Species* of *Ens* would rather be under *that* Head than *its own*. Again, that *Divisibility*, which is of *Quantity*, may oftentimes be put into Act, and yet the *same Ens* remain; *v. g.* a Man may lose the *Quantity* of an Arm; a Tree, of a Branch, &c. and yet remain still the same *Things*; whereas, if *Quantitative Divisibility* were the *Intrinsecal* Difference which constituted it *such an Ens*, *Quantitative Division* must by consequence make it cease to be *that Ens*.
Moreover, since *Quantity* (as will be ²⁸ shortly seen) is *Divisibility*, and *Divisibility* in *Unity*, in case *Quantity* did *Intrinsecally* divide *Ens*, and constitute *Body*, where-ever there were *Quantity* there would be *Unity* under that notion; and so *all* *Quantitative* things would be but *one Ens* or *one Body*; which is the highest absurdity. Therefore the *Divisibility* and *Indivisibility* which are the *intrinsecal* Differences of *Ens*, are not those of being *Quantitative* and *not Quantitative*.
6. Therefore the *Divisibility* and *Indivisibility* which divide **Ens** *Intrinsecally*, must be the *Divisibility* and *Indivisibility* of the Constituents of *Ens*, as such; that is, the *Divisibility* of it into *Matter* and *Form*, and *Indivisibility* of it into such Constituent parts: Which differences do *Essentially* divide the *Genus* of *Ens*, and constitute the *species* of *Body* and *Spirit*. For, since we see *Bodies* *chang'd* into one another, and therefore, the former *Body* had really somewhat in it determining it to be actually *what it was*, which we call the *Form*; and somewhat by which it *could be Another*, which we call the *Power* to be another, or *Matter*. Again, since we see that the *Form*, which made the *former* Thing be what it was, is *gone* when 'tis made *Another* Thing, and a *New* *Form* succeeds into the same *Matter*; hence we can frame diverse Conceptions of *Body*, which belong to it as such an *Ens*, *viz.* *Matter* and *Form*; and have a Ground in Nature to say there is a *Real* divisibility between them. Wherefore since that *Ens* call'd *Body*, by being divisible into *Matter* and *Form*, becomes liable to have the *Form*, that constituted it such an *Ens*, separated from the *Matter*, and so to lose its being the *same Ens* it was, and incapable of existing any longer; and, for the same reason, a *Spirit*, by its *not* being divisible into *Matter* and *Form*, has *not* in its *Essence* any Principle giving it a Capacity *not to Exist*, as had the

²⁶ Latin: 'undivided in itself'

²⁷ S. 1.

²⁸ Less. 4., Sect. 2, 4

other; but *has* in its self, or rather *is* of its self a more simple and more perfect kind of *Unity*, and consequently a more Noble kind of *Entity* or Capacity of existing, than is the other; Therefore the *Divisibility* and *Indivisibility* which divide *Ens* Intrinsically, must be the Divisibility and Indivisibility of it into *Matter* and *Form*; which we call *Metaphysical Divisibility*, because it is the divisibility of the parts of *Ens* as such; that is, of *Ens* under the Notion of *Ens*.

7. For the same Reason given above, (Sect. 1, 2.) *Mixt* and *Simple* are the *Intrinsecal* Differences of **Body**: For, since *Simple* Bodies, which we call *Elements*, have in them but the Nature or Essence of *One* kind of Body only, and *Mixt* Bodies have both the nature of *That* Kind, and of *other* Elements besides; it is manifest that they divide the Common Notion of Body by *more* and *less*, which are *Intrinsecal* Differences.
8. For the same reason **Mixt Body** is divided into *Living* Bodies, and not *Living* by *Intrinsecal* Differences; because Those are *more* mixt, These *less*.
9. For the same Reason, a **Living Body**, being that which has a Principle of Motion in it self, is divided, as by *Intrinsecal* Differences into **Animal**, which is *more* Living, or *more moving it self* (*viz.* by every slight Impression on the Senses) and **Plant**, or *Vegetable*, which is *less-moving it self*.
10. For the same Reason, **Animal**, which is a Body moving it self by Impression on the Senses, is intrinsically divided into **Brutes**, which do *thus* move themselves onely to a set *Determinate* number of Actions, which is to be *less moving it self* by impressions on the Senses; and **Man**, who by his Reason and Knowledge is apt to move himself to a kind of *Universality* of Action, which is to be *more* moving himself by means of such impressions.
11. For the same Reason, **Man**, or *Rational Animal*, is divided intrinsically and essentially into those who have *more* and *less* the Faculty or Power of *Reasoning*; who are, therefore, properly and essentially *more* and *less* **Men**.

Note, That Common Logicians, because we cannot descend or reach to those particular *intrinsecal* Differences which constitute *Individuals*, do therefore make [*Man*] the *lowest species*: But 'tis one thing what may serve for Logical Speculation; another, what the nature of the thing bears, and the right division of the Commoner Notion by *Intrinsecal* differences requires: Wherefore, tho' not able to discern the intermediate *Species*, and (as far as I have observ'd) not reflecting that *more* and *less* of the common Notion do make the *Intrinsecal* and *Essential* Differences that constitute its *Species*, Common Logicians do content themselves to put *Individuums* immediately under *Man*, and thence mistake *Man* to have no *Essential* Differences at all, but *Accidental* ones only; yet 'tis manifest, that, since all *Individuums* are diverse *Entia* or Things, and **Essence** does formally Constitute an *Ens*, the Differences that constitute diverse *Entia* must necessarily be **Essential**. So that amongst *Men* there may be many Degrees of *more* or *less* Rational, constituting diverse under-*Species* of **Man**, could we have light to distinguish them; as well as there are diverse *species* of Dogs, Horses, Trees, and Flowers.

12. *Particular* or *Singular* Things are properly call'd **Individuums**, because they cannot be divided into more of the same Notion, as all others in the same Line could. For *Socrates* cannot be divided into more that have the particular Nature of *Socrates* in them, as *Man* could into more that have the Common Nature of *Man*.
13. *Individuals* only are properly and completely *Entia* or *Things*, and capable of existing. For, since the Notion of *Thing* is [*Capable of Existing*] and all Notions that are *superiour* to the *Individuum* are *Inadequate* or *Partial Notions* of it, as is manifest; and the *Individuum* is the

Whole, as comprizing all those Parts; and no Part can exist by its *own* Virtue, or *out of* the whole; in regard it would then be of it self a *whole Ens* and not a *Part* onely; it follows, that *onely Individuals* are properly and compleatly *Entia* or *capable of Existing*.

14. *Individuals* are the proper Subject or *Suppositum* of all other Notions or Natures both of its own Line, and of all the rest. For, ²⁹ since *Individuals* onely are properly *Things*, or capable of Existing; it follows, that both all in its *own* Line, and much more in *all* the *other* Lines (which have not at all in their *peculiar* Notions any Order or Title to Existence) must exist and subsist *in* *Individuals*, as in their *suppositum* or subject; which *lends* them to be, and *sustains* them in *Being*.

COROLLARIES.

Cor. I. Hence, 'tis Logically demonstrated that every *individual Man* is but *One Ens* or Thing; since he descends Lineally from that Common Head by intrinsecal Differences of *more* and *less*, which constitute him truly *One* in that Line; that is, one *Ens*, or one *Thing*. Whence the contrary Position ravelles all the Well-Order'd Frame of Human Notions, and the Division of them by intrinsecal Differences; which (as ³⁰ has been shewn) must needs put all our thoughts into Confusion, and wholly obstruct the Way to *Science*. Nor matters it that there are *two* contrary *Natures* in him, *Corporeal* and *Spiritual*; since the Notion of *Ens* is not the Notion of the *Nature*,³¹ but of the *suppositum* which *has* the nature *in it*. Add, that the notion of *Ens* is indifferent to *both* *Natures*; and therefore, if they may be co-ordinate to *one* End, and that it wrong no other Principle, they may both club into *one Thing*, and compound *one Ens*: As appears in the *Incarnation*, in which the *Second Person* of the *Trinity* assum'd Human Nature, and joyn'd it to it self in the same *suppositum*.

Cor. II. The Notion of *Rational* (which is in some sort truly *Spiritual*) may be *Co-ordinate* to the Notion of some kind of *Body*. For, since *Animal* is directly subsum'd under the Notion of *Body*, and the Notion of *Animal* (or of a Thing moving it self by Impressions on the Senses) is Intrinsecally divided by *less*-moving it self thus, which constitutes *Brutes*; and *more*-moving it self thus, which is manifestly done by its being *Rational*, that is in part *spiritual*; It follows, that the Notion of *Rational* or *Spiritual* may be *Co-ordinate* to some *Body*, (*viz.* to *Animal*) as one of the Proper and Intrinsecal Differences of that *Genus*, as is shewn above.

Cor. III. Notwithstanding *Man* cannot be *both* *Body* and *Spirit* *formally*. For, then he must necessarily be *Two* Entities in distinct Lines of Substance; the one under the *Genus* of *Body*, the other of *Spirit*. Whence, he would be *Unum* and *non-Unum*, in the same regard, or according to the same Formal Notion; that is, he would be *Ens* and *non Ens*; and consist *formally* of two Things as perfectly distinct as an Angel and an Ape; and even be more monstrous than a *Hircocervus* or *Chimaera*; because he would be *formally*, that is *essentially*, made up of two more-generically-opposit Things than these are conceiv'd to be. Wherefore, the Notion of *Man* being deduced by Intrinsecal Differences from the *Genus* of *Body*, he is *formally a Body*, tho' his Soul be of a *spiritual* Nature, which makes him *virtually a Spirit*. Whence also, the *manner* of *Existence* following from what's *Formal* in the Thing, he has, *in this* State, a *Corporeal Manner* of Existence; as appears by his gleaning Knowledge by the Senses;

²⁹ Sect. 13.

³⁰ L. 2. Sect. 12, 13.

³¹ Sect. 14.

his being Measurable by Quantity, Alterable by Corporeal Qualities; nay, even his peculiar and proper Action of *Discourse* attends the slow pace of Fancy and Bodily Motion; none of which could be competent to a Pure *Spirit* that exists *after a Spiritual and Indivisible* manner. Nor does this more prejudice the Spiritual Nature of a Soul that it exists and works in some regards after the manner of a Body, than it does prejudice the Nature of a *Body*, (a Stone, for example) that it exists in us *spiritually*; as it does when we *know* it, or have the *Notion* or *Nature* of it in our Understanding.

Cor. IV. Hence is seen what Notions do formally belong to the Line of *Substance*, or to *Ens* as *Ens, viz;* the several *species* of it descending downwards from the Common Head, till we come to the *Individuum*; which therefore is a *compleat Ens*, as including all those Superiour or *partial* Notions; and ³² therefore *it* only is in proper speech, an *Ens* or *Thing*; in regard It onely being ultimately determin'd to be *This* or *That*, only It is, by consequence, *capable of existing*, which is the Definition of *Ens*. Whence all Potential or Indeterminate Notions of *Ens*, such as are *Ens*, *Corpus*, *Vivens*, or *Animal* in *Common*, are, for the same reason, *incapable of Existing*, otherwise than as they are Parts of the compleat *Ens* or *Individuum*; and therefore they are phras'd by the Schools, *Substantiae Secundae*,³³ and the Individuum *Substantia Prima*.³⁴ Lower than the Individuum in the Line of *Ens* we cannot go, nor can any Notion be superadded to it that belong Properly to *Ens*, but that of *Existence*, of which *Ens* is a *Capacity*. Whence we do not call Existence a *Form* (or *Act*), for This joyn'd with the *Matter* (or *Power*) does constitute that compound *Ens* call'd *Body*, and, therefore, are both presuppos'd to *Existence*; but we call it the *last Formality* of every created *Ens*, because it has no Potentiality at all in that Line, but is *Pure Actuality*; and therefore most resembles GOD, our Creator and the sole Giver of It, whose very Essence is *Self-Existence*.

Cor. V. All those Notions before said, taking them *precisely* as determining the common Notion of *Ens*, and belonging to *it* (even to the last *Actuality* of it [Existence] inclusively) are *Metaphysical* Notions: The proper Object of which Science is *Ens*; not taken as it abstracts from *Existence*, but as it abstracts from all the *other Predicaments* or common Heads of Notions; that is, from all *Matter* and *Motion*, and all Modes or Manners of them. For which Reason *Existence*, which *more perfectly* abstracts from both, does *more formally* belong to the Object of Metaphysics.

Lesson IV. Some Considerations belonging to those Ten Heads of Notions, or to the Ten Predicaments in Common.

1. THE last Nine Predicaments, call'd *Accidents*, are not truly *Things*, nor (of themselves) capable of existence; and therefore they are onely Capable of *Being* by their Identity with Substance. For, since ³⁵ we cannot *clearly* know anything but by framing *diverse* Notions or Considerations of it,³⁶ and all the Notions we have are divided into Ten common Heads,³⁷ and it hinders the way to Science, if we keep not the Distinction of those Heads unmingled:

³² The marginal note appears to be missing.

³³ Latin: 'secondary substances'.

³⁴ Latin: 'primary substance'.

³⁵ L. 1. S. 3, 4, 5.

³⁶ L. 2. S. 17, 18, 19, 20.

³⁷ L. 2. S. 4, 5.

Wherefore, it being manifest and undeniable, that among those Heads there is one which is truly the Notion of *Ens* or *Thing*, that is, of [*Capable of Existing*] viz. that of *Substance*. Hence, in case we should conceive, or put all the rest to be also *Entities* or Things, or of themselves *capable of Existence*, we should confound and jumble all the Common Heads of our Notions together; which would fundamentally destroy all *possibility of Science*, even while we are laying it.

2. Notwithstanding this, the Notions or Natures of those Nine Heads are not *Fictitious*, or fram'd *gratis* by our Understanding, but real Affections or Modifications of the Thing. For, since ³⁸ we cannot comprehend *all* that is in the thing *at once*, but are forced to make diverse Considerations of it; nor could we do this unless the thing were diversly Considerable; it follows, that these Nine Heads (as well as the First) are diverse Considerabilities of the *same Thing*; that is, the real Thing *it self* as diversly consider'd or conceiv'd by us; and therefore, since they are not *Things* by virtue of their distinct Notions, and yet are really the *Thing diversly* consider'd (which takes nothing from their *Reality*) it is left that they must be *Real Affections*, Modifications, Respects or Determinations of it, and not *meer Nothings* or Fictitious; but, (as we may say) *somewhat of the Thing*, or belonging to it; which Logicians phrase to be a *Thing* in an *Analogical* or Secondary sense.
3. The *Distinction* of these Considerabilities is partly taken from the *Understanding*, partly from *Nature* it self. For, since the diverse Considerabilities of the Thing³⁹ are not so many little Entities found in it, but the *same thing* diversly conceiv'd; the distinction of them cannot be taken from the Thing it self, *singly considered*. On the other side,⁴⁰ since our Understanding is naturally *apt* to make diverse Abstract Notions of the Thing; nay, is *forced* to do it because it cannot discourse clearly of more of them together, much less of the whole *suppositum*; and, that the Impressions on the Senses which cause those Notions are naturally *diverse*; and, that the Causes in Nature do often work upon the *suppositum* or thing, according to some *one* Notion or Considerability of it, and not according to *another*: for example, on its Figure, and not on its Colour; on its Locality or Situation, and not on its Substance; hence ample occasion is ministred to the Understanding to consider it *diversly*; that is, to make diverse Conceptions or Notions of it. Wherefore the distinction of these Considerabilities is partly taken from the Understanding, partly from *Nature* it self; Nature affording *Ground* and *Occasion* for the Understanding to make this Distinction, and the Understanding making it *formally*.
4. Hence follows, that the only way to acquire solid Knowledge of the *Nature of Things*, or (which is the same) of those *Nature-imprinted Notions*, is, not to frame high-flying speculations of them, beaten out of our own Brain, or coin'd by our own Wit: but, to gain by attentive Reflexion, the *true* and genuine *Meaning* of those *Words*, which the Generality of Mankind, or the Vulgar, make use of to signifie those Notions: For, this known,⁴¹ the Meaning of the Word being the Meaning or Notion of those that *use* it, and their⁴² Notion being the *Nature* of the Thing, it follows, that the *Nature* of the Thing will be known likewise. Wherefore, this is the best Test to know which Speculations are *Aiery*, which *solid* and Grounded on *Nature*. For Instance.

To know what is properly meant by the word [*Thing*], ask an honest Country fellow (as my

³⁸ L. 2. S. 5, 7.

³⁹ L. 2. S. 5, 11.

⁴⁰ L. 1. S. 3, 5, 7.

⁴¹ L. 1. S. 6.

⁴² L. 1. S. 6, 7, 8.

self did once to satisfy a Sceptick) how many Things lye upon the Table; and we shall see that he will readily reckon up all the *individual Substances*, and be ready to swear there are no more: Which shews, that Nature teaches him that only an *individual Substance* is truly and properly a **Thing**. This done, tell him he has not reckon'd *all* the Things there, but has omitted Bigness, Whiteness, Roundness, &c. which are not *Nothings*, but *Things*, and really there. Which done, you will find you have blunder'd him, by putting him to *distinguish*, which he is not good at: Yet, for all that, he will stand to his former Answer, and tell you, These are not *such* Things as we call *Things*; and that in reckoning up the Other things, he reckon'd up Those into the bargain. Which rude Answer contains the sum of this present Discourse; *viz.* that only *Individual Substances* are truly *Things*; the others *somewhat* of the *Thing*, or belonging to it; and that they are no otherwise *things*, but as they are *it*, or *somewhat of it*; and consequently *are not*, or have *no Existence* of their *own*, but *its*.

5. *Artificial* things are in *no One* of these Heads. For, since *Artificial* things are either *more* things join'd together, or some *one* Natural Body, not as it stands in *Nature*, but as vested with a new *artificial* Form, introduced by *Art*; it cannot have *one* Notion; nor, consequently, can it be comprized under any *one* Head. Nor are these *Notions Common to all Mankind*; nor, lastly, are they constituted by *Essential* or *Intrinsecal* Differences in the Line of *Ens*, but such as are *Accidental* or *Extrinsecal*, and generally by their Figures or Situation of their Parts.
6. What's *Infini*t can be in none of these Heads. For, since an *Infini*t *Ens* (for example) involves in its self all that is or can belong to the *Notion* of *Ens*, and can be but *One*, in regard, were there *more*, one of them would have *something* of Entity in it which the other *has not*, and so they would *limit* one another, and both of them would be *Finite*; it follows, that what's *Infini*te can neither be a *Common Head* it self, because it can have *no Particular Infini*tes under it; nor can it be a *Particular* under that *Common Head*, because it could have no *Genus* to it, nor *Intrinsecal* Differences to divide that *Genus*, and to constitute a *Distinct* *Infini*t from the *other*.
7. *Ens*, diversly conceiv'd, is the *Adequate* Object of our Understanding, working naturally. This is evident from the whole Scheme of our Discourse concerning the Ten *Common Heads* of all our *Notions*, shewing they are nothing but diverse *Conceptions* of *Ens*.
8. Hence we can have no proper *Notion* of a pure *Non-Entity*; not only for the Reason now given, but also, because a *Non-Ens* could never make any impression on our Senses, and thence convey its *Notion* into our Minds.
9. For the same reason we can have no proper and *direct* *Notions* of *Indivisibles* or *Points*, or of what's purely *Negative* of *Ens*, or of any real Affection of *Ens*, taking them as purely *Negative*, without connotating the Subject, or the *Thing*; whose notion only is truly *Positive*. For (as has been shown) all our *Conceptions* are *Notions* of the Things as conceiv'd by us; which when, by a *Reflex* Act, we consider to be *Limited*, and to reach *no farther* under such or such a *Notion*, we abstract *Limitedness* from the *Real Notion*; and because we can have no *Conception* but under the notion of *Ens*, we are forced to use an *improper* *Notion*, and conceive it as a kind of *Ens*; even tho' at the same time wise Reflecters judge and say, 'tis *none* of it self, or, as totally abstracted from the *Thing*. In which case no harm is done by our barely *Apprehending* it so, for 'tis *Natural*, and we cannot help it; but if, not distinguishing our Manner of *Conceiving* from what is found in the *Thing*, we come to judge that to be an *Entity* which, by the *Thing's* reaching *no farther*, is evident that of it self 'tis none; or to be *Diverse Entities* because our *Conceptions* are different, it will certainly pervert all our *Discourses*, and make them *Aiery*, *Fantastical*, and *Contradictory*.
10. Hence it is a most *Intolerable Error*, to make *Imaginary Space*, or an *Immense Vacuum* beyond the *World* to *Exist*; and, by consequence to belong to some one of those *Common Heads*. For, the word *Vacuum* must either be taken as a *Concrete*, and then it must signify a

Subject or *Ens* which has an Accident in it call'd *Vacuity*; in which case, since none says that that *Ens* is a *Spirit*; nor can it be a Body, being put to be *beyond the World*, that is, beyond the *whole* Mass of Bodies; it follows, that it is *no Ens at all*, but a meer *Nothing*; and so, to put a *Nothing* to *be*, is against Common Sense, the Light of Nature, and the very First Principle of our Understanding; for it puts that to *be*, which, being *no Ens*, is *not capable to be*; that is, it puts a perfect Impossibility or Contradiction. Or else it is a meer *Abstract Term*, and means a *Vacuity*; and then the Asserters of it must put a *Form* to *bee* without any *Matter* or *Subject* inform'd by it; which wanting, it can be *no Form*; or an *Accident* to subsist without any *Subject*, which makes it *no Accident*; since an *Accident* is that which does *accidere substantiae*,⁴³ or is *Adventitious* to it. Again, the Name they give it, *viz. Imaginary Space*, by which they distinguish it from *Real Space*, confesses it not to be *in re*, but only in *our Imagination*: Which words can have no sence, unless they mean, that the Imagination is the *Only Subject* in which it subsists. Wherefore, to speak consequently, they ought to say, that our Imagination, in which only it has any Being, is some infinitely-extended Thing *beyond the World*; for *there* they put this *Imaginary Space* to *bee*; but this is so notorious a Banger, that they dare not say this neither; and, therefore, they can make no piece of their Tenet cohere, nor make any Sence of their own Words. But let them wriggle what way they will, their putting it to be *without the World*, and yet not to exist *in re*, but *in our Imagination* only, which is *within the World*, is so full fraught with variety of Contradictions, that they cannot even name it or talk of it, without speaking palpable Nonsense at every step of their Discourse. Moreover, they deny it to be a *Thing*, and yet they attribute to it the Properties of a *Real Thing*, by making it have *assignable Parts* in it; as also to be Extended, Measurable, &c. which is the highest strain of Contradiction imaginable. For, since *Ens* and *Non-Ens* do differ more than *toto genere*,⁴⁴ and as far as Contradiction can distance them; whatever is affirm'd of an *Ens* must necessarily be deny'd of *Non-Ens*; so that, if a *Thing* (a Body for example) can be extended, measur'd, pass'd through, or mov'd in; it must necessarily be affirm'd, that a *Non-Ens* cannot be mov'd in, extended, measur'd, or have Parts. Lastly, *Imaginary Space* or *Vacuum* never affected our Senses; and therefore, since we can have no distinct Notion of it from outward Objects, neither can it, consequently, belong to any of those Common Heads of Notions; whence follows that one of these Heads, which gives Being to all the other, being **Ens**, *Imaginary Space* and *Vacuum* are meer *Nothings*.

Note 1. That this Discourse equally concludes against *Vacuum within the World*. For that Imagin'd Space would neither be Body nor Spirit, Subject nor Accident; and therefore it must be merely Nothing. Nor, consequently, could it be Measur'd, Extended, Mov'd in, &c.

Note 2. That these two Tenets being overthrown, the whole *Epicurean Hypothesis*,⁴⁵ built on them, falls to the Ground, and needs no farther Confutation.

11. Hence 'tis Logically demonstrated, that there can be no Protuberancy in the outmost Superficies of the World; for, were this so, there would be some Distance between the Extream Surface and that Protuberancy; and that distance could be Measurable, Divisible, &c. which would make *Non-Ens* to be *Ens*.

⁴³ Latin: occur in a subject; literally, 'to fall or happen upon' a substance.

⁴⁴ Latin: 'entirely' or 'in all its kind'.

⁴⁵ Followers of the ancient Greek philosopher Epicurus (ca. 3rd century BC) held that the world consists of matter (*atoms*) and void (*vacuum*). Epicurean physics hypothesized empty space as being required for matter to move at all, since matter would otherwise collide with other matter with such constancy so as not to move.

12. This Humour of Fancy, or of ill-govern'd Reason, making *Entities* of *Non-Entities*; and conceiting every Negative, purely as such, to be a *Thing*, because we cannot conceive *Nothings* but as *Things*, destroys *all Science*, and makes it Chimerical. For, every *Species* in Nature includes a Negation of all other *Species*, and every Individuum in the World of all other Individuums: at which rate we should have far more *Nothings* in the World than *Things*, if we come to put all those Negations to *bee*. It were very proper, but withal very pleasant, if such Men of Fancy would, in pursuance of their *Tenet*, frame us a new No-Logick of their own, and put *Non-Ens* in Common to be the First Head of their Negative Notions; and then divide it by *more* of *Non-ens* that is, *No-Body*, and *Less* of it, or *no Spirit*; and then descend to its proper Individuums. as *Non-Petrus*, *Non-Ioannes*, *Non-Bucephalus*, &c. This would be consequent to their Fantastick *Tenet*. But, even then they must be forc'd to contradict themselves, and confess, that as *Non-ens* means *not capable of existing*; so, by the same reason, they ought to make *Non-Corpus* to be *Non-quantum*, *Non-quale*, *Non-passivum*, *Non-locabile*, &c. which would spoil all their Positions of *Vacuum* and *Imaginary Space*. So certain it is that all Errors, pursu'd home to their bad Principles, will still confute themselves. Hence the distinction some make of *Ens* into *Ens-Positivum*, *Privativum*, and *Negativum*, is no wiser than was the saying of the Fanatick Preacher in Ben's Play. *viz.* That *he had three Lights in him; a Great Light, a Little Light, and No Light at all*.
13. We have no *Natural Notion*, nor *Ground*, from Nature, of an **Union**, as they call it. For, the Asserters of it, neither make it the *Action* that unites two things or parts, nor the *Effect* of that Action wrought upon the Subject, that is, *their being united*, (which hinders it from belonging to the Common Heads of Action or Passion) but an Intervening Little Entity, whose nature it is to *tye them together*. And, since such a Notion was never imprinted by our Senses, 'tis plain it can be no *Natural Notion* as those in the Predicaments are, nor belong to any of those Common Heads. Nor can it be collected by Reason; for since the *Matter*, before the Union be made, is Ultimately dispos'd by Nature to receive the *Form*, and the *Form* is *Proper*, and by the course of Causes, *Necessary* to be received into the *Matter thus disposed*, there can need nothing to Unite them (as they call it) but the Efficient, making the *Form result* from such *Matter* as was fitted for it and requir'd it, which is to be *in it*; any more than, if Fire be apt to burn what's Combustible, and what's Combustible be perfectly fit to be burnt by Fire, there can need any thing but *Application*, to burn it, or (which in their Phrase is the same) to *unite* the *Form* of Fire to the *Matter* of the Wood. This Conceit therefore of those little Entities, call'd *Unions*, to tack things together at every turn, is a meer *Chimera* coin'd by Fancy; and seems to be borrow'd from those mens observing that two Things, unapt otherwise to cohere, (diverse pieces of Wood, for example) do need Glew, or Pitch, or some such tenacious stuff, to fix them together; whence, by an Unsuitable and Ill-grounded Metaphor, they translate it to the Uniting the parts of *Natural Entities*; which, by the wise Conduct of the Author of Nature, are always *ready* for an Union e're they come to be made *One*, and can need nothing at all to unite them or make them *One* Entitatively. *Union* therefore is the *Effect* of the Action of Uniting, or the same with their *being united* or their *Unity*, and not an Intermediating Entity; since whatever Things or Parts are *naturally United* do cling together into one Entity by a kind of spontaneous Inclination; and by means of the antecedent Dispositions requiring the *Form*, are such good Friends of themselves beforehand, that there can need nothing to Reconcile them. Besides, this Conceit is ill-grounded in another respect; for, the Inventers of it make account that those *Unible Parts* were, before they were united, *Two Things*; whereas, in reality, there was but *One* Thing, dispos'd to be chang'd into another, by sitting the *Matter* to receive a new *Form*. Which Discourse may be apply'd to

those who ask, How, or by what means, the Soul and Body were United or made *One Thing*? To which the proper Answer is, *They were never Two Things*.

14. We can have no One Notion of a *Transcendent*; for, since Transcendents are those that run through *all* or *many* of the Predicaments, and the Predicaments are so many Heads of Notions *Generically distinct*; it is impossible to have any *one* Notion of *Transcendents*; Again, there is no *more common Genus*, which can be divided into those Ten Heads, as its *Species*, by Intrinsic Differences; but those several *Summa Genera* are distinguish'd from one another by their own Common Notions. Whence the Words that signifie them, whether *Unum*, *Verum*, *Bonum*, *Idem*, *Diversum*, or what ever they be, are the most Equivocal of any that can be imagin'd, and have a vastly different signification as apply'd to the Notions in each of those Heads.
15. No **Part** of an *Ens* can belong to any Predicament: For a *Part* of an *Ens* is no more an *Ens*, than a part of an Apple is an Apple: Nor, can Parts have *Intrinsic Differences* in the Line of *Substance*; for such *Differences* would with the *Genus* make the Part to be a *Totum* in that Line.

Corol. I. Hence by the way, we may frame a Logical Demonstration against *Actual Parts* in a Compound. For, were they Actually Distinct, they must have each of them Matter and Form of its own; which being the proper Constituents of such an *Ens*, each of them would be such an *Ens* or a *Body*; and so they would have each of them, a Title to *Existence*, which is the proper Notion of a compleat *Ens*; and by consequence each *Part* would be a *Whole*.

16. The Notions of *Genus*, *Species*, and the Terms of Art, fram'd by the Reflexion of our Understanding, are not Things distinct from the Notions of *Ens*, *Corpus*, *Vivens*, &c. which Logicians call by those Names; nor are they in any of those Common Heads. For, First, (⁴⁶as will appear) these Notions are but *Parts* of the *Individuum*, which is the *whole Ens*. Next Terms of *Art* are made by Men of Art, who are *Reflecters*, and not *directly* imprinted by *Nature*, or Common to all Mankind: For which Reason we must learn the Meaning of those Words, and, consequently, those Notions themselves, from *Learned Men*, and not from the *Generality*.
17. Notwithstanding, it must be Granted, That *Nature* gives our Understanding *Hints* or *Ground* to frame such Artificial Conceptions; without which they would be Fictitious and Chimerical: For Example, by observing that all the Men we ever knew, do proceed to Action upon *some* Reason or *other*; hence, we frame a Common Notion of a *species* or Kind, call'd a *Rational Thing*; and, observing farther, that Beasts as well as Men have *Senses*, and are excited and *mov'd* by means of them; hence we frame a *Higher* Notion, common to both the Kinds of Man and Beast, and call it a *Genus*; and so still upwards. Nature all along affording us some *Ground* of framing Universal Notions, and the Understanding making and framing them *actually*. And, where these Notions were *bred*, there they *dwell* or *exist*; for, *out of* the Understanding, and in Nature, there is nothing but *Individuals*.
18. Note, that the Notions of *Genus*, *Species*, &c. as abstracted and rais'd to a Common pitch by Men of Art, or Logicians, reflecting on the Agreement of *more* under that one Notion, are (as such) *Wholes*; but, as consider'd in the *Ens* or *Individuum*, and as causing our Natural Notions of them, they are but *Parts*, and the Individuum is the *Whole*, in respect of them: For, since the *whole* is that which is *larger* than *some parts* are, or rather which comprehends *all* the Parts; it follows, that those Notions, thus abstractedly consider'd, being (according to the condition they have in our Understanding) *larger* than the Inferiour Notions, and comprehending *all* under them, are therefore certain kinds of Wholes, *as thus consider'd*. On the other side, since

⁴⁶ S. 18.

only *Individuums* are truly the Compleat and Whole *Entia*, as being only *Capable of Existing*; and the Notions of *Ens*, *Corpus*, *Vivens*, *Animal*, *Homo*, are but *Partial* and *Inadequate* Notions of the *Individuum*; it follows, that the *Individuum* does, in reality, comprehend what answers to the Notions of *each* or *all* of them: wherefore, *thus consider'd*, (that is, as they stand in Nature) they are but *Parts*, and the Individuum is the *Whole*.

Lesson V. *Of the Common Head called Quantity.*

1. **Quantity** may either be may either be consider'd *Mathematically*, as abstracted from Motion, and meerly *Extending* the Body, as it were, in *Rest*; or *Physically*, as affecting Body, its Subject, in order to *Motion*; that is, as to *natural Action* and *Passion*. This needs no Proof, since it is Evident that Quantity may be consider'd both these ways, and we experience that we can both these ways consider it.
2. The Essential Notion of Quantity is *Divisibility* into Parts; and, *such* a Divisibility as that each of its Parts, after Division, becomes a *Whole*. For, since the Essential Notion of it cannot consist in its having Matter and Form, which make it an *Ens*, and so fit it for Existence (as it was in a Divisible *Substance* or ⁴⁷ *Body*) the *Essence* of it (such as it is) must be taken from some Consideration belonging to its *own* single Abstracted Notion, and from that in the first place that best expresses its Metaphysical *Unity*. And, since nothing can be said to be *Divisible*, or capable to be made *more*, but it must be said *eo ipso* to be Actually and truly *One*; therefore *Divisibility*, or a Capacity to be made *more*, is the very Notion of its *Unity*, only connotating that 'tis *such* an Unity as makes its subject Capable to be made *more*, or dissolved by *Division* into Parts. Again,⁴⁸ as was said above, and will more evidently be shown hereafter, that is the true Notion of any Nature to which the Sayings of Mankind do agree: But *Divisibility* is thus shown to be the Notion of *Quantity*. For example, ask what a Mile is, it will be answer'd, That it has so many Furlongs, Paces, or Yards in it. Ask what a Yard is, it will be answer'd, It consists of so many Feet; and so of the rest. And when we come to so small a Quantity, that we can no more give an account of it, or assign the *parts* into which it is divisible, we find our selves at a plunge, and know not how to define it, but seem to have lost the Notion of it. Therefore, however Extension, Measurability, and such others, may truly belong to Quantity as its *Properties*, yet only *Divisibility* is its Primary and Essential Notion, because 'tis this only denotes its *Unity*. And, since it is not a Divisibility into such parts as could not remain *Wholes* after their separation, such as were *Matter* and *Form*, which are the Essential parts of *Substance*; hence the *Divisibility* which Quantity gives to its Subject must be *such* as makes it remain *so many Wholes* after the Division is made; as Experience also shews us.
3. Quantity is adequately divided into *Continu'd*, or Coherent; and *Discrete*, or *Number*. For, since 'tis impossible to ask any Question concerning the Quantity of Things, but either *how Many* they are, if *more* Things; or, *how great* it is, (that is *how much* there is of it) if it be but *One* thing; 'tis evident that Mankind has no Notion of any other kind of Quantity but of *Discrete* and *Continu'd*; and, therefore, the Division of Quantity into these two *Species* is *Adequate*. Note, that *Discrete* Quantity is *less* Quantity than *Continu'd*, because 'tis *less Divisible*; or rather 'tis not so properly Quantity as is the other, because it has no *Unity* to distinguish it from a mere Confused *Multitude* of Ones but by means of the Understanding, conceiving it to be so many Units terminated by the *last*; yet, because *Plurality* and *Paucity* are *More* and *Less* of any one Determinate Number, and that there is a Ground in Nature for our Understanding to

⁴⁷ L. 3. Sect. 5.

⁴⁸ L. 4. S. 4.

consider *many* Scatter'd *Ones* and comprehend or bind them together into one Notion, and that such Notions are useful or necessary to Mankind; therefore this Order'd Multitude of *discrete* or *shatter'd* *Ones*, call'd *Number*, is rightly placed in the Predicament of Quantity. For, 'tis to be noted, that when 'tis said Quantity is *Divisibilis in semper Divisibilia*,⁴⁹ it was not meant of Quantity in Common, or *all* Quantity, but only of that *Species* of Quantity call'd *Continued*.

4. The Unity proper to Extended Quantity is *Continuity* of its parts; For, if the parts of this sort of Quantity be *Discontin'd*, either *Nothing* (or *vacuum*) comes between them, and then they are still *Continu'd* against the Supposition; for Nothing can *do* nothing and therefore cannot *discontinue* the Parts of Quantity. Or else some *Body* comes between them and *Discontinues* them; and then, since all Bodies bring their *own* Quantities along with them, however the Bodies, A. and B. are distanced by C's coming between them, because every Body has its determinate bounds and Limits; yet, the *Quantity* of those three Bodies, precisely consider'd, has *none*, but goes on Smoothly in the self same tenour thro' the whole Mass of Body, whether those Bodies be *Different* or the *Same*; without Notches or Nicks butting and bounding it here and there, or in the least diversifying it; what ever Variety is found in the Figure, Colour, Hardness, Softness or in any other consideration belonging to those Bodies. Again, since this *Species* of Quantity has its peculiar Notion, Nature, or Essence, it must have some kind of *Unity* too peculiar to it self: But, none is imaginable except *Continuity*, nor does any so directly subsume under the notion of Quantity, which is *Divisibility* or *Unity* of its potential parts, or suite so exactly with it. Nay, were the parts of Quantity *discontin'd* quantitatively, they would be *divided* quantitatively, that is, not *Divisible* or *One*, that is *none*, or *Not-Quantity*, against the Supposition. Therefore the *Unity* proper to this *Species* of Quantity is *Continuity* of its parts.

Corol. I. Therefore the Quantity of the whole World is *One Uninterrupted Continuity*, and the *World* it self (speaking of Quantitative Unity) *One Great Continuum*.

5. *Quantity*, according to its precise Notion, cannot be *Essential* to Body, because it can neither be the *Genus* of it, nor the *Intrinsecal* Difference that constitutes it; as is prov'd⁵⁰ above.
6. Yet *Quantity*, *Materially* consider'd, and not according to its precise and formal notion of *Divisibility*, may (as it were) *per accidens* contribute to the Essence of *Individual* Bodies. For, since nothing is truly and perfectly *Ens*, or Capable of Existence, but *Individuals*; nor (since *Thing* in common cannot exist) can any thing be *Capable of Existing*, but by being ultimately *Determined*, and thence compleatly fitted to be *This* or *That*; and this Determination, distinguishing one *Individuum* from all others, is perform'd by means of such a particular Complexion of Accidents as fits them for their *Primary Operation* for which Nature ordain'd them; and this Complexion of Accidents is either of *Quantity*, or else (as is shewn in Physicks) of different modifications of *Quantity*; it follows, that *Quantity*, *materially* consider'd, and not according to its *Formal* notion of *Divisibility*, may (as it were) by Accident contribute to the Essence of *Individual* Bodies.
7. The *Intrinsecal* Differences of *Quantity* are *more* and *less* of the Notion of *Quantity*. This is prov'd⁵¹ formerly, when we treated of the Division of Substance; and the reason given there holds equally here.

⁴⁹ Latin: 'Divisible in always divisible things'; i.e., infinitely divisible.

⁵⁰ L. 3. S. 1, 2.

⁵¹ Less. 7. Sect. 1, 2.

8. The Proper *Species* of Quantity, *mathematically* consider'd, or as it abstracts from *Motion*, are *Longitude*, *Latitude*, and *Profundity*; otherwise call'd *Linea*, *Superficies*, and *Corpus*. For, it is evident that Latitude is *another* sort of Quantity, and has more of that Notion in it than Longitude has; and that Profundity is a *different* sort of Quantity, and has in it *more* of Quantity, thus consider'd, than either of the other, as containing in it self all the *three* Dimensions.
9. Therefore, the *Intrinsecal* Differences of each of these continued Quantities (consider'd Mathematically, as abstracted from all Order to Motion) are Divisibility into *greater* or into *lesser* determinate parts: For, since the Notion of Quantity is *Divisibility*, and Divisibility respects the *Parts* into which it may be divided; and this respect cannot be to Indeterminate parts into which it may be divided, they being (as *Euclid* has demonstrated) *Infinet*, as well in the greatest as the least Quantities, so that they cannot have *any* differences, *thus* considered; wherefore Divisibility into *Greater* and *Lesser* parts, being the *Intrinsecal* Differences of all *such* Quantities, in regard that the Greater have *more* of the Immediate Generical Notion, or of that kind of Quantity, in them; the smaller, *less* of it; and Divisibility into parts which are *Determinate*, may bear the Notion of *Greater* or *lesser* Divisibility, which Divisibility into *Potential* parts (as was said) *cannot*; it follows that Divisibility into *Greater* and *Lesser* Determinate parts are the *Intrinsecal* Differences of this kind of Quantity, *Mathematically* consider'd. Besides, *Greater* and *Lesser* bear in their Notions some *Proportion* between those parts; which cannot be conceiv'd unless those Parts be *Determinate*.
10. The Proper and *Intrinsecal* Differences of Continued Quantity consider'd *Physically*, or in Order to *Motion*; that is, Affecting it's subject as apt to be wrought upon by Natural Causes, are *more* or *less* Divisible or *capable to be wrought upon* and divided by those Causes. This is evident from the very same Reason, supposing *Intrinsecal* Differences to be onely *more* or *less* of the immediate common *Notion*, or of the *Genus* they are to divide.
11. The *More* and *Less* Divisibility of *Continu'd* Quantity *thus* consider'd, is to be *more easily* or *less easily* wrought upon or divided by Natural Agents. For, since Quantity, *thus* consider'd, does not respect the *Parts* it contains or may be divided into, but the *Causes* in Nature, and their *Operation* upon its Subject, *Body*; it follows, that the Notion of its being *more* or *less* Divisible, as thus consider'd, can only mean *more* or *less* susceptible of the Efficiency of Natural Causes; that is, *more easily* or *less easily* Divisible by the said Causes; which is to be *Rare* and *Dense*.
12. The Division of Continu'd Quantity into *Permanent* and *Successive*, is made by *Accidental* Differences, and not by *Essential* ones, as were the former Divisions of it: For, since to *move* and to *stand still* are *Accidental* to Quantity, and have no respect to that Generical Notion, as *more* and *less* of it, as had the other Differences above mentioned; it follows, that these Differences are *Accidental* to their Generical Notion, and not *Essential* or *Intrinsecal* to it. Again, *more* and *less*, which are *Intrinsecal* Differences, signifie some *Proportion* or *Comparison* of one to the other, which can have no place in *Permanent* and *Successive Quantities*; for, what sense bears it to say, that a *Yard* is as Long as an *Hour*? Wherefore, since it is a most certain Maxim, That *Comparisons are made of things which are of the same Genus or kind* (which by the way shews, that *Intrinsecal* Differences of any *Genus* or *Kind* are *Comparative Notions*, or *More* and *Less* of it) 'tis Evident that Continu'd *Quantity* is not a Proper *Genus* to them, as *such*; nor They Proper *Species* of it, or constituted such under it by *Intrinsecal* Differences; but each of them is the very *Genus* it self of Continu'd *Quantity*, consider'd under diverse States altogether disparate; and one of them, *viz.* *Successive*, connotating the Predicament of *Action*, the other seeming rather to hold on the side of meer *Quantity*; tho' that Common Head does, in rigour, Abstract from *both* those States.

13. The Division of *Permanent* Continu'd *Quantity* into *Extensive*, containing the three *Species*⁵² above mentioned; and *Intensive* or *Weight*, is yet more defective than the other: For, first, part of the *Genus* it self (*viz.* *Permanent*) is *Accidental* to *Quantity*. Next, (there being no Natural Propension one way or other Inherent in Bodies while *in Rest*, (as is shown in Physicks) *Weight* must be taken for an Actual tendency downwards; and so it belongs to the Predicament of *Action* or *Passion*, according as the Body that weighs is consider'd either as prest upon by the *superiour* body, or pressing that *below* it. Whence, whatever else we can conceive of the *Notion* of *Weight* in any Body is nothing else but its *Density*; for this makes it apt to receive the full Impression of the descending Ayr, and *better* and *more swiftly* cut the *medium*, when its Motion is once determin'd; whereas *Rare* Bodies suffer the descending Particles to slip thro' them, and do but dully and slowly divide the *Medium* thro' which they are to pass in their descent. But of this more in Physicks.
14. *Infinet* Discrete *Quantity*, that is *Infinet* *Number* cannot belong to the Predicament of *Quantity*; For then, it must either have the place there of a *Genus*, or of a *Species*; whereas it can be *neither*, because the Generical *Notion* would in that case be Common to *more* *Infinet* *Numbers* as its *Species*, which is a Contradiction: For, since each of these *Species*, being *Infinet* in such a line, or under such a *Notion*, must comprehend All that can be in *that* *Line*, they would *each* of them contain the *whole* *Line* of *Number*; and so each of them would be of as large a *Notion* as their *Genus*; nor would they, in that case, be *Different* from one another in that *Line*, because one of them can have nothing which the other has not; nor consequently can they be diverse *Species*, nor can *Infinet* *Quantity* be their *Genus*. Besides, two *Infinets*, under what *Notion* soever, *limit*, and so *destroy* one another: nor can it be solv'd by saying, that *Quantity* may be divided into *Finit* and *Infinet*, and that *Species* that is *Infinet* be but *one*, or have *no more* of its kind but its single self; for, since *Infinet* in any *Notion* includes All that can belong to that *Notion*, nothing of the *Genus* would be left for its fellow-*species* to partake of; which makes *Finite* *Number* to be *no Species*. Lastly, As the Differences of *Continu'd* *Quantity* were *Greater* or *Lesser* determinate parts, so the Differences of *Number* must be *More* or *Fewer* determinate parts; which can bear no Sense if one of the *species* have *All*, or be *Endless* or *Indeterminate*.
15. Hence 'tis Logically demonstrated that *Infinet* *Number* is *Impossible* and *Contradictory*; since it contradicts the *Methods* and *Maxims* of all our *Natural* *Notions*. For, were it put, it ought to belong to the *Common* *Head* of *Quantity*, which we see is in many regards *Implicatory*. Add, That as no *Ens* is capable of *Existence* unless it be first *Ultimately* determin'd to be *This* or *That*; so no *Affection* of *Ens*, v. g. *Number*, can possibly *exist* in *Things*, unless it be determin'd in its own *Line* to be *This* or *That* *Number*; which is here forbidden it by the very *Notion* of *Infinet*, which signifies *Indeterminate*.
16. Therefore *Continu'd* *Quantity*, for the same reason, cannot be *Infinet*; that is, there cannot be an *Infinet* *Extent* or *Expansion* of *Body*; for, then the *Subject* would verifie it, that there must be in it an *Infinet* *Number* of *Yards*, which is now prov'd *Impossible*.
17. For the same reason there cannot have been *Infinet* *Time*; for then, again, there must have been an *Infinet* *Number*, *viz.* of *Hours*. Again, let us put *Time* to have been *Infinet*, that is, never to have begun; then there must have succeeded an *Infinet* *Number* of *Hours*; wherefore in that whole *Collection* of *Hours* there must either have been *some one* hour distant from *this* present hour by *Infinet* *Intermediate* ones, or *no one* Hour thus distant. If *no one*, then the whole *Collection* of *Hours* (consisting of *One*s) is *Finite*: If *some one* Hour be distant from *this present one* by *Infinet* *Intermediate* ones, then we are forc'd to put an *Infinet* which has *two*

⁵² Sect. 8.

Ends, viz. *that* Hour said to be Infinitely *long ago*, and *this* present Hour that *now* passes; that is, we must put an *Infinite* to be *Finite*.

Corol. I. Hence is demonstrated, that the Course of Nature, consisting in *Motion*, had a *Beginning* or *First Motion*; therefore a *First-Mover*, therefore some *Spiritual Nature*; as ⁵³ will be demonstrated hereafter.

LESSON VI. *Of the Common Head of Quality.*

1. THE Notion of Substance being *What* a Thing is; and that of *Quantity*, *how Great* it is, or how much there is of it; the Common Notion of *Quality*, (as was said above, and indeed as the very word imports) is *how* a thing is in respect to its *own* peculiar nature; that is, whether it *be so as it should be or no*. This will be farther Evident from the whole following Discourse.
2. Wherefore there must be so many Common Kinds or *Species* of *Quality* as there may be Common Considerations of *How* a thing *is* in regard to its own peculiar nature.
3. Wherefore, seeing the Subject may be *thus* Consider'd, either according to its *Intrinsecals*, or according to *Extrinsecals*, to which it may be refer'd: And, if to *Intrinsecals*, then, either according to some Perfection or Imperfection of its *Intrinsecal Temperature* or Constitution, which we call *Habit*, if Permanent; or *Disposition*, if Transitory; or to its outward Shape conceiv'd to inhere in it, call'd *Figure*. If it be consider'd according to *Extrinsecals*, then, either according to the Causes from which it may *suffer* or be *variable*, which we call *Passible Quality*, if steady; or *Passion*, if sudden and fleeting; or to the *Effects* or *Operations* it may or may not produce; which we name its *Power* or *Impotency*: Hence *Quality* in common is divided into Four Kinds and no more; nor can more sorts of Answers to the Question, *How a Thing is*, be invented or imagin'd.

Examples of the Questions proper to *Quality* are such as these: How do you? To which is Answer'd, *Sick* or in *Health*, well or ill dispos'd. How is he as to his Understanding? *Learned* or *Ignorant*; which Answers we call *Habits* or *Dispositions*. How is he as to his Walking, or using his Natural Faculties? To which we answer, *well able* to walk, or *Lame*, &c. which signifie his *Power* or *Impotency*. How is the Milk that's over the Fire, or the Bread in the Oven? To which is answer'd, *Hot* or *Cold*; *Dough-bak'd* or *Enough*: which are *Passible Qualities*. How is *he* affected to me? To which is answer'd, *Angry*, which is *Passion*. Lastly, it may be ask'd, How he is as to his *outward shape*? To which is answer'd, *well* or *ill shap'd*, *Handsome* or *Ugly*, which *Quality* is call'd *Figure*.

4. The *Intrinsecal* Differences of *more* or *less* in this Common Head of *Quality*, are more properly to be call'd *Better* and *Worse* qualified, since they fall into the same as *more* and *less*; only the *latter* Expressions sute better, having a *qualifying* sense.
5. Wherefore *Power* and *Impotency* are the *First Species* of *Quality*, because they spring immediately out of the *Essence* as it's *Properties*, and most meerly concern it as to making it *Better* or *Worse*; as also, because they most *dispose* or *indispose* the Subject to the substance (as it were) of it's Natural Operations. *Habit* and *Disposition* are the *Second*; because they Supervene to the *Power*, and only give it a *better* or *worse* Facility or Difficulty to Operate. *Passible Quality* and *Passion*, taken as such, are the *Third*; because, taken as such, they meerly qualify the Subject to be *Passive* or *Alterable* by another. I say, *taken as such*, that is, as *Passible*; for, if they be consider'd as *Active*, as Heat in Fire is conceiv'd to be apt to *effect* Heat in another thing, then 'tis a calefactive *Virtue*, and has the Notion of *Power*. Lastly, *Figure* has the least share of

⁵³ B. 3. L. 6. S. 4.

the Notion of Quality, because it onely regards the *Outward* Lineaments and Appearance, which are the sleightest of all other Qualities. Though it may sometimes, (especially in Organical Bodies and their several parts,) contribute to their *Power* or *Impotency*; as an *Acute Figure* in Dense Bodies makes them better divide the Ayre, and other Bodies, adding thus an *Accidental* perfection to their *Power* of *Dividing*; and *Splay-footedness* hinders the *Power* of *Walking*, whereas *Straightness* helps it. *Accidental*, I say, for the, Essential Notion of *Figure* is onely to *terminate* thus, or thus the Quantity of Bodies, as will be shewn hereafter.

6. Wherefore, the Intrinsic Differences of *Quality* being to make the Subject of them *better* or *worse*, hence most Qualities may admit of several *Degrees* in each of it's Species, or, as the Schools phrase it, may be *Intended* or *Remitted*; whereas neither *Substance* nor *Quantity* can. Not *Substance*; because, as we no sooner step out of the *Notion* of *Ens* in common but we plunge into *Non-Ens*, so we cannot depart from the Essential *Notion* of *Hoc Ens*,⁵⁴ but we must fall into *Non-hoc-Ens* or Another *Ens*. Not *Quantity*; for, let us design any particular or determinate *Species* of Quantity (a *Yard* for example) and but in the least Increase or Diminish it quantitatively, and immediately it becomes *no yard* but of an other *Species* really, tho' perhaps so little may be added or detracted that we may want a Name for it.
7. *Power* differs from *Habit* also in this that Powers are *Natural*, and spring out of the Essences of things as their *Properties*; as the Power of Walking, Seeing, Hearing, Fancying, Understanding, Willing, Heating, Dividing, &c. Whereas *Habits* are generally, Acquir'd by frequent Acts. In things Inanimate, and Vegetables, and in some sort of Animals they are properly call'd *Virtues*; thus we say such a Mineral or Herb has the *Virtue* of Drying, Cooling, Healing, Cauterizing, Poisoning. In Animals, they are call'd *Natural Faculties*; as those of Seeing Walking, Flying, &c. Where the word *Faculty* is not taken in the same Sense in which we use it, when we tell one he *has got a Faculty* of doing this or that, meaning thereby a *Facility* or *Habit* of doing it, but for the *Power it self* which is to be facilitated by that *Habit*. The *Privations* or want of those Powers due to Nature we call *Impotences*; as Deafness, Blindness, Doltishness, &c. Which signify Inabilities to perform such Operations as we ought, were the Subjects Qualify'd as they should be.
8. *Habits* are generally Acquir'd by *Acts*: yet some may seem to be had by *Nature*: as Healthfulness and Sickliness. Of the former we use to say such a one *has got a Habit* of Dancing, Drinking, Brawling, Swearing, Praying, &c. Of which sort are all kind of *Skill's* in moving the Body, and all *Arts* and *Sciences* qualifying the *Mind*, and their Opposites: All which we shall find to be Perfections or Imperfections, belonging either to the particular Nature of the *Body*, as Dancing, Pronouncing, &c. or else suitable or disagreeable to the peculiar Temper of the *Mind*, which is *Reason*; such as are Sciences, Virtues, Vices, Ignorance, &c. But those that are *Innate*, and have withal some constant Ground of *Stability* by the steady or fixt course of Causes, are rather call'd *States* or *Conditions* than *Habits*; such as are Original Justice, Original Sin, Impeccableness in the Saints in Heaven, Obdurateness in Sin in the Divels; and, Healthfulness or Sickliness, if it comes out of a Man's *Natural* Constitution. All which, tho' less properly *Habits* than those that are *Acquir'd*, yet *Habit* having in it's *Notion* a kind of Constancy, we do therefore from their *Steady* manner of working, denominate *Habitual* Propensions, Dispositions, Affections, or Determinations of the Subjects, and *reduce* them to the *Species* of *Habit*.
9. Those Natural Affections of *Body*, consider'd as apt to render the Subject, not to be determinately *This* or *That* in the Line of *Ens*; nor *Bigger* or *Lesser*, but only *Alterable* thus or thus, without changing the Entity, are for the most part *Passible Qualities*. This is manifest;

⁵⁴ Latin: 'this being' or 'this thing'.

For considering them thus, there is *no* Predicament but that of *Quality*, nor any *Species* of Quality but *This*, under which they can be rank't. Under the *Genus* of *Passible Quality* are particularly The Four First Qualities, *Heat, Coldness, Moisture, Dryness*; and the Second, (and perhaps Third) Qualities compounded of these, with a variety almost Infinit, of which more in Physicks.

10. All *Passible Qualities* are Objects of the Senses, Otherwise they would not be Natural Notions, nor belong to any Common Head; and, consequently, we could not *discourse* or *think* of them, which yet we experience we do.
11. Yet 'tis not the Consideration of them as the Objects of our Senses which *Constitutes* them, nor Essentially *Distinguishes* them. This is evident, for their Essence, as Qualities, must be taken from their manner of affecting their own Subject, and thence giving us ground of denominating it diversly, or framing distinct Notions of it. Besides, to be an *Object* of any *Power*, can, as such, be Essential to Nothing; because it is perfectly *Extrinsecal* to the *Thing* or it's *Power* to which 'tis an Object; as will be farther seen when we come to treat of the Predicament of ⁵⁵ *Relation*. Wherefore, the Division of this *Species* of of Quality into Visible, Audible, Tangible, &c. is *Accidental* to Quality and far from *Intrinsecal* or Essential.
12. Notwithstanding what is said above, some Qualities may *contribute* to the Essence of a Thing, and so be in part *Essential*. For, since (as is shewn in *Metaphysicks*) the Complexion of Accidents, and of some Qualities, among the rest, do *determine* a Thing to be *This* and Distinct from all *others*, and withal *fit* it for its *Primary Operation*; and consequently do help to constitute the Essence of an Individual Body as part of it's *Form*; *Passible Qualities*, in particular, may contribute to the Essence of a Thing; or be *in part*, and, as joyn'd with Quantity, Essential to it. Yet so, that each of these consider'd *Alone* is an *Accident*: but *all* of them taken together and as clubbing to *determin* the matter *ultimately* to be *This*, they are to be consider'd not as *meerly* Quantitative, nor as Qualificative, but as belonging to the *Substantial Form*.
13. No other *Species* of Quality but *Passible Qualities* has this Prerogative, Not *Power*. For Powers are *Properties*; and, so, are conceiv'd to *follow* the Essence constituted, and *presuppose* it; much less *Habits*, for they supervene to the Natural Powers. And least of all *Figure*, for this is *Extrinsecal* to the Constitution of the Body; however in Organical Bodies they may help to determine the *Species* or *Individuum*.
14. *Figure* is nothing but the Termination of the Quantity of a Body, or (which is the same) *Body thus Terminated*. For, since *Figure* is nothing but *such* a *Superficies*, and the *Superficies* is the Termination of *Profundity* which is the proper Quantity of *Body*; it follows that *Figure* is nothing else but the Termination of the Quantity of Body. Again, if we look narrowly into particular Figures, we shall find them nothing but that the Quantity goes no further, or ends, *here* and *there*. Whence the Figure of it must necessarily be *thus* and *thus*. And this is all can be made of it as it is distinguisht from the *Body* it self or its *Quantity*; however we are prone to conceit it, as 'tis distinct from *Body*, to be a kind of *Ens*.
15. *Figure* alone is Incapable of *more* or *Less* in the same *Species*. For, since *Figure* is the Termination of the Quantity of Body, and Quantity being Divisibility, the Termination or *No-fartherness* of Quantity must be *no Quantity*, and therefore *Indivisible*, and there can be no *Degrees* in Indivisibles; it follows that *Figure* is not capable of *more* and *less* within the same *Species*, but every Alteration of the *Figure* is a *New Species* of it.
16. Hence the Termination of the *Self-same* Quantity (tho' being oft-times Imperceptible, it happens to be Nameless,) after *Several Manners* make so many *particular Figures*. For example,

⁵⁵ L. 7. S. 10, 11.

the self same Quantity, (*viz.* a Pint of Water,) may be put into a Round viol and a Square or Oval one; which being terminated after a particular manner, do make so many particular kinds of Figures.

Corol. I. Hence is seen that there is a *Real Divisibility* (that is such a Notional one as is *grounded* in Nature) between *Quantity* and *Figure*; since the subject may be chang'd according to *Figure* and *not* according to *Quantity*, of which we can have no better nor more familiar Instance than a Pastry-Cook's forming the same quantity of Dow into a Pye, and a Lid for it, or into Pyes of several Figures.

17. The Termination of the Quantity of Body, being the Outside, that Circumscribes and *Comprehends* all the Body enclos'd in it, which is the *Containing* it; the *Species* of Figure, simply speaking, must be More or less a Capacity to *contain* Body; that is, to Contain *more* or *less* of it. Hence a Round Figure is the *best*, a Quadrate *Worse*, and a Parallelogram *still worse* than the former: I say, simply speaking; or regarding Body *in common*; for otherwise, if the nature of some sorts of Bodies (Organical Ones for Example) requires such a determinate Figure, then that Figure is *Better* or *Worse*, which approaches *more* or *less* to such a Figure as best suites with that Nature, fits it best for its Operations, and makes the Symmetry with its other parts most perfect. Things endow'd with this Quality we use to call *Well shaped* or *Handsome*; which, with fit *Colours* rightly placed in the respective Parts, make up that amiable Quality we call *Beauty*.
18. All Corporeal Qualities are in reality the very Particles or Parts of *Body*. This has been prov'd⁵⁶ above, where it was shewn, that Accidents are not *Entities*, nor can exist of themselves, but meerly by their Identity with their *subject*.
19. Wherefore Corporeal *Powers* are nothing but several Mixt Parts, so contriv'd and Organiz'd, as enable the Compounds to perform such and such Operations. Corporeal *Habits* are nothing but the same Parts by *Use* and Bending to and fro made plyable, and, so, apt to perform them *more easily*. The *Passible Qualities* are the same Parts as rendring the Subject either perfectly or imperfectly *Divisible* or Capable to be Alter'd by Natural Causes. *Figure* can the least be thought to have any Being of its own, since it is onely the Termination of Quantity which is it self but a Determination of Body.

Corol. I. Hence is evident that all the Qualities that affect our *Senses* are nothing but the minute and subtil particles or *Effluvioms* of Bodies; sent out from them, and lighting on those most tender and sensible Receivers, and affecting them agreeably or disagreebly to the nature of the Subjects. And the same may be said of the Ideas lodg'd in the Fancy or Imaginative Power it self. Nor will this be hard to conceive if we reflect attentively, how Quantitative particles may be still *less* and *less*, almost Infinitely.

Corol. II. Nor will it hence follow, that *Cartesians* and *Aristotelians* agree in the main about the Explication of Nature, in regard they do both of them hold, that there is nothing but the Matter or Substance thus or thus Modify'd. For, the *Aristotelians* give an account of there *Minima Naturalia*; they make them *Mixt* Bodies; they reduce them to their First or Original Mixture; and shew the *Intrinsecal* Temperature or *Constitution* of their *Subject*, or the *Inform'd Matter* of which they consist, from the Conjunction of the highest and most known Notions in nature, *viz.* of that *matter* and *Quantity* diversly proportion'd; whence arise the Natures of *Rarity* and *Density* in the First *species* of Bodies. None of which the *Cartesians* do; nor can they

⁵⁶ L. 4. S. 1.

by their Principles reach the Explication of their *First Matter*, or render any tolerable account of it; whether it is *Dense* or *Rare*, *Hard* or *Soft*, &c. as will be more amply demonstrated in the *Appendix*.

20. Nothing more obstructs the way to Natural Science than the doctrin of Vulgar Philosophers, That *Qualities* are certain Kinds of *little Entities*, which of themselves have a diminutive sort of Being, and are able to produce such and such Effects. For example, Ask them how a Bell works that effect upon my Ear which we call *Sound*; they'll tell you there is a Quality in the Bell call'd *Sonoreity*, whose nature it is to make a Sound. Ask how a Green thing makes such a pleasing Impression on my Eye; they'll answer, There is a certain Quality in it call'd *Greenness*, whose nature 'tis to work such an Effect; and so of the rest. Which ridiculous Method *explicates nothing*, but makes the Silliest old wife as good a Philosopher as the most Learned Naturalist, if she can but name the *Word* that Signifies that *Quality*. Next, it makes Learners rest easily *contented*, and well appay'd with a meer *Word*; whence they will grow Negligent and Careless to take pains to look into the Natures of the Things; or else (if they have any wit in them,) to *despair* of all knowledge of Nature, by seeing their Masters so profoundly Ignorant, and so Superficially Learned. And lastly, it hinders Learners from *Seeing*, or even endeavouring to see, the Natural *Proportion* and *Alliance* between *Proper Causes* and their *Effects*; and inclines them to take purely *upon trust* the whole Administration of Nature, and all Consequence of one thing from another, which renders all natural Science *precarious*. For, 'tis not *Science*, unless we use our *own Eyes*, and *see* the point Demonstrated. *Jurare in verba*⁵⁷—is (in such cases) the *Fool's Oath*; and is, in plain terms, to swear the Devoting or giving up our Reason to a Slothful Contentedness never to grow *Wiser*.

LESSON VII. *Of the Common Head of Relation.*

1. THE Notion of *Relation* being *what* one Individual Thing *is*, if *compar'd to another*, there must be some *Real Ground* of it in the thing Referr'd, which is the *Reason* of our Referring it, and by which formally we do thus Refer it: For otherwise Relation would be a Chimerical and Fictitious Notion; and not a *Real* or *Natural* one, common to all Mankind, and held by them to be *such*; which yet we experience, by our daily Converse with them, *it is*.
2. This Ground cannot be their having *Disparate* or *Disagreeing Notions* in them, or their being of Disparate Orders, which have nothing to do with one another: For, we find that we cannot Refer or compare *Green* and *Hard*, *Youthful* and *Transparent*, *Hot* and *Triangular*, nor any other *disparate Notions*; nor yet a *Writer* and a *Ploughshare*, a *Father* and a *Mill-stone*, a *Brother* and a *Handsam*, &c. because they are in *Disparate Orders*, and have no Respect to one another, *grounding* our Referring them or Comparing them together, as have a *Writer* and a *Writing*, a *Father* and a *Son*, a *Baker* and *Bread*, &c.
3. Wherefore the *Ground* of Relation must either be some Notion agreeing to *both* the things related, that is, found to belong to *both*, either Intrinsically or Extrinsecally, or else their having Communication with one another by way of natural *Action* and *Passion*. This is prov'd by the former Section, and is evident, because there can be no other Considerations by which they can be order'd to one another, or be of the same Order, but their having some

⁵⁷ Latin: 'to swear in words' [of allegiance], for example to a master. The motto of the Royal Society of London 'nullius in verba' is to refuse to be beholden to someone or take someone's word for a matter. It is a modified form of a phrase that appears in Horace's *Epistle*, Book 1, Epistle 1, lines 14-15.

Intrinsecal Notion common to both, or else their Acting and Suffering upon and from one another, which is an Extrinsecal Consideration.

4. Relations of the *first* sort, which have one and the *same* Notion in them, are of as many kinds as there are Heads of Notions, since all these have a kind of Nature or Notion in them, and so some kind of *Transcendent* Unity. Thus, if they have the same Nature or Essence in them which belongs to the Common Head of *Substance*, the Relation between them is call'd *Identity*, which is their being of *one* and the *same* kind of *Entity*. If of one and the same Notion of *Quantity*, 'tis call'd *Equality*, which is their being of one and the same *Quantity*: If of *Quality*, 'tis call'd *Likeness*: if of *Action*, (singly consider'd) they are call'd *Co-actors*, as Fellow-Souldiers, Fellow-Servants, &c. If of *Passion* (singly consider'd) Fellow-Sufferers, Fellow-Martyrs, &c. If of *Place*, (or *Ubi*) Bed-fellows, Chamber-fellows, Townsmen, Country-men, &c. If of *Time*, Contemporaries, Co-eve, or born at the same time. If of *Habit*, Fellow-Mourners, Fellow-Curassiers, Fellow-Souldiers of the Blew or Grey Regiment. If of *Situation*, Fellow-Assessors or Sitters; tho' such as this seldom occur. Nay there may be a Relation grounded on having the same notion even of *Relation* in them; as Parents or Fellow-begetters.
5. Of the second sort grounded on *Action* and *Passion*, *not singly* consider'd, but with an Order to one another, or *as Inferring one another*, are such as these, *viz.* Father and Son, Master and Servant, Prince and Subject, Tutor and Pupil; which are grounded on the *Actions* and *Passions* of Begetting and being Begotten, Commanding and being Commanded, Governing and being Governed, Teaching and being Taught, &c.
6. In both these sorts of Relations the things Referr'd must have their *Correlates*; that is, there must be a mutual Relation on both sides. In the former of them, because there is the *selfsame* Ground or Reason of Referring in *one* as in the *other*, *viz.* that one *same Notion*, Common or Belonging to *Both*, to wit, the same Essence, same Quantity, same Quality, same Relation, same Place, same Time, same sort of Action and Passion, same Situation, and the same Habit.
7. This Agreeing and Corresponding of the two things thus Related in those of the *former* kind of Relation, must be meant to be their Agreeing in the same *Abstracted* and *Common* or Specificical Notion, and not in the same *Individual* one. For, otherwise two Men could not have *Identity* in their *Individual* Essence, since then they would be the *same* and *not the same*, that is, *Unum* and *Non-unum*: And, for the same reason, *Intrinsecal Accidents* being Identify'd with the Subjects in which they inhere, and having no Entity but *theirs*, they can have no Individuality but *by them*, and so the same *Individual* Intrinsecal Accident cannot be Common to *two* Subjects or Substances, but must be Individually *Two*, as *They* are. Whence the Relations grounded on them must be upon their being the same in *Species* or Kind, and not *Individually*. Which reason holds equally for those Relations that are grounded on *Action*, *Passion*, and *Situation*, and the rest: For, two things cannot be in one Individual *place* (that is, in a place capable to hold but one Individual thing) without Penetration of Bodies: Nor is it possible, in the course of Natural Causes, that *two* should be *born* or *dye* at the same precise *Time*, that is, in such a portion of *Time* as is terminated by the same Instants: Nor can Two wear the same Individual Arms, &c. at once. Wherefore it must be meant, that the Notion common to both must be an abstracted or *specificical* Notion, and not the *Individual*.
8. The Relations of the later sort became Mutual upon another score, *viz.* because *Action* and its proper *Passion* corresponding to it, do *infer one another*; For, nothing can *Act*, but it must Act upon *something* that receives that Action, or *suffers* by it; nor *suffer* or be Acted upon, but by something that *Acts* on it.
9. There is a Third Mix'd sort of Relation, call'd, *Of the thing Measured to the Measure*; that is, when the Thing Related *depends* for its *Essence* or its *Perfection*, on *Another*, and that other does not at

all depend for either on *it*. For Example, When a Picture is drawn from the Prototype, it depends on the Prototype for its Perfection, and is, as it were, *Measur'd* by it, in regard 'tis only so far *Good* or *Bad* as it resembles the Man it was drawn for; but the *Prototype* or the *Man*, gets Nothing, nor is in the least Better or Worse, by having a Picture drawn from him. Again, there is a common Notion of Lineaments and Colour found in *both*, which makes it seem to partake of the first sort of Relation; also the Prototype, by imprinting an Idea of it self in the Painter, enables him in some sort to draw him, and so contributes something to that Action which gives it to partake of the Second Kind: so that this Kind of Relation seems to be *Mixt* of the *other two*, and yet (as will be shown) is perfectly of *Neither*.

10. This kind of Relation is not *Mutual*, but is found only on the side of the thing *measured*: For, since the *Measure* (*v. g.* the Prototype) has no natural Order of Agency or Patiency by which it respects the Picture, because the Man is not a Thing naturally ordain'd to work upon the Fancy of the Painter so to render him, a perfect Efficient cause of the Picture, as Fire is Ordain'd to Heat, a Master to Command, &c. Nor is there a true *Unity of Form*, to wit, of Colour and Figure, in *both*, but only some Counterfeit Resemblance of them; whence we cannot, without speaking nonsense, say, *The Man is like his Picture*, as we can that the Picture is *like the Man*, or that two white Walls are *like one another*, nor (as was said) does the *Man* receive any degree of Perfection or Imperfection by being *pictur'd*; it follows, that there is *no* Ground or Reason on the *Man's* side to make him Related to his Picture; wherefore he has no *Real* Relation to it at all, but only a *Verbal* one, consisting in the Grammatical chiming of the word *pictured* to *picture*.
11. Of this sort are the Relations between all our *Powers*, whether Corporeal or Intellectual, to their *Objects*; for the very Essence and Nature of those Powers is to *see, hear, or understand* the Objects: and the Perfections of the Powers in their several kinds, are *Measured* and rated by their doing this *Better* or *Worse*; whereas the *Objects* are never the *Better* by being *seen, heard, or known*. Wherefore there wants on those Objects side a *Real Ground*, and therefore a *Real Relation* to our *Powers*; however, the words *Seer* and *Seen, Knower* and *Known*, do answer one another, as if they were *proper* Agents and Patients, and Order'd mutually to each other.
12. Of this sort too is the Relation between GOD, as *Creator*, and his *Creatures*. For, seeing the Creature has received all it has, or can have, from its Creator; that is, has to be an *Ens*, and not a meer Nothing from the Essential *Ideas* it had from all Eternity in the Divine Understanding; and was put afterwards into Actual Being or *Existence*, and is conserv'd in the same by his continual Influence; and has, besides all its Accidental Perfections and Conveniences, by the course of Causes, laid by his Divine Providence (all which is demonstrated in Metaphysicks): Hence there is all the Ground imaginable of a *Real Relation* on the Creature's part towards GOD. On the other side, since GOD gains *no* kind of perfection by making Creatures, nor is intrinsically better in the least by his Creating them, there can be *no Ground* at all of a *Real Relation* on GOD's side to the Creature, but only a *Verbal* Sound of [*Creator*] answering Grammatically to *Creature*, as *Creature* does to *Creator*. So important a thing it is in Philosophy not to be deluded by Articulate Ayr, or meer Characters, but to look deeply and attentively into the *Thing* it self, and to guide our Thoughts by what we find *there*, lest we come to frame Mock-notions out of our Fancy which Nature never gave us.

Corol. I. Hence follows, that all the Expressions of the Holy Scripture of a *Pact* or *Covenant* between *God* and Creatures, That, upon their behaving themselves thus and thus, he enters an *Obligation* of doing thus or thus towards them; the which do, consequently, put *God* and the Creature upon the *same* rank of *Agency* and *Patiency*: It follows, I say, that such

Expressions are purely *Metaphorical*, and far from *Proper* or *Literally True*; but are spoken *humano more*,⁵⁸ or in accommodation to our Human Actions and Manners of Proceeding. For, on *God's* side there is nothing but his Infinit Wisdom and Goodness, carrying on Supernatural Good Dispositions to conformable Effects, as he does Natural Dispositions to Effects suitable to the Nature of such things. Which Rectitude of his Will being *Essential* to him, and consequently Independent on Creatures or their Actions, had produc'd the *same* Effects whether he had made any such Covenant or no. And the same may be said proportionably of *God's* Promising, Threatening, Commanding, Requiring Satisfaction, Accepting the Payment of it, and such-like; which tho' *Metaphorical*, are notwithstanding *True*, amount to the same, and induce the same Effects, tho' in a more sovereign way, and more becoming *God's* Infinit Majesty, than the Gross Capacity of the Generality of Mankind (for whose sake those low Conceptions and Expressions were us'd) can apprehend.

13. There is yet another sort of Mutual Relations, which are partly *Artificial*, partly *Natural*; such as are those of *Genus* and *Species*, *Antecedent* and *Consequent*, *Subject* and *Predicate*, *Premises* and *Conclusion*, &c. These are partly *Natural*, in regard our *Understanding* has its distinct Nature or Notion, as well as *Whiteness*, *Action* or any other Ground of Relation hitherto spoken of; and these are grounded on the *Manner of the Objects existing in our Understanding*; where they are as truly *Universal* and *Particular*, *Subject* and *Predicate*, &c. as the Wall is *White*, or the Quantity a *Yard*, &c. And they are also partly *Artificial*, because Artists in Logick, who *reflect* on the things as they are in our Minds, do make use of such to *clear* their Notions, *predicate* them of one another, and discourse of them exactly.
14. Wherefore those Logicians who call them *Relationes Rationis*,⁵⁹ meaning to oppose them by that Expression to *Real* Relations, seem to forget that the ⁶⁰ *Understanding* and its manner of working are *Real*; whereas they have more of *Entity*, and consequently of *Reality*, in them than *Bodies*, and their Powers or Manners of Working have; and, consequently, those Relations are far more *Real* than those which are grounded on *Corporeal* Powers and their Operations.
15. The *Substance* (as it were) of *Relation* consists in that *Immediate Ground* which is the Reason of our referring one thing to another. For, 'tis Evident, that 'tis the *Thing it self* in my Mind which is Referr'd, and not the *Act* of the *Mind* Referring it. For example; Two *White* things have *Unity* of Form, or the *same* Notion in them, which makes them Really Alike *of themselves*, were they in a Comparing Power, that could actually Referr them and denominate them Relatively as their Nature requires; so that it is not the *Act* of my Understanding which made the white Walls really *Alike*, but their *own Natures* which are the Object of my Act; by means notwithstanding of the Comparative Act of my Understanding, which they inform'd, as a *necessary Condition* to relate them *actually*, and without which they had each of them had but the *Absolute* Notion of *White*, and not the *Relative* one of being *Alike*.

Corol. II. Hence we have some light given us how there may be True and *Real* Relations in *God*, Knowing and Loving himself; and, how they *depend* and *not depend* on our Understanding.

16. The Intrinsic Differences of Relation being *more* and *less*, and our Act adding *nothing* to the *Substance* of the Relation, they must be taken from the Greater or Lesser *Ground* or *Reason* why the thing is referr'd to another. Hence our greatest Relation is to *God*, because all the

⁵⁸ Latin: 'from human custom'.

⁵⁹ Latin: 'relations of reason'.

⁶⁰ L. 3. S. 6.

good we have or can have does entirely Referr us to him. Upon which therefore is founded all our Religious Respects, and our Duties of Serving, Obeying and Adoring him. Next follows the Relation of a *Husband* to a *Wife*, who is (in some manner) the same Individual with himself. After them comes our Relation to our *Parents*, who concurr'd to our Being, gave us Education, and provided for our Subsistence. Then to *Mankind*, to whom we are Related by Identity of Nature; to our *Country*, our *King*, and other *Superiours*, according to their several Ranks; to our *Kinsfolks*, *Neighbours*, &c. from which Relations arise several Duties in proportion to the *more* or *less* important Reason or Ground that makes them more or less *nearer* or *remotely* Related to us.

LESSON VIII. *Of the Common Heads of Action and Passion.*

1. THERE are Two, and but Two, Common Heads of Extrinsecals conceiv'd to be apply'd to one another by way of *Motion*. For, since Motion has *two* Terms, *viz.* that thing from whence it *comes*, and that to which it *reaches*, and these are *distinct* Considerations; hence we have Two Common Heads of one Extrinsecal thing conceiv'd to be apply'd to another by way of Motion. Nor can there be *more*; for Motion, consider'd (as it were) in the Midway between those Terms, has no Notion but that of *meer* Motion; whence it is the very Notion of *Successive Quantity*, and belongs clearly to *that* Common Head, and therefore cannot belong to *another*, or constitute a *new* one.
2. The Notion of *Motion* is the most Imperfect of all our Notions, and most approaching to Non-Entity. For, since *Motion*, as it superadds to the Extensive Quantity of its Subject, is wholly made up of *not being* in this place, or that; or, of *not being still here* and *not being yet there*; nor has any thing of *Permanency*, which is in a manner the same Notion with *Actual Being*; it follows, that, besides the Common disadvantage other Accidents are liable to, of having no Entity of their *own* but what's *borrow'd* of their Subjects, it has moreover this, that neither it self, nor any *part* of it self, *exists* so much as for one Moment. Wherefore *Ens* being a Capacity of Existence, Motion seems to be (in a manner) incapable of Existence, or a *Non-Entity*; and this out of its own *peculiar Nature* or *Notion*. Again, since in every part of Motion the thing moved is in a space *bigger* than it self, and *Place* (as will be shewn ⁶¹ hereafter) properly such, is but *Equal* to the thing it contains, and not *bigger* than it, hence Motion hinders its Subject to be, properly speaking, *in any place*, that is *any where*, which amongst Bodies seems next akin to *not being at all*. Lastly, Motion is destructive of Actual Being in those things that are arriv'd to their full state of perfection; which shews its nature to be in some sense directly opposit to the Notion of *Being*, which has some kind of *Constancy* and *Stability* in it. Nor can it be said that it gives Actual Being or *Existence* to the *new* Entities it helps to produce, for Existence⁶² is the proper Effect of *Self-Existence* or the *First Cause*. Wherefore the Notion of *Motion* is the *most* Imperfect of all our Notions, and *most* approaching to *Non-Entity*.

Corol. I. Hence is demonstrated that, since every Agent produces an Effect suitable to its *own Nature*, and therefore an Agent *infinitely perfect* cannot be the *Immediate Cause* of what's *most Imperfect*; therefore Motion, being both *most imperfect*, and withal most *disagreeable*, nay, directly

⁶¹ Less. 3. Sect. 9.

⁶² Book 3. L. 7. S.5. Prop 6,7.

contrary, to God's Nature, which is pure Self-Existence and *Essentially Immovable* and *Unchangable*, was not *immediately* caus'd by God, but by ⁶³ some *imperfect* Agent, or some Creature, that is, by such a Cause as *of it self* is a *Non-Entity*.

3. The Notion of *Action*, as it superadds to meer Motion is, the *Exercise of a Power*, which is *Effective* of something. For, since to *Act* is to *Do*, and to *do Nothing* is *not to do*, it follows, that to *Act* is to *Do something*; but to *do something* presupposes a *Power* to do it; and this so as not to stay in the Notion of meer *Power*; for, if it stays *there*, it *only* denominates the Thing *Able to do*, which (again) is *not to do*; wherefore *Action* is not the Notion of a sluggish *Power*, but of a *Power Exerted* and *Exercis'd*, that is, *Effecting* something; whence the *Power* is call'd *Effective*, the *Action Efficiency*, and the Something it does is term'd an *Effect*. All which superadd to the notion of *meer* Motion.
4. The Primary and Chief *Natural Action* is *Division*. For, since Substance is the Subject of all Accidents; and, which being changed, all the Accidents do suffer a change with it; hence *that* Action that works upon a Body according to the *Substantial* Notion of it, has *more* of Action in it, as working a *Greater* Effect: But *Division* makes *Two* Things of *One*, and so destroys the former *Unum* or *Ens*, and makes *Two* new ones, therefore *Division* is the Primary and Chief of all other *Natural Actions*.
Note, That this is to be understood of Perfect *Division*, which makes the thing *Divided*, and is therefore only properly to be call'd *Division*; for, Imperfect *Division* only alters the *Figure*. It may be objected, That Rarefaction and Condensation, if they be in a great degree, change the Substance as well as *Division* does. *Ans.* This arises out of the nature of some particular sort of Bodies, and not out of the precise Notion of those Actions: For, 'tis evident that Rarefaction and Condensation import no more in their Notion but the *altering* the Subject according to some *Quality*; whereas *Division* imports directly the taking away the *Unity* of the Thing, and consequently its *Entity*. Again, meer Rarefaction does not change the Substance, but the *Degree* of it, when it comes to great height; and every Body admits Rarefaction a long time without losing its former Essence; whereas *Division* consists in an *Indivisible*, so that the *Divisum esse* is *esse aliud*, or *esse duo ex uno*;⁶⁴ whereas the *Rarefactum esse* may be without any such Effect following it.
5. *Rarefaction* and *Condensation* are the *next* Actions in Dignity: For, since (as was proved above) Rarity and Density are the *First* Intrinsecal Differences of *Quantity*, as it affects Body (in order to natural Action and Passion, it follows, that those natural Actions that cause Rarity or Density, are the *next* in dignity to *Division*, which works more upon *Divisibility* their *Genus*.
6. These *three* sorts of Action take up the whole Head of *Natural Action*. For, since the *Genus* and its two *Differences* must needs comprehend all under any common Head, as being Adequate to it, and *Division* answers to *Divisibility*, the *Genus*, and *Rarefaction*, and *Condensation* to the Intrinsecal Differences of *more* or *less* thus *Divisible*; it follows, that *these three* sorts of Action do take up *all* that Head, so that there cannot be *any kind* of *Natural Action*, which is not reducible to some of these, or not comprehended under them. Besides, all the First and Second *Passible Qualities*, which generally are the Immediate Objects of *Natural Actions*, are comprehended in, or spring out of, Rarity and Density; as will be seen in Physicks.
7. The *Formal Virtue* of Acting, or working any Effect, which we call its *Causality*, is the Agent's *being what it is*, or its very *Existence* apply'd by Motion to the Patient, and Communicated to it, or (as it were) imprinted on it. For, since no particular Agent in Nature can do *every* thing

⁶³ See B.3. L. 6. S.4.

⁶⁴ Latin: 'to be divided' is 'to be other', or 'to be two out of one'.

whatever, the reason why such *particular* Causes work such *particular* Effects must spring hence, that the Effect has something in its Nature that is like the Cause, comes *from it*, and is *Communicated* to the Patient, or *partak'd* by it. Whence come those Vulgar Axioms, *Operari sequitur esse*,⁶⁵ *Every thing acts as it is*; An *Effect* is a *participation of the immediate Cause, &c.* Thus the Cause or Reason why Water moistens, is because it is moist in it self, and imparts that Quality to another thing. The reason why a Seal makes such an Impression, is; because *it self* is of such a stamp. The reason why *God* Creates, or is the Cause of *Being*, is, because *Being* is *Essential* to him.

Corol. II. Hence Motion is only requisit to *apply* the Virtue or *Existence* of the Agent to the Matter or Patient; but the *Substance* of the Effect springs from the Cause's *being what it is*: Whence it happens, that the Effect from the same Causes is more or less perfect, according as the *Existence* of a Cause which is of such a Nature or Essence, or more or fewer *parts* of it, are apply'd *better* or *worse* to the Patient, or to *more* or *fewer* parts of it, by a *feebler* or *smarter* Motion.

8. It follows from this discourse that there must be *Four* Sorts of Causes necessarily belonging to every Effect in Nature, *viz.* There must be an *Acter* which we call the *Efficient* Cause; a *Subject* for the Acter to work upon, called the *Material* Cause. The *Effect* wrought in that Matter or Receiv'd in it, which makes it otherwise than it was before, and therefore has the Notion of some *Form* newly accruing to it; which constitutes the *Formal* Cause. And, since Corporeal Action is *Motion*, and no *Body* can move *it self*, and therefore all Motion in Nature must be *caus'd* (either Mediatly or Immediately) by something that is *not a Body*, that is, by a *Spiritual* or *Intelligent* Being: and such Agents do *design* or *act* for an *End*; therefore, there must also be a *Final* Cause to make those Agents to move Bodies, and make them act as they do in every particular Action tho' never so minute; which grounds our Notion of *Providence* adequately Governing the World even as to the least circumstance of it. Wherefore, there are to every Action in Nature *Four* Causes necessarily requisit; which will afford Reflecters ample occasion for Speculation and Contemplation. For example, When I write a Letter, the *Efficient* Cause is my Self; the *Material* Cause, Paper, which *receives* the Effect of my Writing; The *Formal* Cause, the Characters received in the Paper; the *Final* Cause, to gratify my Friend, treat of Business, or acquaint him with News.
9. There is no *Fifth* Cause call'd an *Idea*, as *Plato* affirms. For, either that *Idea* is conceiv'd as introduced in the matter and Receiv'd there, and then 'tis clearly a *Formal* Cause: or, as 'tis in the *Mind* of the Artificer; and then it concurs to make him an *Efficient* Cause; for without such an *Idea* he could not produce such an Artificial Effect.
10. *Operation* has not the same Notion with *Action*, but is *Indifferent* to Action and Passion, or rather a kind of *Neutral* Notion made up of both. For example, *Notions* or *Simple Apprehensions* are said to be the First *Operation* of our Understanding, tho' the Soul in having them is purely *Passive*. So also my Acts of *Discoursing*, *Willing* &c. are call'd *Operations*, tho' they be both *perform'd* by my Soul and *Receiv'd* in it; Whence they have a kind of *Neutral* Notion, such as have *Curro*, *ardeo*, and such-like, taking such words not in a Grammatical, but in a Philosophical and Natural Sense. Of which kind are all *Immanent* Actions or Acts; And, therefore, these are not so properly call'd *Actions*, as *Operations*, in order to what they have of *Effective* in them; or else *Acts*, because they *Actuate* or *Inform* the Subject *in which* they are as well *Received*, as they are *Produced* by it. Whence *Action*, in the Proper and Obvious Sense,

⁶⁵ Latin: 'to work follows to be'; in other words, each thing acts according to its nature.

signifies the Efficiency of a Natural Cause; which has a *Transitive* Notion, and inferrs *Passion*; and, consequently, some *Effect* in the Extrinsecal Subject it lights on.

Note, That since *Action* inferrs *Passion*, and refers to it, hence whatever is discoursed here of *Action*, may, by turning the Tables (as it were) or considering Motion in order to its *other* Term, be understood likewise of *Passion*; for which reason we treat of both those Heads in the same Discourse.

LESSON IX. *Of the Common Head of Ubi or Where.*

1. **UBI** or *Where* signifying [*in what Place*] the Notion of *Place*, must first be rightly understood e're we can have a right Notion of the Common Head call'd *Ubi*. And the word [*Place*] being no Artificial Term but a Natural one, and us'd by all Mankind, we are to learn the true and proper meaning of it from the Users of it; that is, we must take the Notion of *Place*, not from men of *Art* or *Speculators*, but from the *Vulgar*; and the surest way to do this, is to gather their Sense by *reflecting* on their Sayings and known Intentions.
2. Since then the *Vulgar* agree naturally to say a thing is *in* a *Place*; the Notion of *Place* is to be a *Container* of the thing that is *in it*; and, withal, *such* a *Container* as is not *Intrinsecal* to the Thing of which 'tis enquir'd where it is, but *Extrinsecal* to it; for it would be very odd and dissatisfactory, and look like a *Jest*, if when we are ask'd, *Where* such a man *is*? we should Answer, *He is in his Skin*. Whence, pursuing these Natural Apprehensions of theirs exactly, we shall find, that the *Proper Place* of any Body must be *Another* Body that is *Immediate* and *Equal* to it; for were it *Distant* from it, and so, *Unequal* to it, or too wide for it, then (since there is no *Vacuum*) that too-large *Container* would be a *Common Place* to other Bodies as well as *it*, and so would not be its *Proper Place*, (which was the Question that was ask'd) since it would be no more *Its Place* than that *others*, but a *Common Place* to both; which, therefore, would be no competent Answer to the Question where *It* was? Whence, by Reflexion, we shall discover, that *Place*, in proper and exact speech, is the *Ambient Superficies of the next Body*; for, this is *Immediate*, and therefore *Equal* to it, because an *Indivisible* (such as the *Superficies* is in respect to *Body*) can add *no* Quantity to it or make the *Container Unequal* to the thing Contained. But 'tis to be observed, that the *Vulgar*, whose only aym it is to *find* a thing by asking for its *Place*, do not reflect oftentimes upon their own Notion, or as it were *refine* it to an Exactness, but content themselves to know *near* what Visible thing that which they look for is placed; as on the Cup-board, behind the door, under the Beds-feet, &c. which is a Slubber⁶⁶ or Imperfect Notion of *Place*, even according to their own Sayings; for these do put the thing sought for to be *in* that *Place*, whereas perhaps many *other* things are *on* the Cup-board, or *near* the Bed's feet, as well as the thing sought for.
3. Again, since the Intention of Mankind in asking *Where* a Thing is? can be no other but to know how to *find* it, it follows that *Place* must be certainly *Knowable*, that is, such as does not it self need *seeking for*. Nor could it be such if it were still Subject to be *Remov'd*; for then we should be at a loss both to find *It* and *other* things *by it*: and our selves would be at the same plunge as are those that practise the Art of Memory; who, being to range the things they would remember in set *Places* their Fancy had design'd, do affix them to *Stools*, *Chairs*, *Brooms*, and such like; which being taken away and *Remov'd*, they have lost the Memory of the thing their Fancy had placed there; wherefore *Place* must have as much *Immobility* as may Serve for our *finding* a thing, so that our Enquiry *where*, or in what *Place* the thing is, be not

⁶⁶ Archaic: 'to slubber' means 'to work hastily or carelessly'.

defeated; and no more is requisit. All *farther* Immobility being nothing to the purpose mankind intended, and therefore was no part of their Notion of *Place*.

4. Wherefore, there is no Necessity of having recourse to *Imaginary Space* or *Subsistent Dimensions*, to find something which is Immoveable *Absolutely*, which some do upon this account, because all things in Nature are subject to *motion*. For, we experience, that we can *find* any thing that we can have necessity to use or know well enough without recurring thither. Besides, *Place* must be *more* Knowable then the thing we look for; whereas, these *Imaginary Ubies* are not Distinguishable or Knowable *at all*. So that such wild Conceits as these are Extravagant even to madness. We have prov'd *Vacuum* to be purely *Nothing*, and consequently *Unknowable*; and, therefore, to be in a *Vacuum* is to be in *no place* or *no where*. And, as for *Subsistent Dimensions*, 'tis a plain Contradiction upon another score; because it puts *Quantity* to be *Substance*, and capable of subsisting *alone* or without a Subject.
5. 'Tis not much less ridiculous to invent little Entities call'd *Ubies* for Bodies, or for Spirits (which are incapable of being in place) of which we can give no account. For, since the surface of the containing Body, in a Determinate distance from some Parts of the House, the Town, the Country, or the World, which to our apprehension are *fixt*, answers all Questions that can be proposed about the *Place* of a thing, and we can be furnisht with this by our *Natural* Notions; it follows, that all other far-fetcht Conceits, invented to explicate *Place*, are Needless and Senseless. Such strange extravagancies capering wits are apt to fall into, when they relinquish Nature and the *Solid* Notions she imprints in them, to follow meer *Fancy*, the mint of a thousand ungrounded Capricio's and Chimera's.
6. Examples of *Ubi* may be such as this. *Quest. Where, or in what Place, lives Dr. H.? Answ. In Kings-street. Q. Where is that Kings-street? A. In high Holborn. Q. Where is Holborn? A. At the West end of London. Q. Where is London? A. About the middle of England. Q. Where is England? A. In such a part of Europe. Q. Where is Europe? A. In the Northwest part of the Earth. And, farther than this (or rather not so far) none of the Generality of Mankind can have occasion to enquire; tho' perhaps Artists, or Geographers and Astronomers, may; nor needs there any more Immobility to be ascertain'd, to find out where that Skilful Doctor lives, since this may serve our purpose of finding him. And we may do this easily, (let the whole Earth move round never so swiftly) by getting an Answer to some of these Questions, without the help of *Imaginary Space*, *Subsistent Dimensions*, or those little Entities call'd *Ubies*, which no mortal Man's Eyes ever saw, or any man of Sense could ever understand.*

Corol. I. Hence it is a Contradiction to say the World is *in Place*, since it Contains *all* Space, and, consequently, *all* *Place* in its self, and therefore is Contain'd by *none*; which (as was shewn) is requisit to the Notion of being *in Place*; nor is there any necessity or sense it should; unless we should Fancy that some ultra-mundane Traveller bewilder'd in *Imaginary Space*, should be put to it to ask some of the Chimera's there, which is the way to the World?

Corol. II. Hence is seen, that the *Concave Superficies* of a Body, consider'd as affecting its own Subject, is in the Head of *Quantity*; but, as *Containing* another Body, and connotating a respect to some other things, so *fixt* and known, that by knowing them and It, we may know *where* the thing contain'd is; it constitutes the Common Head of *Ubi*, and consequently of *Place*.

Corol. III. 'Tis seen also that Angels are not properly *in Place*, nor consequently have properly any *Ubi*; since they have nothing in them which can have any Commensuration to a *Superficies*, or

be Contain'd within it. Wherefore their being *in Place* can only be understood of their *working* upon Bodies which *are in Place*.

7. From what is said it will appear, that the true and proper Notion of *Ubi* is not *Place* it self, but *the being in* such or such *a Place*; that is, it consists formally in the Application of one Extrinsic thing to another, *in Rest*; *viz.* of the Body Contain'd to the *Superficies* of the Body Containing, with a Connotation of the respects above-mentioned. Yet, because *to be in a Place* includes *Place* in its Notion, it was proper and necessary to treat of it under this Head, seeing it belong'd to it *Formally*, and to *Quantity* only *Materially*.

LESSON X. *Of the Common Head of Quando or When.*

1. There is some Motion that is *Even* and *Regular*, at least to our Apprehension; and withal *Knowable* to all Mankind. For, every man sees that the Sun moves (at least it appears so to us) and if there be any Irregularity or Unevenness in its Motion, yet it is to us Undiscernable.
2. Therefore this *Regular* and *Known* Motion is fit to be a *Measure* to all our other Motions. For, since there are but three things Requisite to compleat the Notion of a *Measure*, *viz.* that it be apt to bear a Proportion to the Thing Measured, and to be *compar'd* to it, which all Motions have from being *Quantities* of the same kind, *viz.* being *Successive Quantity*; and that its Quantity be *more Known* than the Quantity of the thing Measured; and, lastly, that it be *fix'd* or *Constantly* the same, that so it may be a Standard to the others; and, since the Motion of the Sun has both these last Properties, as well as it has the First from its being of the *same Kind* of Quantity with *other* Motions, therefore this *proportionable*, *known*, and *even* Motion of the Sun is every way fit to be a *Measure* to all our *less known* and *less regular* Motions; which kind of Measure we call *Time*.
3. Hence Motion may be consider'd three several ways, and thence ground three several Notions: One, as it respects the *parts* into which it is Divisible, and its peculiar manner of having *no two Parts at once*; the former of which gives it the Notion of *Quantity*, the latter to be of that *Species* of Quantity call'd *Successive*. Next, it may be consider'd as it respects the two *Terms* or Things, *viz.* that from which it *begins*, and that on which it *lights* and where it *ends* its Career; which Considerations of Motion ground Action and Passion: And, lastly, it may be consider'd as bearing a *proportion* to *other* Motions, and as having such other Properties as fit it to *Measure* them; and Motion, as conceiv'd to be furnish'd with these Requisites to Measure all others, is that which we properly call *Time*.
4. The Notion of *Time* is a *Natural* Notion, and *Common* to all Mankind. This is evident; For all Mankind, the Rudest as well as the most Learned, (as we find by their expressions) *has* that Notion, must *need* it, and does *use* it.
5. Tho' the Notion of *Time* be clearly grounded in Nature, yet it needs some help of the Understanding to make it *completely* and *actually* a Measure: For, when I write an hour (for example) that motion of Writing was really perform'd while the Sun did run the four and twentieth part of his Diurnal course; and so, that Motion of my Pen was *in reality* proportion'd to such a part of Time. On the other side, since every particular Measure bears in its Notion to be determinately *thus much*, and there is no Determination in Nature of any part of the Sun's Motion, nor any part of it *at once*, and only my Understanding divides its Annual and Diurnal Motion into so many Proportionate and Determinate parts; and (tho' the Motion it self be perpetually fleeting) yet it resumes so much of it into one Determinate and Constant Notion (*viz.* of an Hour) without which Determination it could not actually be

a *Measure*; therefore, tho' the Notion of *Time* be clearly *grounded* in Nature, yet it needs some help of the Understanding to make it *completely* and *actually* a *Measure*.

6. The Notion of *Time* depends on our Understanding in the same manner that *Relation* did: For, the Ground, Reason, and Substance of Times being a *Measure*, is found in Nature; and yet the otherwise-Indeterminate parts of the Sun's Motion must be made Determinate by our comprizing so much of them at once into one Notion, and then *considering* them as Proportion'd, that is, by our *Referring* or *Comparing* them to *other* Motions, e're they can be Actually a *Measure*.
7. Hence may be collected, that the True and Genuin Notion of the Common Head of *Quando* or *When*, is not the meer precise Notion of *Time it self*, but of *being in such* a determinate *part* of Time; that is, its Notion consists in the Application of the Extrinsecal Motion of the Sun to Sublunary (or perhaps in Artists who reach further) to subsolar or supersolar Motions; and the Answer to *Quando* tells us to what part of Time they belong, or are conceiv'd to be Apply'd. For example, these Expressions; *I writ yesterday, I will come to morrow, I will speak with you within an hour*, and such-like, do Apply our Past, Present, or Future Actions to some different part of Time. Yet, because their being perform'd *in such a Time* includes *Time* in its Notion; and that Time, tho' it be *materially* Successive Quantity, yet taking it *formally*, 'tis not consider'd in order to its *own* Subject, of which it is an Intrinsic Accident, but in order to *Another*; it was necessary to treat of it under *this* Head; since taken thus *formally* it can belong to *this*, and cannot to *any other*.

Corol. I. Hence 'tis a meer *Chimera*, and as senseless as that of Imaginary Space to fancy Time *before* or *after* the World. For, it is in direct terms to put Motion and Time to *be* when they *are not*, which is, to put it *to be and not be at once*.

Corol. II. For the same reason meer *Being*, without Order to *Motion*, has nothing to do with *Time*, nor can be said to be *in it*, or *subject to it*, or *measurable by it*. For *Being*, precisely as such, has no *parts* by which it may be proportion'd to the Sun's Motion, or Commensurable to it: Wherefore, to fancy God's Eternity (which consists in the most Absolute Impossibility of his not-being) to be Commensurate to an Infinit flux of Time, is a Groundless and Senseless Imagination. Tho' his never-altering *Being* does, even for its being such, eminently include all Possible *Time* and all *Differences* of Time, Past, Present, and Future, and this concenter'd in it all at once.

Corol. III. For the like reason the *Internal* Operations of Spirits being *Indivisible* and *Instantaneous*, can have no Commensuration to the Motion of the Sun, or to Time; tho' their *External* Operation upon Bodies may; correspondently to what is said before of their being *in Place*.

8. The Questions of *Quando*, and their proper Answers, are such as these; When was Christ born? *Ans.* 1696 Years ago. When will there be a Leap-year? *Ans.* This Year. When did *Mustapha*⁶⁷ the Turkish Emperor begin his Reign? *Ans.* The last Year.
9. The Differences of *Quando* are *Past, Present* and *Future*. Tho' the Present is not in reality, it being an Instant and Indivisible; yet, since our Understanding can *comprise* such a portion of Time into one Notion, and consider it, and conceive it, and thence speak of it by a participle of the Present Tense, and as one entire Part of Time, and say *'tis Running*, till as much as we had fram'd a Notion of were run out or ended; hence we can truly say, something *is doing* this

⁶⁷ Mustafa II, 1664-1703, was Sultan of the Ottoman Empire from 1695-1703.

present Age, Year, Month, Day and Hour, nay, this very Moment, taking *Moment* for some short Indeterminate part of Time.

10. The Differences of Past and Future are *more* and *less* distant from the Present prefix'd Time; for *Past* signifies *before it*, *Future*, *after it*. Inferiour Differences also must be taken from some determinate point, (as it were) as, from the Creation, the first Olympiad, the Birth of our Saviour, &c.

Note, That it is very nicely to be remark'd, that when *Questions* are ask'd, by *how much* or *how little* of *Time*? the Answer belongs to the Predicament of *Successive Quantity*; whence an Age, a Year, a Month, &c. are *Quantitative* Notions, divided by *more* and *less* of *Successive Quantity* or *Motion*, and constituted by them; and only what answers precisely to *When*, belongs to this Predicament of *Quando*. Thus, if we ask *how long Time* it is *since* the Invasion of *William the Conqueror*,⁶⁸ the Answer is, Six hundred and thirty years; which is a quantitative Notion consisting of both Continu'd and Discrete Quantity. But if you ask, *When* was the first Olympiad? the Answer will be, In the three thousandth two hundredth twenty eighth year from the Creation,⁶⁹ and so it will belong to this Head; for then it formally signifies, that the Motion or Action of the Games in the first Olympiad were celebrated while such a part of the Sun's Motion was passing. The Predicaments of *Situation* and *Habit* are of little use, therefore not worth the dilating on them.

LESSON XI. *Of the Expression of Our Notions by Words.*

1. NOtions being (as was said) the *Meanings of Words*, it comes next to be examin'd, what Advantage or Disadvantage may accrue to *Science*, by the expressing our Notions by *Words*, either distinctly or confusedly. If the word have but *one* Sense or Signification, either taken alone or as apply'd to other Notions, 'tis said to be *Univocal*, or to be spoken *Univocally* of them; because *Vox* or *Word* differing from meer *Sound* in this, that a *Voice* is apt to express our Inward *Sense*, *Mind*, or *Notion*, so that *Sense* seems to be the *Form* or *Soul* of a *Word*, and *Sound* only the *material* part or (as it were) the *Body* of it: Hence a *Word* is said to be *Univocal*, when it has but *One Sense* or Meaning, and *Equivocal* when it has or may have *more*.
2. Since, as ⁷⁰ was prov'd above, Notions are the *Natures* of the things in our Understanding, and so can have no Falsity, in regard they have their *Metaphysical* Verity; that is, they are *what they are*, and cannot be *other* than they are; nor can they have *Formal* Falsity, for this consists in the *Compounding* two Notions together by Affirming or Denying, neither of which is found in Notions or *Simple* Apprehensions, which are *not* thus Compounded; hence *no Error* can possibly proceed from the *Notions*, but all *Truth*; wherefore, were all *Words* *Univocal*, and had but *One* Notion or Meaning, there could be no more possibility of Error from *Words* than there could be from the *Notions* themselves, which are signified by those *Words*. Wherefore, on the contrary, if words be *Equivocal*, that is, Ambiguous, or liable to be taken in a *double Meaning*, or (which is the same) to signify *diverse Notions*, and it happen that some of the persons that use them do take them in *one* sense, others in *another*, they must necessarily speak and discourse of *different* things, and, so fall into *different sentiments*, and contradict one another.

⁶⁸ William I, 1028-1087, became the first Norman monarch in England in 1066, during the Norman Conquest of the Anglo-Saxons from 1066-1075.

⁶⁹ The traditional dating of the first Olympic games in ancient Greece is 776 BC. Implied by Sergeant's calculation, God would have created the world about 4004 BC, and so he would have thought the Earth was at that time 5,700 years old.

⁷⁰ B. 1. L. 1.

3. Hence, supposing the Persons be *sincere*, and that there be no Fault in their *Will*, most of the Contests and Wranglings in the World do arise from the *Equivocal* Meaning of Words: For, since the Use of Words is Common to all Mankind, and most Single Words are Equivocal, and the Contexture of them, or the whole Clause, may also be oftentimes taken in a different sense; hence, unless the double sense of the Words be Clear'd and Distinguish'd, Innumerable and Endless Contests must necessarily happen from the *Equivocal* Meaning of those Words.
4. *Written* Words are far more liable to those Inconveniencies than words *Spoken*, especially if the Authors of those *Written* Words be *Dead*, and no Certain way of Interpreting them be agreed on by all Parties. For, if an Equivocation happen in Words *spoken*, the Speaker, if *alive*, may easily come to see he is misunderstood, and by a Pertinent Distinction shewing the *double* sense of the Word, and in *which* of the senses he means it, may come to a right understanding with his Opposit; which is Impossible in *Written* Words, when the Author is *Dead*, and there is no Certain way of Interpreting those words Agreed on; as it happens in the followers of *Aristotle* or any other *Dead* Authors.

Corol. I. This *Method* or way of Interpreting such Words must either be Evident of it self, or made Evident by Proof; and it must, besides, be Agreed by both the contending Parties. *Evident*, because it is a kind of *Principle* to find out the true sence of the Author. And it must be *Agreed on*; for otherwise the Principle not been yielded to, all Contests which depend upon that Principle must remain *Undecided*, and end (if they ever do so) in a meer Logomachy or *Word-skirmish*.

5. For the same reason, even the same person, if he be deluded by the Ambiguous Sound of a Word, and, thro' Inadvertence or want of Skill to keep his Thoughts steady, happen to take it now in *one* sense, now in *another*, must necessarily *blunder* in his Discourse, and speak Incoherently. For, since the true Notion of the Thing does Ground all our Knowledge of it, and all our Discourses concerning it; it follows, that he who proceeds now upon *one* Notion, then upon *another*, must needs vary and hobble in his Discourse, and talk Incoherently; having no Certain and Fixt Notion affording him Light to guide his Steps to the *same End*, or take the *right Way* to it.
6. The Meaning of those words that express *Natural* Notions is to be taken from the *Vulgar*; and the sense of *Artificial* Words from Men who are *Learned* in those respective Arts: For, the signification of Words can only be taken from the Authors and Users of them; which in the former sort of Words is the *Vulgar*; in the later, *Men of Art*.
7. Hence Criticisms, generally speaking, are Incompetent to give us the *Certain* Sense of Words. For, Criticks do very frequently ground the Sense of Words upon Etymologies, or the Derivation of them from other words: Or else, on the Sense in which some few learned Writers do take them; both which are Fallacious Rules to know their Sense *certainly*. The former, because the Reason *why* the word was Impos'd, and the Sense *it self* of those words are many times Different Notions: For example, a Stone (as some of them tell us) is in Latin nam'd *Lapis*, a *laedendo pedes*;⁷¹ but the *Notion* or signification of that word is the *very Substance* it self of such a Body. Nor is the latter Rule competent to give us the true Meanings of those words that express *Natural* Notions; first, because those *Learned* Men use to speak *Learnedly* or *Rhetorically* with Tropes and Figures, and affect to deliver their thoughts neatly

⁷¹ Latin roughly means: 'harming the feet'; the folk etymology is that 'laedendo pedes' was shortened to 'la' + 'pis', and thus 'lapis'. Thanks to classical languages scholar Samuel Stahl for his assistance.

and finely, with quaint Phrases, Allusions, Metaphors, and other knacks of Language; all which are so many Deviations from the *Natural* manner of Expression Common to all Mankind, and, consequently, Unsuitable to our *Natural* Conceptions. Besides that, a *Few* Authors suffice the Criticks to build their Observations upon; All which falls infinitely short of that Certainty and Plainness which the *Common* and *Constant Use* of the Generality of Mankind, or the *Vulgar*, affords us.

8. *Equivocal* Words are either Simply and *Absolutely* such, which we call Equivocal *by chance*; or *Relatively*, which we call Equivocal *by design*. Absolutely, when there is no kind of Reason or Ground why the same word should have two different senses; as when [*Far*] in English signifies *a great way*; in Latin, *Bread-Corn*; or any word in one Language happens merely casually to have a different Signification in another. In which sort of Equivocation there can be no danger to Science, those two Senses of the Word being so vastly disparate: *Relatively*, when there is *some* kind of Ground *why* the same word should be *transferr'd* from one Notion to another. And this may be done for two different reasons. One, when it is *referr'd* to another for some *Connexion* with them as Cause and Effect; as, when the word [*Healthful*] which properly belongs to an *Animal*, is; *transferr'd* to *Meat*, because it is the *Cause* of Health in the Animal; and to *Urine*, because it is an *Effect* of its Health, and therefore a *Natural Sign* of it. Or, as when we say there is much *Art* in such a Picture or Poem, it means the *Effect* of Art; for *Art* in proper speech is to be found only in the Understanding of the Artificer. The other Reason of the words being *Transferr'd* from one to another, and consequently, *Referr'd* back to it again, is, when this is done for some *Proportion* or *Resemblance* between them: As, when we say of a *good Governour*, that he is the *Pilot* of the Common-wealth, to steer it into a safe Harbour, and preserve it from splitting upon the Rocks of Division. Where the word [*Pilot*] which in the First and Proper Meaning signifies a *Director* of a Ship, is *transferr'd* to a *Governor*, because he does the same *in Proportion* in a Common-wealth which the other does in a Ship. Thus *Tranquility*, which is properly said of the *Sea* in a *Calm*, is *Transferr'd* to a *State* or *Kingdom*, because its *Peaceable* Condition resembles or bears a kind of *Proportion* to the Undisturb'd Quiet found in a *Calm Sea*.
9. Words *Transferr'd* to another for some Proportion or Resemblance between them are call'd *Metaphors*, or *Metaphorical*; and the best Metaphors are, when the thing, from which 'tis *Transferr'd*, is Eminent under that Notion we intend to express. As when we call a Valiant Man *a Lyon*, and a Meek man *a Lamb*; because *Courage* and *Mildness* are Eminent in those *Animals*. A Continu'd Metaphor is call'd an *Allegory*. As, in the Example lately given, the word *Pilot*, *steer*, *harbour*, *splitting* and *Rocks*, are all Metaphors, and therefore the whole speech is *Allegorical*.
10. There is no Danger nor Detriment to Science that such words are us'd in *Common* Speech, or *Loose* Rhetorical Discourses; but they are exceedingly pernicious to it when we are treating of *Dogmatical Tenets*, and searching for Truth out of the Words of *Written* Authors. For, since those Metaphors, however they be *True* while understood to be meant in Proportion and Resemblance onely, yet are *Literally* *Tals*; and in delivering Doctrines or *Dogmatical* Tenets only *Litteral* Truth is aim'd at; and, if the Reader happen to take a *Metaphorical* Expression for a *Literal* one, he will most certainly embrace an *Errour* for a *Truth*; or, if he takes a word *Literally* meant for a *Metaphor*, he will take a *Truth* for an *Errour*; hence, it must Needs be most pernicious to Science not to distinguish between the *Metaphorical* and *Literal* sense of the words, but mistake one for the other. And, therefore, unless some Certain Rule be Establish't, by which we may be ascertain'd when *Written* Words are to be taken *Literally*, when *Metaphorically*, 'tis impossible to be Certain of any Truth merely by those *Written* Words.

11. Those Words which are Transferr'd from *Corporeal* to *Spiritual* Natures are, by far, more highly Metaphorical than can be any Transferr'd from one *Body* to another; and therefore, the Misunderstanding them must needs be very destructive to Science: For, since Corporeal and Spiritual are the First *Species* of *Ens*, and the Division of that *Genus* into those *Species* is made by the *Contradictory* Differences of Divisible and Indivisible; it follows demonstratively, that whatever, except the precise Notion of *Ens*, is properly Affirm'd of *Body* must be properly Deny'd of *Spirit*: and therefore the words Transferr'd from Bodies to Spirits which are in *Different Lines* are far more Improper than those which are Tranferr'd from *one Body* to *another*; they being in the *same Line*, and so less Disparate.

Corol. II. Hence is confirm'd the former doctrine that Spirits are not *in place*; nor are Themselves, or their Spiritual Actions, Subject to *Time* or Commensurable *to it*, &c. Since all these may properly be *said* of *Bodies*; and therefore must properly be *deny'd* of *Spirits*.

Corol. III. From the two last Sections it follows evidently that no *Dogmatical* Tenet can be prov'd from Books that treat of *Spiritual* Natures, or of such considerations as belong to them, unless some *Certain* Rule be first Establish'd by which the Reader may know when the words are to be taken *literally*, when *Metaphorically* in this or that place; once a Mistake in this may make the Reader embrace a Falshood for a Truth, or a Truth for a Falshood in matters of greatest Importance. For example, this Proportion, [*God is mov'd by our prayers*] is Literally False; for to be *Moved is to be* Chang'd, and **God** is Essentially *unchangeable*. Wherefore, it is only True in a Metaphorical Sence; and the Word [*moved*] is a metaphor of the last sort, viz. of Words transferr'd to another for some *Proportion* or *Resemblance* between them; and, so, the true sense is this; **God**, tho' Unmov'd in himself, yet acts in the same manner towards him that prays to him, as a good *Man* here (who is *properly Mov'd*) would act towards one that Petitions him.

Corol. IV. Hence also is demonstrated that all the Names and Words we can use when we speak of the *Divine Nature* and its Attributes, are in the *highest* manner Metaphorical and Improper. For, since we can no other wise name or *speak* of a thing but as we *Conceive* it, and all our Conceptions are Notions taken from *Natural* Objects, and onely said of *them* with Propriety; and no otherwise said of *Created Spirits* but onely Metaphorically; and that *God's* Infinite Perfections do far more excel *Created Spirits*, than those Spirits do *Bodies*; it follows that all the Names and Words we can make use of to speak of the *Divine Nature* and its Attributes, are in the *highest* manner Metaphorical and Improper: as may be farther shewn in *Metaphysics*.

12. The Word *Ens*, as apply'd to *Substantial* and *Accidental* Notions is of the *former* sort of Equivocal words, and *Analogically* spoken of them; that is, *first* and *properly*, of Substance; and *Secondarily* or *Improperly* of Accidents. For, since (as was shewn above) *Ens* signifies *Capable of being*, and none of the Accidents is *of itself* Capable of Being, but onely comes to have some Title to Existence by the *Substance*, from whose Being they have entirely all the Being they have, and that *Its* being: it follows that the word *Ens* must be *Analogically* said of them; that is, Properly of Substance, and Improperly of Accidents.

13. Since it appears, from what is said hitherto, that the Equivocation of words is most highly Prejudicial to Science, it is one necessary part of of the **Method to Science** to detect the Snares it lays in the way of our Discourse, that we may avoid them. And this may be done.

14. First, by observing the *Explication* we make of the Word that is apply'd to different Notions, that so we may know which is the *proper* Signification of it. For, by doing this we shall

certainly find that the *less proper* Notion, when the word is explicated, will still include the Notion of the *Proper* one, and bear up to it. As if we would Explicate the word *Strong* as ‘tis spoken of Ale or Wine, we shall be forced to say (if we be put to express our selves Literally, and tell what it means) that as he is call’d a *Strong Man*, who is able to overthrow his Enemy, so we call Wine or Beer *Strong* when it is able to overpower our Brain. Or, if we call a man *Hard-hearted*, it would be explicated thus, that his Humour is as *Hard* and *Inflexible*, considering the Temper of a Rational Creature which ought to be mov’d by Reason, as *Hard* things, which are very difficult to bend, are among Natural Bodies; for which reason they sometimes call such men [*Stony-hearted*] or [*Iron-hearted*]; in both which we see that [*Strength*] is properly in *Man*, and *Hardness* in such Bodies as *Stone* or *Iron*, and improperly in *Wine* or the *Heart*. And the same may be observ’d in the word [*Pilot*] apply’d to a *Governour*; in [*Moved*] apply’d to **God**; in [*Healthful*] to Meat or Urine. Thus the word [*Religious Honour, Worship* or *Respect*] is first and properly apprehended as belonging or Due to **God**, the sole End and Author of *all* Religion, and Analogically or Improperly to *Holy Persons*, either on Earth or in Heaven, as his Servants; and to *Sacred Books, Pictures, and Churches*, as either Causing, Exciting, Increasing or Belonging to the *Religious Honour* due properly to *Him* Alone. Whence *Religious Honour* given to any other things cannot be Explicated, but in Reference to *God*, the only proper Object of Religion; which therefore will be found Included in the Explication of that Religious Honour which is given to any thing else. And yet what Endless Squabbles, Contests and Animositities has this one Equivocation produced, while Passionate or Ignorant men will needs take the word [*Religious*] when spoken of those Different things, to be *Univocal*, which is most clearly *Analogical*.

15. The next way is, to observe the Notions any way Connected in our Common Speech with that Word whose Equivocalness we doubt of; that is, to consider the Causes, Effects, Antecedents, Consequents, Contraries, its Superiour and Inferiour Notions, its Circumstances, &c. For, if some or any of these do *not* agree to the Meaning of any Word when spoken of *more* things, or found in diverse Contexts, then we may be sure ‘tis spoken in *diverse Senses*, and is Equivocal; and then, by the foregoing Rule we may certainly come to know its proper Signification. So, in the Notion of *Religious Honour* apply’d to **God** as properly due to him, and Adoration of him, the chief part of which is an humble Acknowledgment of him to be our Creator, Redeemer, Sanctifier, the Supreme Lord of Heaven and Earth, the Searcher of Hearts, and Judge of all our Actions, &c. none of these are possible to be Connected, or Agree to any of the other Improperly called Objects of Religious Worship: So, when we stile any Eminent Person for Learning [*a Great Man*] we shall easily find it is Equivocal and Improper, because *Greatness* means, in Proper Speech, *much of Quantity*, and has that Common Head for its *Genus*; whereas a *very Little* Man in Quantity may be *Great* in the sence in which we meant it.
16. The Third way is, to attend to what True *Science* or Faith teach us. For, since one Truth cannot contradict another, therefore we may be assur’d, that, in case we be Certain that what the Writer meant is *True*, his Words must be taken in that sence which is Agreeable to *True Science*, or Faith. Hence, when it is said that **God** made *two Great Lights*, the Sun and the Moon, it being Evident by *Science*, that *Other Stars* are incomparably Greater than the Moon, hence the words [*Great Lights*] in that place, cannot be meant of *Great in it self*, but as to their *Appearance to us*. But, care is to be taken that we have *true Science* of the thing expresst by such words, and that the Subject be not such as exceeds our pitch of Knowledge.
17. The *Context* may help much to give us the right Notion of the Words; especially when the *Literal* Truth is aim’d at, *Axioms* and evident *Principles* are laid, and the Discourse is perfectly *Connected* or Coherent. For, in that case the Symmetry found in the parts of the whole

Discourse forbids any word to be taken in a *wrong* signification; as we experience in Mathematicks and other Close Discourses.

18. The *Intention* of the Author, and the *Argument* and *Scope* of the Book, avail much to direct us to the right sense of those words in it which are most Material and Significant. For, the Notions meant by such words are as it were the *steps* which lye level all the way, and lead to the End at which the Author aim'd them; and, therefore, cannot easily permit a Deviation from their true Sence, or suffer their Meaning to be mistaken.
19. The Words in which *Laws* are conceiv'd are best interpreted by the *Common Practice* of those who are subject to those Laws. For, since those Laws are the *Causes* of the Common Practice, and the Common Practice is the *Effect* of those Laws, hence the *sence* of the *Laws* is demonstrated by the Common Practice *a posteriori*.
20. But the very best and most assured way to detect and avoid Equivocation in all words whatever, is to observe and examin, whether *the same Definition* agrees to the word as found in diverse places: For, since the *Definition* consists of a Determinate *Genus*, and its Intrinsic or Proper Differences, it must needs give us the *precise Notion* or Meaning of the Word; since, if it be either under any Other *Genus*, or constituted by any Other *Differences*, the Essence which they constitute must needs be a *different Essence*; and, therefore, the Word which signifies it, must necessarily have *another Meaning* or *Notion*.

Corol. V. Words being invented to express *Sense* or *Meaning*, it follows, that those Words that have *many* Senses, and all of them *True* and coherent to one another, have the highest perfection that Words can possibly have. Wherefore those passages in Holy Scripture that bear both a *Literal*, *Tropological* (or Moral) *Analogical* and *Anagogical sence* (or several of them) are of a more sublime nature than other Words are, and argue, that they were endited ⁷² by a Divine Author.

⁷² Alternate form of 'indited' or 'indicted', in the sense of *written* or *composed*.