CHAPTER 8

# HENRY MORE
## (1614–1687)

HENRY MORE WAS BORN IN GRANTHAM, LINCOLNSHIRE, ON OCTOBER 12, 1614. He was educated at Christ's College, Cambridge (completing his Master's in 1636) and he spent the rest of his career at Cambridge. More was part of a group of philosophers, along with Ralph Cudworth and Joseph Glanvill, among others, known by historians as the "Cambridge Platonists" for their rehabilitation of certain Platonic views. More's first published works (in 1642) were philosophical poems on the life of the soul and criticisms of views he took to be opposed to dualism. In 1649, More began correspondence with Anne Conway, first as her tutor and later as her friend and philosophical interlocutor. In addition, the Conway family was More's patron. More published his most important philosophical works in the 1650s, including *An Antidote Against Atheism* (1653), *Conjectura Cabbalistica* (1653), *Enthusiasmus Triumphatus* (1656), and *Immortality of the Soul* (1659).

More's philosophical projects continued to be concerned with dualism and the demonstration of the existence of immaterial spirit in the world. While it is clear that More was greatly influenced by Descartes, he was dissatisfied with Descartes's account of the soul as mere thinking substance, his denial of souls to animals, and his mechanical account of sensation. More also took exception to Descartes's distinguishing of the soul and body by thought and extension, respectively. Instead, More held that souls were extended but penetrable and indiscerpible (indivisible or unable to be torn apart), while bodies are impenetrable and discerpible. He also defended the view that spiritual substance is the cause of

ABOVE: *Henry More.* By William Faithorne, 1675.

all motion in the world. Both Conway and Margaret Cavendish were significantly influenced by More, although both philosophers departed from his views considerably.

The excerpts that follow are from More's *Immortality of the Soul*. In the selections from Book I, More defends the coherence of the concept of immaterial spirit and provides an account of the properties of spirit and its motions. In the last selection, More develops his notion of the "Plastick faculty" of the human soul and the soul of the world, and criticizes the Cartesian account of perception and sensation.

## STUDY QUESTIONS

1. How does More argue that spirit is as intelligible as body? Do his arguments succeed?
2. What are the properties or powers of spirit and what are the properties of body?
3. Given that the body changes size and the soul has no parts, in what way does the soul exist in every part of the body? Why does More think it is important that the soul exist in every part of the body?
4. What do you think is the role of the Plastick faculty?
5. What is More's criticism of the Cartesian account of sensation?

## THE IMMORTALITY OF THE SOUL[1]

*Book I, Chap. III.*

1. The general notions of body and spirit. 2. That the notion of spirit is altogether as intelligible as that of body. 3. Whether there be any substance of a mixed nature, between body and spirit.

1. THE greatest and grossest obstacle to the belief of the immortality of the soul is that confident opinion in some that the very notion of a spirit were a piece of nonsense and that there is a perfect incongruity in the conception thereof. Wherefore to proceed by degrees to our main design, and to lay our foundation low and sure, we will in the first place expose to view the genuine notion of a spirit, in the general acceptation thereof; and afterwards of several kinds of spirits: that it may appear to all how unjust that cavil is against incorporeal substances, as if they were mere impossibilities and contradictory inconsistencies. I will define therefore a spirit in general thus: A substance penetrable and indiscerpible. The fitness of which definition will be the better understood if we divide substance in general into these first kinds, viz. body and spirit, and then define body to be a substance impenetrable and discerpible. Whence the contrary kind to this is fitly defined a substance penetrable and indiscerpible.

2. Now I appeal to any man that can set aside prejudice and has the free use of his faculties, whether every term in the definition of a spirit is not as intelligible and congruous to reason as in that of a body. For the precise notion of substance is the same in both, in which I conceive, is comprised of extension and activity either connate or communicated. For matter itself once moved can move other matter. And it is as easy to understand what penetrable is as impenetrable, and what indiscerpible as discerpible, and penetrability and indiscerpibility being as immediate to spirit, as

1. *The immortality of the soul, so farre forth as it is demonstrable from the knowledge of nature and light of reason* (London: Printed by J. Flesher, for William Morden, 1659). [EEBO]

impenetrability and discerpibility to body, there is as much reason to be given for the attributes of the one as of the other, by Axiom 9.[2] And substance in its precise notion including no more of impenetrability then indiscerpibility, we may as well wonder how one kind of substance can so firmly and irresistibly keep out another substance (as matter for example does the parts of matter) as that the parts of another substance hold so fast together, that they are by no means discerpible, as we have already intimated. And therefore this holding out in one being as difficult a business to conceive as the holding together in the other, this can be no prejudice to the notion of a spirit. For there may be a very fast union where we cannot at all imagine the cause thereof, as in such bodies which are exceeding hard, where no man can fancy what holds the parts together so strongly. And there being no greater difficulty here than that a man cannot imagine what holds the parts of a spirit together, it will follow by Axiom 7[3] that the notion of a spirit is not to be excepted against as an incongruous notion, but is to be admitted for the notion of a thing that may really exist.

3. It may be doubted whether there may not be essences of a middle condition between these corporeal and incorporeal substances we have described, and that of two sorts: the one impenetrable and indiscerpible, the other penetrable and discerpible. But concerning the first, if impenetrability be understood in reference to matter, it is plain there can be no such essence in the world; and if in reference to its own parts, though it may then look like a possible idea in itself, yet there are no footsteps of the existence thereof in nature, the souls of men and daemons implying contraction and dilatation in them. As for the latter, it has no privilege for anything more then matter itself has, or some mode of matter. For it being discerpible, it is plain its union is by juxtaposition of parts, and the more penetrable, the less likely to convey sense and motion to any distance. Besides the ridiculous sequel of this supposition, that will fill the universe with an infinite number of shreds and rags of souls and spirits never to be reduced again to any use or order. And lastly, the proper notion of a substance incorporeal fully counter-distinct to a corporeal substance, necessarily including in it so strong and indissoluble union of parts that it is utterly indiscerpible, whereas yet for all that in this general notion thereof neither sense nor cogitation is implied, it is most rational to conceive, that that substance in which they are must assuredly be incorporeal in the strictest signification; the nature of cogitation and communion of sense arguing a more perfect degree of union then is in mere indiscerpibility of parts. But all this scrupulosity might have been saved, for I confidently promise myself that there are none so perversely given to prevarications and subterfuges, but that they will acknowledge when I can prove that there is a substance distinct from body or matter, that it is in the most full and proper sense incorporeal.

### *Book I, Chap. V.*

1. The definition belonging to all finite and created spirits. 2. Of indiscerpibility, a symbolical representation thereof. 3. An objection answered against that representation.

1. WE have done with the notion of that infinite and uncreated spirit we usually call God; we come now to those that are created and finite, like the spirits of angels, men and brutes, we will cast in the seminal forms also, or archei, as the chemists call them, though happily the world stands in no need of them. The properties of a spirit, as it is a notion common to all these,

2. "There are some properties, powers and operations immediately appertaining to a thing of which no reasons can be given nor ought to be demanded, nor the way or manner of the cohesion of the attribute with the subject can by any means be fancied or imagined." Book I, Chapter II.

3. "What is plainly and manifestly concluded ought to be held undeniable when no difficulties are alleged against it, but such as are acknowledged to be found in other conclusions held by all men undeniably true." Book I, Chapter II.

I have already enumerated in my *Antidote*, Lib. 1. cap. 4.: self-motion, self-penetration, self-contraction and dilatation, and indivisibility, by which I mean indiscerpibility, to which I added penetrating, moving, and altering of matter. We may therefore define this kind of spirit we speak of, to be a substance indiscerpible, that can move itself, that can penetrate, contract, and dilate itself, and can also penetrate, move, and alter matter. We will now examine every term of this definition, from whence it shall appear that it is as congruous and intelligible as those definitions that are made of such things as all men without any scruple acknowledge to exist.

2. Of the indiscerpibility of a spirit we have already given rational grounds to evince it not impossible, it being an immediate attribute thereof, as impenetrability is of a body, and as conceivable or imaginable, that one substance of its own nature may invincibly hold its parts together, so that they cannot be disunited nor dissevered, as that another may keep out so stoutly and irresistibly another substance from entering into the same space or place with itself. For this ... impenetrability is not at all contained in the precise conception of a substance as substance, as I have already signified. But besides that reason may thus easily apprehend that it may be so, I shall a little gratify imagination, and maybe reason too, in offering the manner how it is so, in this kind of spirit we now speak of. That ancient notion of light and intentional species is so far from a plain impossibility that it has been heretofore generally, and is still by very many persons, looked upon as a truth, that is, that light and colour do ray in such sort as they are described in the peripatetic philosophy. Now it is observable in light that it is most vigorous towards its fountain, and fainter by degrees. But we will reduce the matter to one lucid point, which according to the acknowledged principles of optics, will fill a distance of space with its rays of light, which rays may indeed be reverberated back towards their center by interposing some opaque body, and so this orb of light contracted; but, according to the Aristotelean hypothesis, it was always accounted impossible that they should be clipped off, or cut from this lucid point, and be kept apart by themselves. Those whom dry reason will not satisfy, may, if they please, entertain their fancy with such a representation as this, which may a little ease the anxious importunity of their mind when it too eagerly would comprehend the manner how this spirit we speak of may be said to be indiscerpible. For think of any ray of this orb of light, it does sufficiently set out to the imagination how extension and indiscerpibility may consist together. See further in my *Antidote*, Lib. 1. cap. 4. as also the Appendix cap. 3. and 10.

3. But if any object, that the lucid center of this orb or the primary substance, as I call it, in the before mentioned places, is either divisible or absolutely indivisible, and if it is divisible, that as concerning that inmost of a spirit, this representation is not at all serviceable to set off the nature thereof by shewing how the parts there may hold together so indiscerpibly, but if absolutely indivisible, that it seems to be nothing. To this I answer what Scaliger somewhere has noted, *that what is infinitely great or infinitely small the imagination of man is at a loss to conceive it.* Which certainly is the ground of the perplexity of that problem concerning matter, as to whether it consists of points or only of particles divisible *in infinitum.* But to come more closely to the business, I say that though we should acknowledge the inmost center of life, or the very first point, as I may so call it, of the primary substance (for this primary substance is in some sort gradual) to be purely indivisible, it does not at all follow, no not according to imagination itself, that it must be nothing. For let us imagine a perfect plane, and on this plane a perfect globe, we cannot conceive but this globe touches the plane, and that in what we ordinarily call a point, or else the one would not be a globe or the other not a plane. Now it is impossible that one body should touch another, and yet touch one another in nothing. Wherefore this inmost center of life is something, and something so full of essential vigour and virtue, that though gradually it diminishes, yet can fill a certain sphere of space with its own presence and activity, as a spark of light illuminates the dusk air. Wherefore there being no greater perplexity nor subtlety in the consideration of

this center of life or inmost of a spirit, then there is in the atoms of matter, we may by Axiom 7 rightly conclude, that indiscerpibility has nothing in the notion thereof, but what may well consist with the possibility of the existence of the subject whereunto it belongs.

*Book I, Chap. VII.*

1. Of the self-motion of a spirit. 2. Of self-penetration. 3. Of self-contraction and dilatation. 4. The power of penetrating of matter. 5. The power of moving, 6. And of altering the Matter.

1. WE have proved the indiscerpibility of a spirit as well in center as circumference, as well in the primary as secondary substance thereof, to be a very consistent and congruous notion. The next property is self-motion, which must of necessity be an attribute of something or other. For by self-motion I understand nothing else but self-activity, which must pertain to a subject active in itself. Now what is simply active in itself, can no more cease to be active than to be, which is a sign that matter is not active in itself, because it is reducible to rest; which is an argument not only that self-activity belongs to a spirit, but that there is such a thing as a spirit in the world from which activity is communicated to matter. And indeed if matter as matter had motion, nothing would hold together but flints, adamant, brass, iron; yea this whole Earth would suddenly melt into a thinner substance than the subtle air, or rather it never had been condensed together to this consistency we find it. But this is to anticipate my future purpose of proving that there are spirits existing in the world. It had been sufficient here to have asserted that self-motion or self-activity is as conceivable to pertain to spirit as body, which is plain at first sight to any man that appeals to his own faculties. Nor is it at all to be scrupled at that anything should be allowed to move itself because our adversaries that say there is nothing but matter in the world, who must of necessity (as I have intimated already) confess that this matter moves itself, though it be very incongruous so to affirm.

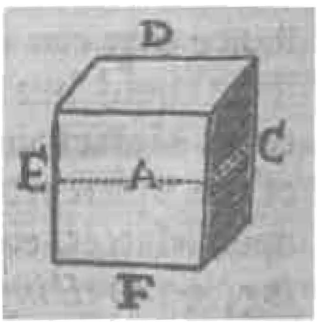
2. The congruity and possibility of self-penetration in a created spirit is to be conceived, partly from the limitedness of the subject, and partly from the foregoing attributes of indiscerpibility and self-motion. For self-penetration cannot belong to God because it is impossible anything should belong to him that implies imperfection, and self-penetration cannot be without the lessening of the presence of that which does penetrate itself, or the implication that some parts of that essence are not so well as they may be, which is a contradiction in a being which is absolutely perfect. From the attributes of indiscerpibility and self-motion (to which you may add penetrability from the general notion of a spirit) it is plain that such a spirit as we define having the power of motion upon the whole extent of its essence, may also determine this motion according to the property of its own nature. And therefore if it determine the motion of the exterior parts inward, they will return inward towards the center of essential power, which they may easily do without resistance, the whole subject being penetrable and without damage, it being also indiscerpible.

3. From this self-penetration we do not only easily, but necessarily, understand self-contraction and dilatation to arise. For this self-moving substance, which we call a spirit, cannot penetrate itself, without contracting itself; nor restore itself again to its former state, without dilating itself; so that we need not at all insist upon these terms.

4. That power which a spirit has to penetrate matter we may easily understand if we consider a spirit only as a substance whose immediate property is activity. For then it is not harder to imagine this active substance to pervade this or the other part of matter, than it is to conceive the pervading or disspreading of motion itself therein.

5. The greatest difficulty is to fancy how this spirit, being so incorporeal, can be able to move matter, even though it is in it. For it seems so subtle that it will pass through leaving no more footsteps of its being there than the lightening does in the scabbard, though it may happily melt

the sword because it there finds resistance. But a spirit can find no resistance anywhere, the closest matter being easily penetrable and pervious to an incorporeal substance. The ground of this difficulty is founded upon the inconceivableness of any union that can be between the matter and a substance that can so easily pass through it. For if we could but once imagine a union between matter and a spirit, the activity then of the Spirit would certainly have influence upon matter, either for begetting, or increasing, or directing the motion thereof. But notwithstanding the penetrability and easy passage of a spirit through matter, there is yet for all that a capacity of a strong union between them, and it is every whit as conceivable as between the parts of matter themselves. For what glue or cement holds the parts of hard matter in stones and metals together, or, if you will, what is absolutely hard so that it has no pores or particles, but is one continued and perfectly homogeneous body, not only to sense, but according to the exact idea of reason? what cement holds together the parts of such a body as this? Certainly nothing but immediate union and rest. Now for union, there is no comparison between that of matter with matter, and this of spirit with matter. For the first is only superficial, and in this latter the very inward parts are united point to point throughout. Nor is there any fear it will not take hold, because it has a capacity of passing through. For in this absolutely solid hard body, which let be A, in which let us conceive some inward superficies, suppose E. A. C., this superficies is so smooth as nothing can be conceived smoother. Why does not therefore the upper E. D. C. slide upon the neather part E. F. C. upon the least motion imaginable, especially E. F. C. being supposed to be held fast while the other is thrust against? This facility therefore of one body passing upon another without any sticking, seeming as necessary to our fancy as a spirit's passing through all bodies without taking hold of them, it is plain by Axiom 7. That




a firm union of spirit and matter is very possible, though we cannot conceive the manner thereof. And as for rest, it is compatible also with this conjunction of matter with spirit, as well as of matter with matter. For suppose the whole body A. moved with like swiftness in every part, the parts of A. then are according to that sense of rest, by which they would explain the adhesion of the parts of matter one with another, truly quiescent. So say I that in the union of matter and spirit, the parts of the matter receiving from the spirit just such a velocity of motion as the spirit exerts, and no more, they both rest in firm union one with another. That which comes to pass even then when there is far less immediate union than we speak of. For if we do but lay a book on our hand, provided our hand is not moved with a swifter motion than it communicates to the book, nor the book be pushed on faster than the swiftness of our hand, the book and our hand will most certainly retain their union and go together. So natural and easy is it to conceive how a spirit may move a body without any more perplexity or contradiction than is found in the union and motion of the parts of matter itself.

6. The last term I put in the definition of a spirit, is the power of altering matter, which will necessarily follow from its power of moving it or directing its motion. For alteration is nothing else but the varying of either the figures, or postures, or the degrees of motion in the particles, all of which are nothing else but the results of local motion. Thus have we cleared the intelligibility and possibility of all the terms that belong to the notion of a created spirit in general, at least of such as may be rationally conceived to be the causes of any visible phenomena in the world. We will now descend to the defining of the chief species thereof.

*Book II, Chap. X.*

1. That the soul is not confined to the common sensorium. 2. The first argument from the Plastick power of the soul. 3. Which is confirmed from the gradual dignity of the soul's faculties, of which this Plastick is the lowest; 4. External

sensation the next; 5. After that imagination, and then reason. 6. The second argument from passions and sympathies in animals. 7. An illustration of the manner of natural magic. 8. The third argument from the perception of pain in the exterior parts of the body. 9. The fourth and last from the nature of sight.

1. WE are now at leisure to resume the two remaining inquiries: the former is, whether the soul be so in this fourth ventricle that it is essentially nowhere else in the body, or whether it be spread out into all the members. Regius would coup it up in the conarion (pineal gland), which he believes to be the common sensorium, and so by consequence it should be confined to the fourth ventricle, and not expatiate at all thence supposing that to be the seat of common sense.[4] The reason of this conceit of his is this: that whatever is in the rest of the body may come to pass by powers merely mechanical, wherein he does very superstitiously tread in the footsteps of his master Descartes. But for my own part, I cannot but dissent, I finding in neither any sufficient grounds in so novel an opinion, but rather apparent reasons to the contrary.

2. As first the frame of the body, of which I think most reasonable to conclude the soul herself to be the more particular architect (for I will not wholly reject Plotinus his opinion) and that the Plastick power resides in her, as also in the souls of brute animals, as very learned and worthy writers have determined. That the fabric of the body is out of the concourse of atoms is a mere precarious opinion without any ground or reason. For sense does not discover any such thing, the first rudiments of life being out of some liquid homogeneous matter; and it is against reason that the tumbling of atoms or corporeal particles should produce such exquisite frames of creatures, wherein the acutest wit is not able to find any thing inept, but all done exquisitely well everywhere, where the foulness and coarseness of matter has not been in fault. That God is not the immediate maker of these bodies, the particular miscarriages demonstrate. For there is no matter so perverse and stubborn but his omnipotency could tame, whence there would be no defects nor monstrosities in the generation of animals. Nor is it so congruous to admit that the Plastick faculty of the soul of the world is the sole contriver of these fabrics of particular creatures (though I will not deny but she may give some rude preparative strokes towards formation) but that in every particular world, such as man is especially, his own soul is the peculiar and most perfective architect thereof, as the soul of the world is of it. For this vital fabrication is not as in artificial architecture, when an external person acts upon matter, but implies a more particular and near union with that matter it thus intrinsically shapes out and organizes. And what ought to have a more particular and close union with our bodies than our souls themselves? My opinion is therefore that the soul, which is a spirit, and therefore contractible and dilatable, begins within less compass at first in organizing the fitly-prepared matter, and so bears itself on in the same tenor of work till the body has attained its full growth, and that the soul dilates itself in the dilating of the body, and so possesses it through all the members thereof.

3. The congruity of this truth will further discover itself, if we consider the nature of the faculties of the Soul (of which you may read more fully in *Enthusiasmus Triumphatus* Artic. 3, 4, 5.) in what a natural gradualness they arise till they come to the most free of all. The deepest or lowest is this Plastick power we have already spoken of, in virtue whereof is continued that perpetual systole and diastole of the heart, as I am more prone to think than that it is merely mechanical, as also that respiration that is performed without the command of our will: For the liberation or reciprocation of the spirits in the tensility of the muscles would not be so perpetual, but cease in a small time, did not some more mystical principle than what is merely mechanical give assistance, as any one may understand by observing the insufficiency of those devices that Henricus Regius propounds for

4. Henricus Regius (1598–1679) was a Dutch physician and natural philosopher.

adequate causes of such motions in the body. These I look upon as the first faculties of the soul, which may be bounded by this general character—that the exercise of them does not at all imply so much as our perception.

4. Next to these is the sensation of any external object, such as hearing, seeing, feeling, etc., all of which include perception in an irresistible necessity there of the object being present before us, and no external obstacle interposing.

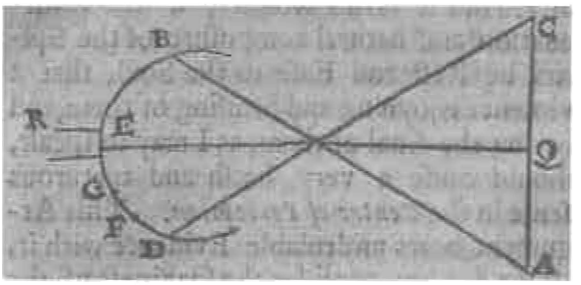
5. Imagination is more free, we being able to avoid its representations for the most part without any external help, but it is a degree on this side of will and reason, by which we correct and silence unallowable fancies. Thus we see how the faculties of the soul arise by degrees, which makes it still the more easy and credible that the lowest of all is compatible to her as well as the highest.

6. Moreover, passions and sympathies, in my judgment, are more easily to be resolved into this hypothesis of the soul's pervading the whole body than in restraining its essential presence to one part thereof. For to believe that such a horrible object as, suppose, a bear or tiger, by transmission of motion from it through the eyes of an animal to the conarion, shall so reflect thence as to determine the spirits into such nerves as will straighten the orifice of the heart and lessen the pulse, and cause all other symptoms of fear, seems to me little better then a mere piece of mechanical credulity. Those motions that represent the species of things being turned this way or the other way, without any such impetus of matter as should do such feats as Descartes speaks of in his book of passions (*The Passions of the Soul*), and that which he would give us as a pledge of this truth is so false that it does the more animate me to disbelieve the theorem, Article 13. For the wafting of one's hand near the eye of a man's friend is no sufficient proof that external objects will necessarily and mechanically determine the spirits into the muscles with no faculty of the soul intermeddling. For if one be fully assured, or rather can keep himself from the fear of any hurt, by the wafting of his friend's hand before his eye, he may easily abstain from blinking. But if fear surprise him, the soul is to be entitled to the action, and not the mere mechanism of the body. Wherefore this is no proof that the phenomena of passions with their consequences may be saved in brute beasts by pure mechanics, and therefore neither in men; but it is evident that they arise in us against both our will and appetite. For who would bear the tortures of fears and jealousies if he could avoid it? And therefore the soul sends not nor determines the spirits thus to her own torture, as she resides in the head. Whence it is plain that it is the effect of her as she resides in the heart and stomach, which sympathize with the horrid representation in the common sensorium, by reason of the exquisite unity of the soul with herself, & of the continuity of spirits in the body, the necessary instrument of all her functions. And there is good reason the heart & stomach should be so much affected, they being the chief seats of those faculties that maintain the life of the body—the danger whereof is the most eminent object of fear in any animal.

7. From this principle, I conceive that not only the sympathy of parts in one particular subject, but of different and distant subjects, may be understood: such as is between the party wounded and the knife or sword that wounded him besmeared with the weapon-salve and kept in a due temper, which certainly is not purely mechanical, but magical, though not in an unlawful sense; that is to say, it is not to be resolved into mere matter of whatever thinness or subtlety soever you please, but into the unity of the soul of the universe and continuity of the subtle matter, which answers to our animal spirits. And in this sense it is that Plotinus says that the world is the grand magus or enchanter. And I do not question but that upon this score merely, without the association of any familiar spirit, several odd things may be done for evil as well as good. For this spirit of the world has faculties that work not by election, but fatally or naturally, as several gamaitus we meet with in nature seem somewhat obscurely to subindicate. Of this principle we shall speak more fully in its due place.

8. But we have yet a more clear discovery that our soul is not confined to any one part of the head, but

possesses the whole body from the perception of pain in the parts thereof. For it is plainly impossible that so high a torture as is felt but in the pricking of a pin can be communicated to the center of perception upon a mere mechanical account. For whether the immediate instrument of sense be the pith of the nerves, as Descartes would have it, or whether it be the spirits, as is most true, it is ridiculous to think that by the forcible parting of what was joined together at ease (when this case is not communicated to either the spirits, or pith of the nerves from the place of the puncture to the very seat of common sense) that the soul there seated should feel so smart a torment, unless that her very essence did reach to the part where the pain is felt to be. For then the reason of this is plain, that it is the unity of soul possessing the whole body and the continuity of spirits that is the cause thereof. And it is no wonder if the continuation and natural composure of the spirits be rest and ease to the soul that a violent disjoining and bruising of them, and baring the soul of them, as I may so speak, should cause a very harsh and torturous sense in the centre of perception. This argument bears undeniable evidence with it if we do but consider the fuzziness of the pith of the nerves and the fluidity of the spirits, and what little stress or crowding so small a thing as a pin or needle can make in such soft and liquid matter.




9. Lastly, unless the very essence of the soul reach from the common sensorium to the eye, there will be very great difficulties in how there should be so distinct a representation of any visible object. For it is very hard to conceive that the colours will not be confounded and the bigness of the object diminished, and indeed that the image will not be quite lost before it can come to the soul, if it be only in the common sensorium. For it is plain, and experience will demonstrate that there is a very perfect image of the object in the bottom of the eye, which is made by the decussation of the lines of motion from it thus: The line A. B. from the object A. C. bears against that point in the bottom of the eye in B, and the line C. D. against the point D; whereby C. and A. are felt in their place and in such a distance as they are in the object C. A: and so of all the lines which come from the object C. A. into the bottom of the eye B. D. From whence the object is felt in such a length and breadth as it is capable of being perceived at such a distance from the eye. And as the motion that is conveyed from A. to B, and from C. to D is felt there, so the modification of it, whereby the object in those parts may seem red, yellow, green, or any other colour also. Whence it is plain that there will be an exquisite impression, according to all circumstances of the object, in the bottom of the eye: so that if the soul receive it there, and convey it thence to her centre of perception entirely in the same circumstances, the representation will be complete. But if the soul is not there, but the conveyance thereof must be left to the bare laws of matter, the image will be much depraved, or lost, before it can come to the common sensorium. For this motion must be propagated from B and D, till it come to the hole E, and so pass into the optic nerve, to be carried into the brain, and so to the seat of common sense: but between B and E, or D and E, there may be the depiction of sundry colours, whence it will be necessary that F be tinctured with the colour D, and G with the colour of both D and F; and so of the rest of the lines drawn from the object to the eye: so that all their colours would be blended before they came to E. Now at that harsh flexure at E, where the visual line is as crooked as B E R, according to the experiments of reflection and refraction, the breadth or length of the object C A. would be lost. For we must expect, that as it is in reflections and refractions, where the object will appear in that line that immediately conveys the sense of it, so here it must be also, and therefore the point C and A must appear about Q, whence the object will shrivel up in a manner into nothing. And suppose it might appear in some tolerable latitude, for all this, the brain being an opaque substance, so soon as the

motion comes thither it would be so either changed or lost that the image could not pass the opacity of it in any splendor or entirety. Wherefore I do not doubt but that the image which the soul perceives is that in the eye, and not any other corporeality produced to the inside of the brain (where colour and figure would be so strangely depraved, if not quite obliterated). I mean it is the concourse of the lucid spirits in the bottom of the eye with the outward light conveyed through the humours thereof (which is the best sense of the Platonic *Sunaugeia*[5] that Plutarch speaks of) wherein the great mystery of sight consists.

5. "Sunaugeia" is defined by Liddell and Scott as the "meeting of the rays of sight from the eye with the rays of light from the object seen." Henry George Liddell and Robert Scott, *A Greek-English Lexicon* (Oxford: Clarendon Press, 1940).

CHAPTER 9

# RALPH CUDWORTH
## (1617–1688)

RALPH CUDWORTH WAS BORN IN ALLER, SOMERSET. HE ENROLLED IN EMMANUEL College, Cambridge, in 1632, earned his BA and MA, and was elected Fellow in 1639. He became Regius Professor of Hebrew and Master of Clare College in 1647, and Master of Christ's College in 1654. While he only published one philosophical work in his lifetime, the weighty *True Intellectual System of the Universe* (1678), two of his treatises were published posthumously: *A Treatise Concerning Eternal and Immutable Morality* (1731) and *A Treatise of Freewill* (1848). These works likely circulated prior to their publication. Cudworth had two sons who did not survive him. However, his daughter, Damaris Masham, followed in his philosophical footsteps, both defending and propagating her father's views to other philosophers, such as G.W. Leibniz, and producing several philosophical works of her own.

Cudworth is primarily known as a leading member of the Cambridge Platonists, along with his friend, Henry More, and others. This group of philosophers and theologians received the moniker for having been educated at Cambridge and for drawing on, in various ways and to differing degrees, Platonic views.

The text we have selected concerns Cudworth's most influential and controversial metaphysical claim: that there exists a "Plastick nature" which is a living, but non-conscious entity that permeates the world and, acting on God's command, forms all living things. In this selection, Cudworth argues that there is a need for such a Plastick nature because the world cannot be completely described by mechanical explanations of matter. In addition, he provides arguments for the coherence of such an entity and its particular nature. Lastly, he argues that there may also be a Plastick nature for the entire world, in

ABOVE: *Ralph Cudworth.* By George Vertue, after David Loggan, 1731.

addition to those that fashion living animals, living plants, etc., or that there may be multiple such entities for different sorts of living things.

## STUDY QUESTIONS

1. According to Cudworth, if there is no Plastick nature, what are the two other options for how animal bodies are formed?
2. Why does Cudworth think the mechanistic account of the formation of animal bodies is unsatisfactory?
3. What are Cudworth's reasons for thinking God does not immediately do all things?
4. How would you characterize Plastick nature? That is, describe what it is, what it does, and how it does it.
5. What is Cudworth's argument for the existence of a general Plastick nature?

## THE TRUE INTELLECTUAL SYSTEM OF THE UNIVERSE[1]

*XXXVII*

1. For we think it fit here to observe that neither the cosmo-Plastick or Stoic nor the hylozoic or stratonic atheists are therefore condemned by us, because they suppose such a thing as a Plastick nature or life distinct from the animal; albeit this is not only exploded as an absolute non-entity by the atomic atheists who ... make the whole world to be nothing else but a mere heap of dust, fortuitously agitated, or a dead cadaverous thing that hath no signatures of mind and understanding, counsel and wisdom at all upon it. Nor indeed any other vitality acting in it than merely the production of a certain quantity of local motion and the conservation of it according to some general laws, which things the democritic atheists take for granted, would all be as they are, though there were no God. And thus, Aristotle describes this kind of philosophy: that it made the whole world to consist of nothing but bodies and monads (that is, atoms or small particles of matter) only ranged and disposed together into such an order, but altogether dead and inanimate.

2. For unless there is such a thing admitted as a Plastick nature that acts for the sake of something, and in order to ends, regularly, artificially, and methodically, it seems that one or other of these two things must be concluded: that either in the formation and organization of the bodies of animals, as well as the other phenomena, everything comes to pass fortuitously, and happens to be as it is, without the guidance and direction of any mind or understanding; or else, that God himself does it all immediately, and as it were with his own hands form the body of every gnat and fly, insect and mite, as of other animals in generations, all whose members have so much contrivance in them that Galen professed he could never enough admire that artifice which was in the leg of a fly (and yet he would have

1. Excerpted from *The true intellectual system of the universe, wherein all the reason and philosophy of atheism is confuted and its impossibility demonstrated* (London: Printed for Richard Royston, Bookfellow to His Most Sacred Majesty, 1678). [EEBO]

admired the wisdom of nature more had he been but acquainted with the use of microscopes).[2] I say, upon the supposition of no Plastick nature, one or other of these two things must be concluded because it is not conceived by anyone that the things of nature are all thus administered with such exact regularity and constancy everywhere merely by the wisdom, providence, and efficiency of those inferior spirits, daemons, or angels. As also, though it be true that the works of nature are dispensed by a divine law and command, yet this is not to be understood in a vulgar sense, as if they were all effected by the mere force of a verbal law or outward command because inanimate things are not commandable nor governable by such a law; and therefore besides the divine will and pleasure, there must needs be some other immediate agent and executioner provided for the producing of every effect. Since not so much as a stone or other heavy body could at any time fall downward merely by the force of a verbal law without any other efficient cause. But either God himself must immediately impel it, or else there must be some other subordinate cause in nature for that motion. Wherefore the divine law and command, by which the things of nature are administered, must be conceived to be the real appointment of some energetic effectual and operative cause for the production of every effect.

3. Now to assert the former of these two things, that all the effects of nature come to pass by material and mechanical necessity or the mere fortuitous motion of matter, without any guidance or direction, is a thing no less irrational than it is impious and atheistic. Not only because it is utterly inconceivable and impossible that such infinite regularity and artificialness as is everywhere throughout the whole world should constantly result out of the fortuitous motion of matter, but also because there are many such particular phenomena in nature as do plainly transcend the powers of mechanism, of which therefore no sufficient mechanical reasons can be devised, as the motion of respiration in animals. As there are also other phenomena that are perfectly cross to the laws of mechanism, as for example, that of the distant poles of the equator and ecliptic which we shall insist upon afterward. Of both which kinds there have been other instances proposed by my learned friend Dr. More in his *Enchiridion Metaphysicum*, and very ingeniously improved by him to this very purpose, namely to evince that there is something in nature besides mechanism, and consequently substance incorporeal.

Moreover those theists who philosophize after this manner by resolving all the corporeal phenomena into fortuitous mechanism, or the necessary and unguided motion of matter, make God to be nothing else in the world but an idle spectator of the various results of the fortuitous and necessary motions of bodies, and render his wisdom altogether useless and insignificant, as being a thing wholly enclosed and shut up within his own breast and not at all acting abroad upon anything without him.

Furthermore, all such mechanists as these, whether theists or atheists, do, according to that judicious censure passed by Aristotle long since upon Democritus, but substitute as it were a carpenter's or artificer's wooden hand moved by strings and wires instead of a living hand. They make a kind of dead and wooden world, as if it were a carved statue that hath nothing neither vital nor magical at all in it. Whereas to those who are considerate, it will plainly appear that there is a mixture of life or Plastick nature together with mechanism, which runs through the whole corporeal universe.

And whereas it is pretended, not only that all corporeal phenomena may be sufficiently salved mechanically without any final, intending, and directive causality, but also that all other reasons of things in nature besides the material and mechanical are altogether unphilosophical. The same Aristotle ingeniously exposes the ridiculousness of this pretense after this manner telling us: that it is just as if a carpenter, joiner, or carver should give this account as the only satisfactory of any artificial fabric or piece of carved imagery,

2. Galen (*Galēnos*, 129–c. 200 CE) was a Greek physician in the Roman Empire. His medical works were extremely influential.

because the instruments, axes and hatchets, planes and chisels, happened to fall so and so upon the timber, cutting it here and there, that therefore it was hollow in one place and plain in another, and the like, and by that means the whole came to be of such a form. For is it not altogether as absurd and ridiculous for men to undertake to give an account of the formation and organization of the bodies of animals by mere fortuitous mechanism, without any final or intending causality, as to why there was a heart here and brains there, and why the heart had so many and such different valves in the entrance and outlet of its ventricles, and why all the other organic parts, veins and arteries, nerves and muscles, bones and cartilages, with the joints and members, were of such a form? Because indeed, the fluid matter of the seed happened to move so and so, in several places, and thereby to cause all those differences which are also diverse in different animals. All being the necessary result of a certain quantity of motion at first indifferently impressed upon the small particles of the matter of this universe turned around in a vortex. But as the same Aristotle adds, no carpenter or artificer is so simple as to give such an account as this and think it satisfactory, but he will rather declare that he himself directed the motion of the instruments after such a manner and in order to such ends. A carpenter would give a better account than so for he would not think it sufficient to say that the fabric came to be of such a form because the instruments happened to fall so and so, but he will tell you that it was because he himself made such strokes, and that he directed the instruments and determined their motion after such a manner to this end that he might make the whole a fabric fit and useful for such purposes. And this is to assign the final cause. And certainly there is scarcely any man in his wits, that will not acknowledge the reason for the different valves in the heart from the apparent usefulness of them according to those particular structures of theirs, to be more satisfactory than any which can be brought from mere fortuitous mechanism or the unguided motion of the seminal matter.

4. And as for the latter part of the disjunction—that everything in nature should be done immediately by God himself—this, as according to vulgar apprehension, would render divine providence operose, solicitous, and distractive, and thereby make the belief of it to be entertained with greater difficulty and give advantage to atheists. So in the judgment of the writer of *De Mundo*, it is not so decorous in respect of God neither that he should set his own hand, as it were, to every work and immediately do all the meanest and trifling-est things himself drudgingly without making use of any inferior and subordinate instruments. If it were not congruous in respect of the state and majesty of Xerxes the great King of Persia that he should condescend to do all the meanest offices himself, much less can this be thought decorous in respect of God. But it seems far more august and becoming of the divine majesty that a certain power and virtue derived from him, and passing through the universe, should move the sun and moon and be the immediate cause of those lower things done here upon earth.

Moreover it seems not so agreeable to reason neither that nature, as a distinct thing from the Deity, should be quite superseded or made to signify nothing, God himself doing all things immediately and miraculously; from whence it would follow also that they are all done either forcibly and violently, or else artificially only, and none of them by any inward principle of their own.

Lastly, this opinion is further confuted by that slow and gradual process that is in the generations of things, which would seem to be but a vain and idle pomp, or a trifling formality, if the agent were omnipotent. As also by those errors and bungles which are committed when the matter is inept and contumacious, which argue the agent not to be irresistible, and that nature is such a thing as is not altogether incapable (as well as human art) of being sometimes frustrated and disappointed by the indisposition of matter. Whereas an omnipotent agent, since it could dispatch its work in a moment, so it would always do it infallibly and irresistibly—no ineptitude or stubbornness of matter being

ever able to hinder such a one or make him bungle or fumble in anything.

5. Wherefore since neither all things are produced fortuitously, or by the unguided mechanism of matter, nor God himself may reasonably be thought to do all things immediately and miraculously, it may well be concluded that there is a Plastick nature under him, which as an inferior and subordinate instrument, does drudgingly execute that part of his providence which consists in the regular and orderly motion of matter. Yet so as that there is also besides this a higher providence to be acknowledged, which presiding over it does often supply the defects of it, and sometimes overrule it, forasmuch as this Plastick nature cannot act electively nor with discretion. And by this means the wisdom of God will not be shut up nor concluded wholly within his own breast, but will display itself abroad and print its stamps and signatures everywhere throughout the world. So that God, as Plato (after Orpheus) speaks, will be not only the beginning and end, but also the middle of all things, they being as much to be ascribed to his causality as if himself had done them all immediately without the concurrent instrumentality of any subordinate natural cause. Notwithstanding which, in this way it will appear also to human reason that all things are disposed and ordered by the Deity without any solicitous care or distractive providence.

And indeed those mechanic theists who rejecting a Plastick nature affect to concern the Deity as little as is possible in mundane affairs, either for fear of debasing him and bringing him down to too mean offices, or else of subjecting him to solicitous encumberment, and for that cause would have God to contribute nothing more to the mundane system and economy than only the first impressing of a certain quantity of motion upon the matter and the after-conserving of it according to some general laws. These men (I say) seem not very well to understand themselves in this. Forasmuch as they must of necessity either suppose these their laws of motion to execute themselves, or else be forced perpetually to concern the Deity in the immediate motion of every atom of matter throughout the universe in order to the execution and observation of them. The former of which being a thing plainly absurd and ridiculous, and the latter that which these philosophers themselves are extremely abhorrent of, we cannot make any other conclusion than this: that they do but unskillfully and unawares establish that very thing which in words they oppose, and that their laws of nature concerning motion are really nothing else but a Plastick nature acting upon the matter of the whole corporeal universe, both maintaining the same quantity of motion always in it, and also dispensing it (by transferring it out of one body into another) according to such laws, fatally impressed upon it. Now if there be a Plastick nature that governs the motion of matter everywhere according to laws, there can be no reason given why the same might not also extend further to the regular disposal of that matter in the formation of plants and animals and other things, in order to that apt coherent frame and harmony of the whole universe.

8. Now this Plastick nature being a thing which is not without some difficulty in the conception of it, we shall here endeavour to do these two things concerning it. First, to set down a right representation thereof, and then afterwards to show how extremely the notion of it hath been mistaken, perverted, and abused by those atheists who would make it to be the only God Almighty, or First Principle of all things.

9. In the next place we are to observe that though the Plastick nature be a kind of art, yet there are some considerable preeminences which it has above human art, the first whereof is this: that whereas human art cannot act upon the matter otherwise than from without and at a distance, nor communicate itself to it but with a great deal of tumult and hurly burly, noise and clatter, it using hands and axes, saws and hammers, and after

this manner with much ado, by knockings and thrustings, slowly introducing its form or idea (as for example of a ship or house) into the materials. Nature in the meantime is another kind of art, which insinuating itself immediately into things themselves, and there acting more commandingly upon the matter as an inward principle, does its work easily, cleverly and silently. Nature is art as it were incorporated and embodied in matter, which does not act upon it from without mechanically, but from within vitally and magically etc. Here are no hands nor feet nor any instrument connate or adventitious, there being only need of matter to work upon and to be brought into a certain form, and nothing else. For it is manifest that the operation of nature is different from mechanism, it not doing its work by pushing or pulsion, by knockings or thrustings, as if it were without that which it wrought upon. But as God is inward to everything, so nature acts immediately upon the matter, as an inward and living soul or law in it.

10. Another preeminence of nature above human art is this, that whereas human artists are often to seek and at a loss, and therefore consult and deliberate, and also upon second thoughts mend their former work, nature, on the contrary, is never to seek what to do, nor at a stand, and for that reason also (besides another that will be suggested afterwards) it does never consult nor deliberate.... And nature is this art, which never hesitates nor studies, as unresolved what to do, but is always readily prompted. Nor does it ever repent afterwards of what it has formerly done or go about, as it were upon second thoughts, to alter and mend its former course, but it goes on in one constant, unrepentant tenor from generation to generation because it is the stamp or impress of that infallibly omniscient art of the divine understanding, which is the very law and rule of what is simply the best in everything.

And thus, we have seen the difference between nature and human art: that the latter is imperfect art, acting upon the matter from without and at a distance, but the former is art itself or perfect art, acting as an inward principle in it. Wherefore when art is said to imitate nature, the meaning thereof is that imperfect human art imitates that perfect art of nature, which is really no other than the divine art itself, as before Aristotle, Plato had declared in his *Sophist* in these words: Those things which are said to be done by nature, are indeed done by divine art.

11. Notwithstanding which, we are to take notice in the next place that as nature is not the Deity itself, but a thing very remote from it and far below it, so neither is it the divine art as it is in itself pure and abstract, but concrete and embodied only. For the divine art considered in itself is nothing but knowledge, understanding, or wisdom in the mind of God.

13. But because this may seem strange at the first sight, that nature should be said to act for the sake of ends, and regularly or artificially, and yet be itself devoid of knowledge and understanding, we shall therefore endeavour to persuade the possibility and facilitate the belief of it by some other instances, and first by that of habits, particularly those musical ones of singing, playing upon instruments, and dancing. Which habits direct every motion of the hand, voice, and body, and prompt them readily without any deliberation or studied consideration what the next following note or motion should be. If you jog a sleeping musician and sing but the first words of a song to him, which he had either himself composed or learnt before, he will presently take it from you, and that perhaps before he is thoroughly awake going on with it and singing out the remainder of the whole song to the end. Thus the fingers of an exercised lutist, and the legs and whole body of a skillful dancer, are directed to move regularly and orderly in a long train and series of motions by those artificial habits in them which do not themselves at all comprehend those laws and rules of music or harmony by which they are governed. So that the same thing may be said of these habits, which was said before of nature, that they do not know, but only do. And thus we see there is no reason why this Plastick nature (which is supposed to move body regularly and artificially)

should be thought to be an absolute impossibility since habits do in like manner gradually evolve themselves in a long train or series of regular and artificial motions, readily prompting the doing of them without comprehending that art and reason by which they are directed. The aforementioned philosopher illustrates the seminary reason and Plastick nature of the universe, by this very instance: the energy of nature is artificial, as when a dancer moves, for a dancer resembles this artificial life of nature, forasmuch as art itself moves him, and so moves him as being such a life in him. And agreeably to this conceit, the ancient mythologists represented the nature of the universe by Pan playing upon a pipe or harp and being in love with the nymph Echo, as if nature did, by a kind of silent melody, make all the parts of the universe everywhere dance in measure & proportion, itself being as it were in the meantime delighted and ravished with the reechoing of its own harmony....

14. Moreover, that something may act artificially and for ends without comprehending the reason of what it does may be further evinced from those natural instincts that are in animals, which without knowledge direct them to act regularly in order both to their own good and the good of the universe. As for example, the bees in mellification and in framing their combs and hexagonal cells, the spiders in spinning their webs, the birds in building their nests, and many other animals in such like actions of theirs which would seem to argue a great sagacity in them, whereas notwithstanding, as Aristotle observes, they do these things neither by art nor by counsel nor by any deliberation of their own, and therefore are not masters of that wisdom according to which they act, but only passive to the instincts and impresses thereof upon them. And indeed, to affirm that brute animals do all these things by a knowledge of their own, and which they themselves are masters of, and that without deliberation and consultation, were to make them to be endued with a most perfect intellect far transcending that of human reason. Whereas it is plain enough that brutes are not above consultation, but below it, and that these instincts of nature in them are nothing but a kind of fate upon them.

15. There is in the next place another Imperfection to be observed in the Plastick nature, that as it does not comprehend the reason of its own action, so neither is it clearly and expressly conscious of what it does. In which respect, it does not only fall short of human art, but even of that very manner of acting which is in brutes themselves, who though they do not understand the reason of those actions that their natural instincts lead them to, yet they are generally conceived to be conscious of them, and to do them by fancy. Whereas the Plastick nature in the formation of plants and animals seems to have no animal fancy, no express con-sense or consciousness of what it does.... As intellection and knowledge is a thing superior to fancy, so fancy is superior to the impress of nature, for nature has no apprehension nor conscious perception of anything. In a word, nature is a thing that has no such self-perception or self-enjoyment in it, as animals have.

16. Now we are well aware that this is a thing which the narrow principles of some late philosophers will not admit of, that there should be any action distinct from local motion besides expressly conscious cogitation. For they making the first general heads of all entity to be extension and cogitation, or extended being and cogitative, and then supposing that the essence of cogitation consists in express consciousness, must needs by this means exclude such a Plastick life of nature as we speak of that is supposed to act without animal fancy or express consciousness. Wherefore we conceive that the first heads of being ought rather to be expressed thus: resisting or antitypous [hard] extension and life, (i.e. internal energy and self-activity), and then again, that life or internal self-activity is to be subdivided into such as either acts with express consciousness and synaesthesis or such as is without it, the latter of which is this Plastick life of nature. So that there may be an action distinct from local motion or a vital energy which is not accompanied with that fancy, or consciousness, that is

in the energies of the animal life; that is, there may be a simple internal energy or vital autokinesis, which is without that duplication that is included in the nature of con-sense and consciousness, which makes a being to be present with itself, attentive to its own actions or animadversive of them, to perceive itself to do or suffer, and to have a fruition or enjoyment of itself. And indeed, it must be granted that what moves matter or determines the motion of it vitally must needs do it by some other energy of its own, as it is reasonable also to conceive, that itself has some vital sympathy with that matter which it acts upon. But we apprehend that both these may be without clear and express consciousness.

Wherefore this controversy, whether the energy of the Plastick nature be cogitation or no, seems to be but a logomachy, or contention about words. For if clear and express consciousness is supposed to be included in cogitation, then it must needs be granted that cogitation does not belong to the Plastick life of nature. But if the notion of that word is enlarged so as to comprehend all action distinct from local motion, and to be of equal extent with life, then the energy of nature is cogitation.

17. However, that there may be some vital energy without clear and express con-sense and consciousness, animadversion, attention, or self-perception, seems reasonable upon several accounts. For first, those philosophers themselves who make the essence of the soul to consist in cogitation, and again the essence of cogitation in clear and express consciousness, cannot render it any way probable that the souls of men in all profound sleeps, lethargies, and apoplexies, as also of embryos in the womb from their very first arrival thither, are never so much as one moment without expressly conscious cogitations. Which if they were, according to the principles of their philosophy, they must *ipso facto* cease to have any being. Now if the souls of men and animals be at any time without consciousness and self-perception, then it must needs be granted that clear and express consciousness is not essential to life. There is some appearance of life and vital sympathy in certain vegetables and plants, which however called sensitive plants and plant-animals, cannot well be supposed to have animal sense and fancy or express consciousness in them, although we are not ignorant in the meantime of how some endeavour to save all those phenomena mechanically. It is certain that our human souls themselves are not always conscious of whatever they have in them. For even the sleeping geometrician has at that time all his geometrical theorems and knowledges some way in him; as also the sleeping musician all his musical skill and songs. And therefore why may it not be possible for the soul to have likewise some actual energy in it which it is not expressly conscious of?

We all have experience of our doing many animal actions non-attendingly, which we reflect upon afterwards. As also that we often continue a long series of bodily motions by a mere virtual intention of our minds, and as it were by half a cogitation. That vital sympathy by which our soul is united and tied fast, as it were with a knot, to the body is a thing that we have no direct consciousness of, but only in its effects. Nor can we tell how we come to be so differently affected in our souls from the many different motions made upon our bodies. As likewise we are not conscious to ourselves of that energy by which we impress a variety of motions and figurations upon the animal spirits of our brain in our fantastic thoughts....

18. Wherefore the Plastick nature acting neither by knowledge nor by animal fancy, neither electively nor hormetically, must be concluded to act fatally, magically, and sympathetically. And thus, that curious and diligent inquirer into nature, before commended, resolves: nature moves as it were by a kind of fate or command, acting according to laws. Fate, and the laws or commands of the Deity, concerning the mundane economy (they being really the same thing) ought not to be looked upon neither as verbal things nor as mere will and cogitation in the mind of God, but as an energetical and effectual principle constituted by the Deity

for the bringing of things decreed to pass. The aphrodisian philosopher with others of the ancients have concluded that fate and nature are but two different names for one and the same thing, and that both that which is done fatally is done naturally and also whatever is done naturally is done fatally. But that which we assert in this place is only this, that the Plastick nature may be said to be the true and proper fate of matter or the corporeal world. Now that which acts not by any knowledge or fancy, will or appetite of its own, but only fatally according to laws and impresses made upon it (but differently in different cases) may be said also to act magically and sympathetically.... and again magic is said to be founded in the sympathy and variety of diverse powers conspiring together into one animal. Of which passages, though the principal meaning seems to be this, that the ground of magical fascination is one vital unitive principle in the universe, yet they imply also that there is a certain vital energy not in the way of knowledge and fancy, will and animal appetite, but fatally sympathetic and magical. As indeed that mutual sympathy which we have constant experience of between our soul and our body (being not a material and mechanical, but vital thing) may be called also magical.

19. From what has been hitherto declared concerning the Plastick nature, it may appear that though it is a thing that acts for ends artificially, and which may be also called the divine art, and the fate of the corporeal world, yet for all that it is neither god nor goddess, but a low and imperfect creature. Forasmuch as it is not master of that reason and wisdom according to which it acts nor does it properly intend those ends which it acts for, nor indeed is it expressly conscious of what it does. It not knowing but only doing, according to commands and laws impressed upon it. Neither of which things ought to seem strange or incredible since nature may as well act regularly and artificially without any knowledge and consciousness of its own, as forms of letters compounded together may print coherent philosophic sense, although they understand nothing at all. And it may also act for the sake of those ends that are not intended by itself, but some higher being.... Nay, this Plastick nature is so far from being the first and highest life that it is indeed the last and lowest of all lives; it being really the same thing as the vegetative, which is inferior to the sensitive. The difference between nature and wisdom was before observed, that wisdom is the first and highest thing, but nature the last and lowest; this latter being but an umbratile [shadowy] imitation of the former.... The spermatic reason or Plastick nature is no pure mind or perfect intellect, nor any kind of pure soul neither, but something which depends upon it being as it were an effulgency or eradiation from both together, mind and soul, or soul affected according to mind, generating the same as a lower kind of life.

20. But though the Plastick nature is the lowest of all lives, nevertheless since it is a life, it must be incorporeal; all life being such. For body being nothing but antitypous extension, or resisting bulk, nothing but mere outside and nothing else, together with passive capability, has no internal energy, self-activity, or life belonging to it; it is not so much able to move itself, and therefore much less can it artificially direct its own motion. Moreover, in the formation of the bodies of animals, it is one and the selfsame thing that directs the whole: that which contrives and frames the eye cannot be a distinct thing from that which frames the ear; nor that which makes the hand from that which makes the foot; the same thing which delineates the veins must also form the arteries; and that which fabricates the nerves must also project the muscles and joints. It must be the same thing that designs and organizes the heart and brain with such communications between them; one and the self-same thing must have in it the entire idea and the complete model or platform of the whole organic body. For the several parts of matter distant from one another, acting alone by themselves, without any common directrix, not being able to confer together nor communicate with each other, could

never possibly conspire to make up one such uniform and orderly system or compages as the body of every animal is.[3] The same is to be said likewise concerning the Plastick nature of the whole corporeal universe in which all things are ordered together conspiringly into one. It must be one and the same thing which forms the whole, or else it could never have fallen into such a uniform order and harmony. Now that which is one and the same acting upon several distant parts of matter cannot be corporeal.

21. Now if the Plastick nature be incorporeal, then it must of necessity be either an inferior power or faculty of some soul which is also conscious, sensitive, or rational, or else a lower substantial life by itself devoid of animal consciousness. The Platonists seem to affirm both these together, namely, that there is a Plastick nature lodged in all particular souls of animals, brutes and men, and also that there is a general Plastick or spermatic principle of the whole universe distinct from their higher mundane soul, though subordinate to it and dependent upon it.

23. Besides this Plastick nature which is in animals forming their several bodies artificially as so many microcosms or little worlds, there must also be a general Plastick nature in the macrocosm the whole corporeal universe that makes all things thus to conspire everywhere and agree together into one harmony. Concerning which Plastick nature of the universe, the author of *De Mundo* writes after this manner: *one power passing thorough all things, ordered and formed the whole world.* Again, he calls the same *a spirit and a living and generative nature*, and plainly declares it to be a thing distinct from the Deity, but subordinate to it and dependent on it.... It seems that as there is art in artificial things, so in the things of nature there is another such like principle or cause, which we ourselves partake of, in the same manner as we do of heat and cold from the universe. Wherefore it is more probable that the whole world was at first made by such a cause as this (if at least it were made) and that it is still conserved by the same, than that mortal animals should be so. For there is much more of order and determinate regularity in the heavenly bodies than in ourselves, but more of fortuitousness and inconstant regularity among these mortal things. Notwithstanding which, there are some, who though they cannot but acknowledge that the bodies of animals were all framed by an artificial nature, yet they will contend that the system of the heavens sprung merely from fortune and chance, although there is not the least appearance of fortuitousness or temerity in it.... Wherefore it is manifest that there is some such thing as that which we call nature, that is, that there is not only an artificial, methodical and Plastick nature in animals by which their respective bodies are framed and conserved, but also that there is such a general Plastick nature likewise in the universe by which the heavens and whole world are thus artificially ordered and disposed.

25. Besides this general Plastick nature of the universe, and those particular Plastick powers in the souls of animals, it is not impossible but that there may be other Plastick natures also (as certain lower lives, or vegetative souls) in some greater parts of the universe, all of them depending, if not upon some higher conscious soul, yet at least upon a perfect intellect presiding over the whole. As for example, though it is not reasonable to think that every plant, herb, and pile of grass has a particular Plastick life, or vegetative soul, of its own distinct from the mechanism of the body, nor that the whole earth is an animal endued with a conscious soul. Yet there may possibly be for all we know one Plastick nature or life belonging to the whole terrestrial (or terraqueous) globe, by which all plants and vegetables continuous

3. "Compages" refers to a complex structure of parts that work as a unity.

with it may be differently formed according to their different seeds, just as also minerals and other bodies are framed and whatsoever else is above the power of fortuitous mechanism is effected, as by the immediate cause though always subordinate to other causes, the chief whereof is the Deity. And this perhaps may ease the minds of those who cannot but think it too much to impose all upon one Plastick nature of the universe.