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fides he found in himself, that there was a greater degree of Heat by much in his Breast, near that place where he had made the Incision in the Roe. This made him think that if he could disiect any Animal alive, and look into that Ventricle which he had found empty when he dissected his Dam the Roe, he might possibly find it full of that Substance which inhabited it, and so inform himself whether it were of the Substance with the Fire, and whether it had any Light or Heat in it or not. In order to this he took a Wild Beast and ty'd him down, so that he could not stir, and dissected him after the same manner he had dissected the Roe, till he came to the Heart; and Essaying the left Ventricle first, and opening it, he perceiv'd it was full of an Airy Vapour, which looked like a little Mist or white Cloud, and putting in his Finger, he found it hotter than he could well endure it, and immediately the Creature Dyed. From whence he assuredly concluded, that it was that Moist Vapour which communicated Motion to that Animal, and that there was accordingly in every Animal of what kind so ever, something like it upon the departure of which Death follow'd.

§ 27. He had then a great desire to enquire into the other parts of Animals, to find out their Order and Situation, their uses

The History of Quantity and the manner of their Connexion one with another, and by what means of Communication they enjoy the Benefit of that Moist Vapour, so as to live by it. How that Vapour is continu'd the time it remains, from whence it has its Supplies, and by what Means its Heat is preserv'd. The way which he us'd in this Enquiry was the Dissection of all sorts of Animals, as well Living as Dead, neither did he leave off to make an accurate Enquiry into them, till at length he arrived to the highest degree of Knowledge in this kind which the most Learned Naturalists ever attain'd to.

§ 28. And now he Apprehended plainly that every particular Animal, tho' it had a great many Limbs, and variety of Sentences and Motions, was nevertheless One in respect of that Spirit, whose Original was from one firm Mansion, viz. the Heart, from whence its Influence was diffus'd among all the Members. And that all the Members were subservient to it, or inform'd and supported by it, and that this Spirit made use of those Members, in the same manner as a Soldier do's of his Weapons, or an Hunter or Fisherman of his Tackling, who makes use of different ways and things, according to the difference of the Creatures he intends to catch. Now the Soldiers Weapons are some of them defensive and offensive, and the Sportsmen
man's too are some for Land, and some for Water: So the Anatomists' Instruments, are some for Fission, others for Fracture, and others for Perforation. And thus the Body was One, yet that governing Spirit made use of it several ways, according to the respective uses of each Member, and the several ends which it propos'd to obtain.

6. 29. Thus he perceiv'd that there was all this while but One Animal Spirit, whose Action when he made use of the Eye, was Sight; when of the Ear, Hearing; when of the Nose, Smelling; when of the Tongue, Tasting; and when of the Skin and Heel, Feeling. When it employ'd any Limb, then its Operation was Motion; and when it made use of the Liver, Nutrition and Concretion. And that, tho' there were Members fitted to every one of these uses, yet none of them could perform their respective Offices, without having Correspondence with that Spirit, by means of the Nerves, and that if at any time it chanc'd that their Passages were either broken off or obstructed, such a Member would be altogether useless. Now these Nerves derive this Spirit from the Brain, which has it from the Heart (and contains abundance of Spirit, because it is divided into a great many partitions) and by what means ever any Limb is deprived of his Spirit, it's Action ceases, and his life a call off Tool, not fit for use. And if this Spirit depart wholly from the Body, or is consum'd or dissolved by any means whatsoever, then the whole Body is depriv'd of Motion all at once, and reduc'd to a State of Death.

6. 30. Thus far had his Observations brought him about the end of the Third Seventh Year of his Age, viz. when he was One and Twenty Years Old. In which time, he had made abundance of pretty Contrivances. He made himself both Cloaths and Shoes of the Skins of such Wild Beasts as he had dissected. His thread was made of Hair, and of the Bark of the Stalks of Althea, Mallows or any other Plants, which afforded such Strings as were fit for that purpose. He learn'd the making of these threads from the use which he had made of the Ruffles before. He made Awls of sharp Thorns, and Splinters of Cane, sharpen'd with Flint. He learn'd the Art of Building, from the Observations he made upon the Swallows' Nefts. He Builds himself a Score-house and a Pantry, to lay up the remainder of his Provision in; and made a Door to it of Canes twisted together, to prevent any of the Beasts getting in; during his absence. He rook Birds of prey and brought them up for Hawking; and kept tame Poultry
Poultry for their Eggs and Chickens. He took the tips of the Buffalo's Horns and fastened them upon the strongest Canes he could get, and Staves of the Tree Alžán and others; and so, partly by the help of the Fire, and partly of sharp edged Stones, he so fitted them that they served him instead of so many Spears. He made him a shield of Hides folded together. All this pains he took to furnish himself with Artificial Weapons, because he found himself destitute of Natural ones.

§ 31. Now when he perceived that his Hand supplied all these defects very well, and that none of all the various kinds of Wild Beasts durst stand against him, but ran away from him, and were too Nimble for him. He began to contrive how to be even with them, and thought there would be no way so proper as to choose out some of the strongest and fittest Beasts of the Island, and bring 'em up tame, and feed them with proper Food, till they would let him back them and then he might pursue the other kinds of Wild Beasts. There were in that Island both Wild Horses and Asses; he chose of both sorts, such as seemed fittest for his purpose, and by exercise he made them so gentle and tractable that he was compleat Master of his Wishes. And when he had made out of the Skins of Beasts...
such things as serv'd him competently well, in the Room of Bridles and Saddles, he could very easily then overtake such Beasts, as he could scarce ever have been able to have catch'd any other manner of way. He made all these discoveries whilst he was employed in the Study of Anatomy, and the searching out of the Properties, peculiar to each Part, and the difference between them; and all this about that time I speak of, viz. of the Age of 21 Years.

§ 32. He then proceeded further to examine the Nature of Bodies in this Sublunary World, viz. The different kinds of Animal, Plants, Minerals, and several sorts of Stones, Earth, Water, Exhalations, Ice, Snow, Hail, Smoak, Hoar Frost, Flame, and Heat. In which he observ'd different Qualities, and different Actions, and that their Motions agreed in some respects, and differ'd in others; and considering these things with great Application, he perceiv'd that their Qualities also agreed in some things, and differ'd in others; and that so far as they agreed, they were One; but when consider'd with Relation to their differences, a great many: so that when he came to consider the Properties of things by which they were distinguish'd one from another, he found that they Multiplied so fast upon him, that 'twas impossible for him, to
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Comprehend them. Nay, when he consider'd the difference of his own Limbs, which he perceiv'd were all distinct from one another, by some Property and Action peculiar to each, it seem'd to him that there was a Plurality in his own Essence. And when he look'd upon any one Member it fell, he found that it might be divided into a great many parts, from whence he concluded, that there must needs be a Plurality in his own Essence, and not only in his own but in every other also.

6. 33: Then he enter'd upon another sort of Speculation of the second kind, by which he perceiv'd that tho' the parts of his Body were many, yet they were Conjointed and Compact'd together so as to make one Body, and that what difference there was between them consist'd only in the difference of their Actions, which diversify proceeded from that Animal Spirit, the Nature of which he had before search'd into, and found out. Now he knew that his Spirit was One in Essence, and was really the Substance of his Being, and that all the rest of the Members serve that Spirit as Instruments, and in this Respect he perceiv'd his own Essence, to be One.

§. 33: He proceeded from hence to the consideration of all the Species of Animals and found that every Individual of them was One. Next he consider'd them with regard to their different Species, viz., as Roes, Horses, Asses and all sorts of Birds according to their kinds, and he perceiv'd that all the Individuals of every Species were exactly like one another, in the shape of their Parts, both within and without, that their Apprehensions, Motions, and Inclinations were alike, and that those little differences which where visible a mongst them, were inconsiderable in respect of those many things in which they agreed. From whence he concluded, that the Spirit which actuated any Species was one and the same; only distributed among so many Hearts, as there were Individuals in that Species, so that if it were possible for all that Spirit, which is so divided among so many Hearts, to be Collected into one Receptacle, it would be all the same thing, just as if any one Liquor should be pour'd out into several Dishes and afterwards put all together again in one Vessel; this Liquor would still be the same, as well when it was divided, as when it was altogether, only in respect of that division it may be said in some sort to be Multiplied. By this way of Contemplation he perceiv'd that a whole Species was One and the same thing, and that the Multiplicity of Individuals in the same Species is like the Multiplicity of
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Plicity of Parts in the same Person, which indeed are not many [7. e. are only One.]

§. 35. Then he represented in his Mind, all the several kinds of Animals, and perceived that Sensation, and Nutrition, and the Power of moving freely where they pleased, was common to them all; which Actions he was after before, were all very proper to the Animal Spirit, and that those lesser things in which they differ'd (notwithstanding their agreement in these greater,) were not so proper to that Spirit. From this consideration he concluded, that it was only One and the same Animal Spirit, which Actuated all living Creatures whatsoever, tho' there was in it a little difference, which each Species claim'd as peculiar to it self. For instance, suppose the same Water be pour'd out into different Vessels, that which is in this Vessel may possibly be something warmer than that which is in another, tho' 'tis the same Water still, and to every degree of Heat and Cold in this Water in the several Vessels, will represent the Specifick difference which there is in Animals: And so as that Water is all one and the same, so is that Animal Spirit One, tho' in some respect there is a sort of Multiplicity. And so under this Notion he look'd upon the whole Species of living Creatures, to be all One.

§. 36. Afterwards Contemplating the different Species of Plants, as he had done before of Animals, he perceived that the Individuals of every Species were alike, both in their Boughs, Leaves, Flowers, Fruits, and manner of Growing. And comparing them with Animals, he found that there must needs be some one thing which they did all of them partake of, which was the same to them, that the Animal Spirit was to the living Creature, and that in respect of that they were all One. Whereupon, taking a view of all the several kinds of Plants, he concluded that they were all One and the same, by reason of that Agreement which he found in their Actions, viz. their Nourishment and Growing.

§. 27. Then he Comprehended in one single Conception, the whole kinds of Animals and Plants together, and found that they were both alike in their Nutrition and Growing, only the Animals excel'd the Plants in Sensation and Apprehension; and yet he had sometimes observ'd something like it in Plants, viz. That some Flowers do turn themselves towards the Sun, and that the Plants extend their Roots, that way the Nourishment comes, and some other such like things, from whence it appear'd to him that Plants and
and Animals, were One and the same, in respect of that one thing which was Common to them both; which was indeed more perfect in the One, and more obstructed and restrained in the other: like Water that is partly running and partly frozen. So that he concluded that Plants and Animals were all One.

§. 38. He next consider'd those Bodies, which have neither Sense, Nutrition nor Growth, such as Stones, Earth, Air, and Flame, which he perceive'd had all of them Three Dimensions, viz.: Length, Breadth, and Thickness, and that their differences consist'd only in this, that some of them were Colour'd, others not; some were Warm, others Cold, and the like. He observe'd that those Bodies which were Warm, grew Cold, and on the contrary, those which were Cold grew Warm. He found that Water was rarified into Vapours, and Vapours again Condens'd into Water; and that such things as were Burnt, were turn'd into Coals, Ashes, Flame, and Smoke, and if in its Ascend it were intercepted by an Arch of Stone or the like, it thicken'd there and was like other Gross, Earthly Substances. From whence it appear'd to him that, all things were in Reality, One, tho' multiplied and diversify'd in some certain respects, as the Plants and Animals were.

§. 39. Then