

---



---

REMARKS

ON

THE COUNT DE BUFFON'S "NATURAL HISTORY."

[PRINTED IN THE YEAR 1782.]

---

Malebranche maintains an odd conceit  
As ever enter'd Frenchman's pate.

PRIOR.

---

BUT is not the Count de Buffon's first conceit full as odd?  
—that the earth (and so every other planet) is only a slice  
of the sun, cut off from it by the stroke of a comet. (Page

64.) He that would take pains to confute this wild theory, must have little to do.

In consequence of this, he supposes all the inner part of the earth to be glass, and strains every natural phenomenon to support his hypothesis. He is certainly a man of a most lively imagination: Pity that his judgment is not equal to it.

Many of his thoughts are quite singular. So: "The upper stratum of the earth, from which all animals and vegetables derive their growth and nourishment, is nothing but a composition of the decayed particles of animal and vegetable bodies." (Vol. i., page 12.) Impossible! Was it composed of decayed animals and vegetables before any animal or vegetable had decayed?

"The earth was covered with the sea for many ages, and thereby the strata therein were formed." (Page 15.) I believe all the upper strata were formed by the deluge; though no man can tell how. Yet I allow, the sea has covered many countries, which are now far distant from it. And I suppose some mountains were then formed by the flux and reflux of it, in the manner he describes.

"The vapours exhaled from the earth deposit mud, of which, mixed with particles of animal and vegetable substances, or rather with particles of stone and sand, the upper stratum of the earth is composed." (Page 161.)

How is this consistent with what was said before?—This upper stratum of the earth is "nothing but a composition of the decayed particles of animals and vegetables." (Page 12.) And how is the following sentence consistent with it?—"Vegetables derive more of their substance from the air and from water than from the earth." (Page 168.)

"All stones were originally a soft paste." (Page 173.) It is probable that most stones were.

"Clay and sand are substances of the same kind." (Page 184.) I doubt this cannot be proved.

"Glass is the true elementary earth; and all mixed bodies are only glass in disguise." (*Ibid.*) Perfectly new! Believe it who can.

"If flints remain long exposed to the air, and unmoved, their upper surface is always white." (Page 185.) "Expose to the air the hardest and blackest flint, and in less than a year the colour of its surface will be changed, and it will

gradually lose its hardness." Not so. The flints of which most of the churches in Norwich are built, have lost nothing of their hardness; and the surface, though exposed to the air, has not changed colour at all, in two or three hundred years.

"Crystals are an exudation of flints." (Page 199.) I doubt it.

"Red porphyry is composed of the prickles of the sea-hedgehog. At Ficin, in Burgundy, there is a red stone that is entirely composed of them, and there is a considerable stratum of it." (Page 213.)

"The number of sea-shells is so great in every part of the earth, it is absolutely impossible that all the fish which inhabited those shells should live at the same time." (Page 221.) "Neither have we any proof that the earth was entirely dissolved at the time of the deluge." (Page 222.)

I believe, therefore, that some of those shells were deposited by the deluge; but most of them in succeeding ages.

"Some mountains in Switzerland exceed the highest of the Pyrenees three thousand two hundred yards. Many mountains in Asia are higher than any in Europe. Atlas in Afric is at least as high as those of Asia." (Page 231.)

Nay, Dr. Shaw, who measured it, informs us, that the height of it is only six hundred yards! Does this exceed the Pyrenees, or mountains in Switzerland? It is not half the height of Snowdon-Hill.

"Mountains do not furnish springs, except at their bottom." (Page 232.) They do; often on their sides, sometimes at the very top; especially when a higher mountain is near.

"My theory rests on four facts: 1. That the earth, to a considerable depth, consists of parallel strata, which were once soft." I think this is highly probable. "2. That the sea did for many ages cover the whole earth." I think this is highly improbable; though it has doubtless covered many parts of it for some time. "3. That the tides, and other motions of the waters, have produced many inequalities in the bottom of the sea." This is unquestionable. "4. That the figure and corresponding angles of the mountains have risen from the same cause." (Page 243.) Probably this is true of some mountains, not of all.

“The surface of rivers from bank to bank is not level. When a river swells suddenly, the middle of it is higher than the sides, sometimes two or three feet. But near the mouth, the middle is lower than the sides.” This is a curious observation.

“There are often currents of air, directly contrary to each other, one above the other. But this never lasts long; for its general cause is, the resistance of some large cloud, which reflects the wind in a direction contrary to its natural course, but is soon dissipated.” (Page 376.) A just solution of that odd phenomenon.

“In Cerem, an island near Amboyne, it is winter in the north part, while it is summer in the south. And the interval between these two seasons is not above three or four leagues.” (Page 388.)

“In Egypt a south wind prevails in summer, which is so hot as to stop respiration. It prevails still more terribly along the Persic Gulf, suffocating all persons who fall within its vortex.” (Page 389.) The same blows in summer along the Red Sea.

“Whirlpools are occasioned by contrary currents of water, and whirlwinds by contrary currents of air.” (Page 397.)

“Tufa is an imperfect substance, between stone and earth, and deriving its origin from both, by the intervention of rain-water.”

“Of the changes of land into sea, and of sea into land. I believe these changes have been very frequent.” (Page 482.)

The sum is, 1. “The whole of what is now dry land was once covered by the sea. 2. The tides, and other movements of the sea, perpetually detach, from the coasts and from the bottom of the sea, shells and matter of every sort. And these are deposited in other places in the form of sediments, and give rise to the horizontal strata there. 3. Most of the inequalities on the surface of the globe have arisen from the motions of the waters of the sea; and most mountains were formed by the successive accumulation of these sediments. 4. The currents which followed the direction of these inequalities, afterward bestowed on them their present figure, that is, their corresponding angles. 5. Most of the matter detached from the coasts, or the bottom of the sea, were deposited in the form of a fine impalpable powder,” (this I doubt,) “which entirely filled

the cavities of shells. 6. The horizontal strata, which have been formed by these accumulations, which were at first soft, hardened as they dried; and the perpendicular fissures arose from their drying. 7. The surface of the earth has been disfigured by many vicissitudes;—rain, frost, rivers, winds, subterraneous fires, earthquakes, inundations, whereby the sea has alternately changed places with the dry land, especially in the first ages after the creation.”

Vol. ii. The Count's theory of the earth is wild and whimsical enough, but it is innocent. I cannot say so much for his theory of generation, which I take to be utterly inconsistent both with reason and Scripture. To prepare the way for it, he first endeavours to confound the distinction between animals and vegetables; between which all men but himself know there is an essential, unalterable difference; every animal having a degree of self-motion and sensation; neither of which any vegetable has. Then he substitutes for the plain word “generation” a quaint word of his own, “reproduction,” in order to level man not only with the beasts that perish, but with nettles or onions.

Vol. ii., p. 15: He lays the foundation of his wonderful theory: “The Creator” (I exceedingly doubt whether he believes there is any such being) “has put no fixed limits between animals and vegetables.” 2. “The production of an animal requires a smaller exertion of nature than the producing a vegetable, or rather no exertion at all.” Marvellous indeed! 3. “Animation or life is a property belonging to all matter.” And is not thought too?

“Every animal or vegetable contains in every part of it a germ or embryo of the same species, which may be expanded into a whole of the same kind with that of which it is a part.” (Page 16.)

This is the nature of a polypus; but who can show that there is any other such animal in the world? I deny that a worm is such. It is not true that every part of this contains a whole. Show me, who can, any animal but a polypus, which has “a power of multiplying by all its parts.” Till then, the foundation of this whole theory totters. Till then we cannot believe that “there exists in nature an infinity of organic, living particles, of the same substance with organized beings:” (Page 18:) A position that directly leads to Atheism. So does his denial of any final causes in the

world: (Page 69:) This is Atheism barefaced. For if God did not create all things for determinate ends, he did not create them at all.

All writers upon generation suppose either spermatie worms or eggs. But both of these systems he thinks impossible. His grand objection is: "How inconceivably minute must those animalcula have been when in the loins of the first man!" This may confound our imagination, but is no argument at all, unless he could confute that well-known demonstration of Dr. Keill, that "any given particle of matter may be so extended as to fill any given space," (suppose a million times larger than that occupied by the solar system,) "and yet the pores of it shall not exceed any given magnitude." Would not any man of sense, who has read and considered this, see the weakness of Buffon's main argument?

But, says he, "The pre-existent germs in the first man are not inanimate embryos, included within each other, but real animals." (Page 137.) Yes, according to his hypothesis, but not according to ours. As to difficulties in accounting for the manner of generation, they will not weigh a straw with a man of reflection. For how are we obliged to account for it at all? Let it lie among the inscrutable secrets of our Creator.

All that I learn from his experiments is, to doubt whether the supposed seminal animalcula are alive at all; and indeed to doubt concerning the whole tribe of microscopic animalcula whether there be any real life in them. I rather think that "these moving bodies are not real animals, as they exist in the seminal fluids of both sexes, and in the flesh of all animals, and in the seeds of all plants." (Page 212.)

"It is then apparent that all parts of animals and of vegetables are composed of living organic particles." (Page 214.) Not at all. It is no more apparent that they are living, than that they are rational.

At page 330 the Count totally denies that children are marked in consequence of their mothers' longing. Is this affectation or ignorance? But he aims at accounting for it: "The marks of fruits are always yellow, red, or black." No. My own mother longed for mulberries. In consequence of this, my eldest brother had all his life a mulberry on his neck. And both the size and colour varied just like those

of a real mulberry. Every spring it was small and white; it then grew larger, exactly as real mulberries do, being greenish, then red, then a deep purple, as large and of as deep a purple as any mulberry on the tree.

“All animals but man are totally void of reason.” (Page 367.) You may as well say, they are totally deprived of sight. Only put the plain word understanding for the equivocal word reason; and can you say, They are all totally void of understanding? No man dares affirm it.

“Smiles and tears are peculiar to the human species.” (Page 376.) No; stags, and even oxen, shed tears. An ox will weep much, if separated from his yoke-fellow.

“According to Simpson’s tables, above a fourth part of children die in the first year; more than a third in two years; and at least one half in the first three years.

“May we be enabled to write the history of the critical period, without exciting any ideas but what are strictly philosophical; with that philosophical apathy which annihilates every loose desire.” (Page 401.)

And after this grave declaration, he will enlarge upon virginity, impotence, castration, infibulation, (never heard of before in England,) in such a manner as a modest Heathen or Mahometan would be ashamed of!

It was at first my design to go through the whole of the Count’s work; but I dare not spend my time so idly. Although the Edinburgh translator has shortened it much, it is still intolerably long and tedious; and the author’s fancy so vastly outruns his judgment, that he asserts a hundred palpable falsehoods. But what shocks a serious reader most is, his obscenity and his Atheism. The former glares even where one would least expect it: In describing, for instance, a horse and a mule. I wonder how he missed a similar piece of natural history relating to that noble animal, a sow. As to his Atheism, I was for some time in doubt; as he often names God to grace his page. But I can doubt no longer: As he openly professes and defends materialism, and every materialist is an Atheist, I cannot set him down for any other. But, were more proof wanting, that curious sentence, vol. iii., page 505, is plain enough:—“In most beings, there are fewer useful or necessary parts than those which are useless or redundant. But as we wish to refer everything to a certain end, when parts have no apparent

uses, we either suppose that their uses are concealed from us, or invent relations which have no existence." He that asserts this, must totally deny a wise Creator: Consequently, he must either believe that chance created the world, or that it existed from eternity. In either case, he denies the being of a God. I cannot, therefore, but place the Count de Buffon as far beneath Voltaire, Rousseau, and Hume, (all of whom acknowledge the being of a God,) in religion as in understanding.

---

---