

William Whiston's translation of the General Scholium to Isaac Newton's *Principia* in *Sir Isaac Newton's corollaries* (1728 and 1729)

Principia third Edition printed A.D. 1726. Pag. 527. – – 530. 4to.

The Planets and Comets will indeed persevere in their Orbs by the Laws of Gravity; but they could by no Means obtain the regular Situation of these Orbs by those Laws at first.

The six primary Planets are revolved about the Sun in Circles concentrical to the Sun, with the same Direction of Motion, in the same plain, very nearly. The ten Moons [or secondary Planets] are revolved about the Earth, Jupiter and Saturn, in Circles concentrical to them, with the same Direction of Motion, in the Plains of the Orbs of those Planets very nearly. And all these regular Motions have not their Origin from mechanical Causes, since the Comets are freely carried in Orbs very excentrical, and that towards all Parts of the Heavens. By which Kind of Motion the Comets pass very swiftly, and very easily through the Orbs of the Planets; and in their greatest Distances from the Sun, where they move more slowly and stay longer, they are at a vast Distance from one another; and so their Attraction of one another is very inconsiderable.

This most excellently contrived System of the Sun, and Planets, and Comets, could not have its Origin from any Thing else than from the wise Conduct and Dominion of an intelligent and powerful Being. And in Case the fixed Stars be the Centers of the like Systems, they that are formed by the like wise Conduct, must all be subject to the Dominion of *One Being*; especially while the Light of the fixed Stars is of the same Nature with the Light of the Sun: And all these Systems do mutually impart their Light to one another. And lest the Systems of the fixed Stars should mutually fall upon one another by their Gravity, the same Being has placed them at an immense Distance from each other.

This Being governs all Things, not as a *Soul of the World*, but as *Lord of the Universe*; and upon Account of his Dominion, he is stiled *Lord God*, supreme over all. For the Word *God* is a relative Term, and has Reference to Servants, [7] and *Deity* is the Dominion of God not (*such as a Soul has*) over a Body of his own, which is the Notion of those, who make God the Soul of the World; but (*such as a Governor has*) over Servants. The supreme God is an eternal, infinite, absolutely perfect Being: But a Being, how perfect soever without Dominion is not *Lord God*. For we say, *my God, your God, the God of Israel, the God of Gods, and Lord of Lords*. But we do not say, *my Eternal, your Eternal, the Eternal of Israel, the Eternal of the Gods*: We do not say, *my Infinite, (your Infinite, the Infinite of Israel:)* We do not say, *my Perfect, (your Perfect, the Perfect of Israel:)* For these Terms have no Relation to Servants. The Term *God* () very frequently signifies *Lord*; but every *Lord* is not *God*. The Dominion of a spiritual Being constitutes him *God*. True

^a Our Countryman *Pocock* deduces the Latin Word for *God, Deus* from the Arabick Word *Du* (and in the oblique Case *Di*) which signifies *Lord*. And in this Sense Princes are called *Gods*. *Psalm* lxxxiv. 6. and *John* x. 45. And *Moses* is called the *God* of his Brother *Aaron*, and the *God* of King *Pharaoh*, Ex. iv. 16. and vii. 1. And in the same Sense the Souls of dead Princes were called of old *Gods* by the Gentiles, but falsely, on Account of their Want of Dominion.

Dominion, *true God*: Supreme Dominion, *supreme God*: Imaginary Dominion, *imaginary God*. And from his having *true Dominion* it follows, that the *true God* is *living*, *intelligent*, and *powerful*; and from his *other* Perfections it follows that he is *supreme* or *most perfect*. He is Eternal and Infinite, Omnipotent and Omniscient; that is, he *continues* from Eternity to Eternity; and is present from Infinity to Infinity: He governs all Things, and knows all Things, which are done, or can be done. (known.) He is not Eternity and Infinity, but Eternal and Infinite: He is not Duration and Space, but he had Duration of Existence, and is Present. He continues [8] *always*, and is present *every where*, and by existing *always*, and *every where*, he constitutes Duration and Space, (Eternity and Infinity.) Since every Part of Space *always* is, and every indivisible Moment of Duration is *every where*, certainly the Maker and Lord of all Things cannot be said to be in *no Time* and *no Place*. Every Soul that hath Perception at different Times, and in different Organs of the Senses and Motions, is the same individual Person. There are Parts, successive in Duration, co-existing in Space; but neither of them in the Person of a Man, or his Principle of Cogitation: And much less are there any in the thinking Substance of God. Every Man, as he is a Being that has Perception, is one and the same Man during his whole Life, in all and every one of the Organs of his Senses. God is one and the same God always, and every where. He is Omnipresent, not by his *Power* only, but in his very *Substance*; for Power cannot subsist without Substance. In him (^a) all Things are contained [9] and move, but without any mutual affecting of each other. For God is *not at all affected* with the Motions of Bodies, neither do *they* find any Resistance from the Omnipresence of God. 'Tis agreed on all Hands that the supreme God necessarily exists; and by the same Necessity he exists *always* and *every where*. Whence also it follows, that he is *all Similar*, *all Eye*, *all Ear*; *all Brain*, *all Arm*, *all Sensation*, *all Understanding*, *all active Power*: But this not after a human Manner, not after a corporeal Manner, but after a Manner wholly unknown to us. As a blind Man has no Idea of Colours, so have we no Notion of the Ways by which the most wise God perceives and understands all Things. He is intirely without all Body or Bodily Figure; and therefore can neither be seen, nor heard, nor touched; neither ought he to be worshipped under

^a This was the Opinion of the Ancients. Pythagoras in Cicero, *De Natura Deorum*. Lib. 1. Edit. Davis Pag. 26. *Pythagoras thought God was a Mind extended through universal Nature, and passing through it*. Thales, Anaxagoras. [ap. Diog. Laert.] Virgil Georg. L. 1. v. 220. *God pervades all Parts of the Earth, and Sea, and the high Heaven*. Æneid 6. V. 721. &c. *In the first Place a Spirit inwardly nourishes the Heaven, and the Earth, and the liquid Seas, and the shining Globe of the Moon, and the stars of Titan: And as a Mind infused universally through its Parts, puts them in Motion, and mingles it self with that great Body*, Philo. Allegor. Lib. 1. not far from the beginning.) *The whole World is not worthy to be an Habitation and Residence for God. Since he is his own Place, and is filled with himself, and sufficient to himself; filling and containing other Beings which are poor, and desert, and empty: While he is contained of nothing beside himself, being himself one and all*. Aratus Phænom. at the beginning.) *Let us begin with Jove: Let us Men never leave off discoursing of him: For every Concourse of People, every Assembly of Mankind, the Seas also, and the Heavens are full of Jove. We all enjoy the Blessings of Jove: For we are also his Off-spring*. Paul Acts xvii 27, 28) *That they should seek the Lord, if haply they might feel after him, and find him; tho' he be not far from every one of us. For in him we live and move and have our Being, as certain also of your own Poets have said; For we are also his Off-spring*. John in his Gospel xiv. 2.) *In my Fathers House are many Mansions*. Moses Deut. iv. 39.) *Behold the Heaven, and the Heavens of Heavens is the Lords thy God; the Earth also with all that therein is*. x. 14. *Know therefore this Day, and consider it in thine Heart, that the Lord he is [9] God, in Heaven above, and in the Earth beneath, there is none else*. David Psal. cxxxix. 7, 8.) *Whither shall I go from thy Spirit, or whither shall I flee from thy Presence? If I ascend up into Heaven thou are there. If I make my Bed in Hell, behold thou are there*. Solomon 1 Kings viii. 27.) *Will God indeed dwell on the Earth? Behold the Heaven, and Heaven of Heavens cannot contain thee; how much less this House which I have builded?* Job xxii. 12.) *Is not God in the Height of Heaven? Jeremiah the Prophet xxiii. 23, 24.) Am I a God at Hand, saith the Lord, and not a God afar off? Can any hide himself in secret Places, that I shall not see him saith the Lord? Do I not fill Heaven and Earth saith the Lord?* Now the Idolaters pretended, that the Sun, the Moon, and the Stars, the Souls of Men, and other Parts of the World were Parts of the supreme God; and were therefore to be worshipped; but falsely.

the Representation of any corporeal Thing. We have Ideas of his *Attributes*; but we do not at all know what the *Substance* of any Thing is. All that we see of Bodies is their Figures and Colours: We hear only their Sounds, we touch only their outward Surfaces, we smell only their Scents, and taste [only] their Savors. We know not their inward Substances by any Sense or any reflex Act; and much less have we any Idea of the Substance [10] of God. We know him only by his Properties and Attributes, and by his most wise and exquisite Structures of Things, and by final Causes, and we admire him for his Perfections: But we reverence and worship him upon Account of his *Dominion*, for we worship him as his Servants: For God without Dominion, Providence, and final Causes, is nothing else but *Fate* and *Nature*. No Variation of Things arises from a blind metaphysical Necessity, which certainly is the same always and every where. The intire Difference of created Beings in different Times and Places could only arise from the Ideas and Will of a Being that exists necessarily. God is indeed said to see, and hear, and speak, and laugh, and love, and hate, and desire, and give, and take, and rejoice, and be angry, and fight, and build, and rear, and frame: But still by Way of Allegory: For all Discourse of God is taken from what we see in human Affairs by a kind of Resemblance, which is in some Measure *real*, but certainly *imperfect*. And thus much concerning God, to Discourse of whom from the Appearances of Nature doth certainly belong to *Natural Philosophy*.

I have hitherto explained the Phænomena of the Heavens, and of our Sea by the *Power of Gravity*: But I have not yet assigned the *Cause of Gravity*. Certainly this Power arises from some Cause which penetrates to the Centers of the Sun and Planets, without the Diminution of its Virtue: And which acts not according to the Quantity of the *Surfaces* of the Particles upon which it acts (as mechanical Causes use to do) but according to the Quantity of the *solid Matter*: And whose Action is extended every Way to immense Distances, [11] so as ever to decrease in the duplicate Proportion of those Distances. Gravity towards the Sun is compounded of the Gravities towards every single Particle in the Sun, and as it recedes from the Sun decreases accurately in that duplicate Proportion of the Distances, as far as the Orb of Saturn, as is manifest from the resting of the *Aphelia* of the Planets; and as far as the utmost *Aphelia* of the Comets, in Case those *Aphelia* rest. But the Cause of these Properties of Gravity I have not been able to draw from the Phænomena: And I do not make Hypotheses. For whatsoever is not drawn from the Phænomena is to be call an Hypotheses. {sic} And Hypotheses, whether they be Metaphysical, or Physical, or of Occult Qualities, or Mechanical, have no Place in *Experimental Philosophy*.



Bibliographical details

Sir Isaac Newton's corollaries from his philosophy and chronology, in his own words. [London, 1728], pp. 6–11. Whiston's *Corollaries* contain theological material excerpted from the Queries to Newton's *Opticks*, the General Scholium, Roger Cotes' preface to the second edition of the *Principia* and a sample of theology from Newton's *Chronology* (1728).

Commentary

This text is a lightly amended version of the translation of the 1713 edition of the General Scholium Whiston published in his *Three essays* (1713), but updates and expanded with the changes and additions of the 1726 edition of the *Principia*. As with his earlier translation of the General Scholium published in the *Three essays* and the *Astronomical principles of religion* (1717, 1725), Whiston—ever the maximalist—includes the texts of the quotations referenced in the footnote on space. Whiston's translation

recognises a textual variant between the 1713 and 1726 editions in the penultimate sentence of page 7: “He is Eternal and Infinite, Omnipotent and Omniscient; that is, he *continues* from Eternity to Eternity; and is present from Infinity to Infinity: He governs all Things, and knows all Things, which are done, or can be done. (known.)”. The word “known” is carried over from Whiston’s 1713 English translation. Whereas the 1713 edition of the General Scholium reads “quæ fiunt aut sciri possunt” (“which are done or can be known”), the 1726 edition reads: “quæ fiunt aut fieri possunt” (“which are done or can be done”).

Whiston’s *Corollaries* was first published in quarto in a single sheet of sixteen pages with a drop-head title. It is signed 1 May 1728 and began to be advertised in late April 1728: “just printed, in a single Sheet of the same Paper with Dr. Pemberton’s Book, &c. to bind with it, a Translation of Sir J. N’s. own Corollaries from his Philosophy: Which hath never been publish’d intire in English before” (*Daily Post*, 29 April 1728). This notice hints at the purpose of the *Corollaries*, namely, to provide coverage of theological and natural theological themes from Newton’s writings that Whiston believed were inadequately treated in Henry Pemberton’s *A view of Sir Isaac Newton’s philosophy* (1728). Whiston provides more detail on his intentions for the *Corollaries* in his *Memoirs*: “In the Year 1728, Dr. Pemberton published his *View of Sir Isaac Newton’s Philosophy*. I would fain have had him added those famous *Scholia*, or *Corollaries* of his, which are of the greatest Value for the Support of Natural and Revealed Religion; but I could not persuade him to it. Upon his Refusal, I translated them myself into *English*, and published them, with some few Additions and Notes, the next Year 1729, both in 4to. and 8vo. Price 6 d.” Evidently some booksellers and owners did precisely what Whiston desired, for several extant copies of the quarto edition are bound with Pemberton’s *View* (e.g., British Library; Clare College, Cambridge; Houghton Library, Harvard; Huntington Library; University of Chicago Library).