

Article

The Tuscan Artist

Images of Galileo in Milton's works

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In The Areopagitica, his most important work of prose, John Milton mentions Galileo as the illustrious martyr who fought for the freedom of thought. The name of the great scientist is repeated several times in the English poet's epic masterpiece: Paradise Lost. In three different passages of the poem, Milton in fact celebrates the "Tuscan Artist" and his crucial achievements in astronomy. Nevertheless, in a subsequent passage, the poet addresses the Copernican issue without openly defending the heliocentric theory confirmed by Galileo's discoveries. In fact, he neither embraces the Copernican system nor the Ptolemaic one, but instead compares them, following a dialectic method where one cannot fail to notice an echo of Galileo's Dialogue Concerning the two Chief World Systems. Milton's literary work presents images of astronomy at that time, thus offering a valuable historical example of scientific communication through art.

Keywords: Milton, Galileo, artist

[...] I could recount what I have seen and heard in other Countries, where this kind of inquisition tyrannizes; when I have sat among their lerned men, for that honor I had, and bin counted happy to be born in such a place of *Philosophic* freedom, as they suppos'd England was, while themselves did nothing but bemoan the servil condition into which lerning amongst them was brought; that this was it which had damp't the glory of Italian wits; that nothing had bin there writt'n now these many years but flattery and fustian. There it was that I found and visited the famous *Galileo* grown old, a prisoner to the Inquisition, for thinking in Astronomy otherwise than the Franciscan and Dominican licencers thought.¹

This is how John Milton, in *Areopagitica*, recalls his Continental tour and his encounter with Galileo.² The passage is taken from a tract whose full title is: *Areopagitica; a Speech of M^r. John Milton, For the Liberty of Unlicenc'd Printing, to the Parliament of England.*³ *Areopagitica* is Milton's major work in prose, as well as the first text in European literature to deal exclusively with the freedom of the press and freedom of thought.

In June 1643, the English Parliament issued an ordinance which imposed severe restrictions on the freedom of the press. In *Areopagitica*, which first appeared in November 1644 against the provisions of that decree, Milton defended passionately the freedom of thought and speech and opposed preventive censorship, warning Parliament against the dangers of adopting methods similar to those of the Inquisition after the Council of Trent. That is to say, methods like the ones which had forced the Copernican and 'subversive' Galileo, 'guilty' of "claiming and believing that the Sun is the centre of the universe and is stationary whereas the Earth is not the centre of the universe and it moves"⁴, to renounce his views.

The idea of Galileo as 'martyr' of the Church of Rome came naturally to Milton who was a fervent and stern Puritan in 17th-century England and so tended to condemn the doctrines and practices of the Catholic religion. As for Milton himself, he advocated 'the religion of the Spirit', the only religion that allowed every individual to interpret the Bible for himself. So, who could better exemplify Milton's views in the field of religion than the old and renowned Italian natural philosopher?⁵

Galileo stated in *Dialogo sopra i due massimi sistemi del mondo (Dialogue concerning the Two Chief World Systems, 1632)* that “[...] we should discuss the physical world and not a world of books”,⁶ thus criticising all those who dogmatically reputed the Classics, and Aristotle in particular, as keepers of the complete and unshakable knowledge of all aspects of reality. According to Galileo, those people lived in a ‘world of books’ refusing to see the ‘sensible world’ to which Aristotle himself had devoted a great deal of attention. The ‘world of books’ was an empty universe of bibliographical citations, an abstract world defended by religious philosophy and institutions on the basis of a principle of authority. Galileo fought against that principle by claiming the complete autonomy of scientific research and by severely criticising those who thought that bookish culture, inherited by the Classics, was the absolute guardian of truth.

On the contrary, Galileo’s dialectics aim at dispelling prejudice and cultivating a critical position towards the views of the Catholic Church even by uncovering possibly uncomfortable truths. In so doing, Galileo’s intellectual stance is in keeping with Milton’s idea of ‘philosophic freedom’ in *Areopagitica*, a freedom which should be expressed without any kind of coercion by any authority – be it religious or political – which claims to be infallible and powerful beyond measure and asserts its right to control the expression and the circulation of individuals’ ideas. In Milton’s own words: “a little generous prudence, a little forbearance of one another, and som grain of charity might win all these diligences to joyn, and unite into one generall and brotherly search after Truth; could we but forgoe this Prelaticall tradition of crowding free consciences and Christian liberties into canons and precepts of men”.⁷

In order to explain how the search for truth must be conducted, Galileo uses an effective simile in *Il Saggiatore (The Assayer, 1623)*: “If discussing a difficult problem was like carrying a load, then it could be said that more than one discussion is more fruitful than just one, since more horses can carry more sacks of grain than just one horse. But discussing is like running, not like carrying loads, and so a Barbary horse will run faster than a hundred Friesian horses”.⁸ In other words, for Galileo the search for truth does not involve the co-operation of more than one power, but rather the competition between proponents of opposing points of view (indeed, discussing is like running, not like carrying loads). A view that Milton expresses even more forcefully in *Areopagitica*: “and though all the windes of doctrin were let loose to play upon the earth, so Truth be in the field, we do injuriously by licencing and prohibiting to misdoubt her strength. Let her and Falshood grapple; who ever knew Truth put to the wors, in a free and open encounter. Her confuting is the best and surest suppressing”.⁹

On the other hand, Milton goes on to ask “[...] is it not impossible that she [i.e. Truth] may have more shapes than one”.¹⁰ Such question, according to Giulio Giorello, introduces “the core of Milton’s strategy as far as tolerance is concerned. As a matter of fact, the attack on preventive censorship in *Areopagitica* not only demonstrates, through the use of appropriate historical cases, that censorship is alien both to ‘Christian liberty’ and to the finest classical reasoning, as well as being ineffective in any case, but is also linked to the observation that, in order for the right opinion to stand out, there must be a wrong one acting as a foil”. Moreover, “the prerequisite for moderate conduct to exist in virtue is the existence of disorderly conduct in vice”.¹¹

Therefore, virtue, which is the knowledge and experience of Good, cannot exist without knowing and evaluating its opposite, Evil; the verification and experience of the values should depend upon the individual’s choice, who cannot but be free. When he rejects an idle, passive virtue, Milton expresses his vision of culture and life as an interminable series of battles and conquests. This is a topic which pre-emptly some fundamental themes Milton was to return to in his greatest work, *Paradise Lost*¹², his fine epic on the fall of the rebel angels and the original sin, a magnificent and solemn epic modelled on the poems of Homer and where, *inter alia*, only one historic figure is mentioned: Galileo.¹³

After a preliminary group of verses, often known as the ‘prologue’, where the contents of the poem are briefly introduced, Book I of *Paradise Lost* immediately introduces “th’ infernal Serpent”, Satan, who “with ambitious aim raised impious war in heav’n and battle proud”¹⁴ along with his legions of rebel angels. But he was defeated by the Almighty and he was thrown to Hell. The Evil One and his angels now lie in “a fiery deluge, fed with ever-burning sulphur unconsumed: such place Eternal Justice had prepared for those rebellious”.¹⁵ In that tempestuous fire, among the fallen angels, Satan sees and beckons the “one next himself in power, and next in crime, long after known in Palestine, and named Beelzebub”.¹⁶ After managing to escape from the burning lake, Satan and Beelzebub talk of their

miserable fall and their having been violently driven out of “happy fields, where joy for ever dwells!”¹⁷ On the other hand, Satan asserts: “better to reign in hell than serve in heav’n”.¹⁸ Beelzebub is about to reply, but:

He scarce had ceased when the superior Fiend
Was moving toward the shore; his ponderous shield,
Ethereal temper, massy, large, and round,
Behind him cast; the broad circumference
Hung on his shoulders like the moon, whose orb
Through optic glass the Tuscan artist views
At ev’ning from the top of Fesole,
Or in Valdarno, to descry new lands,
Rivers or mountains in her spotty globe.¹⁹

At this point, Milton interrupts the dialogue between Satan e Beelzebub, winding down for a while the epic and dramatic tone of the previous verses. This interruption is immediately followed by yet another escalation when Satan addresses his angels and promises them that they will conquer a new world and subdue the creature that will dwell in it. In between, there is a striking image, a sudden change in space and time, where Satan’s “ponderous shield” is compared to the Moon observed through the “optic glass” by the “Tuscan artist”, that is to say Galileo who is called an ‘artist’ because he is an ‘expert’. But ‘artist’ also stands for ‘craftsman’ or ‘creator’: the person who is currently called a ‘technician’. Therefore, in this excerpt Milton presumably wants to honour Galileo mainly as an expert, a skilled technician. Milton emphasises the characteristics and dimensions of Satan’s shield just as Galileo, the expert astronomer, had pointed out the characteristics and dimensions of the Moon’s surface.

According to Northrop Frye, “[Galileo seems to] symbolize for Milton the gaze outward on human nature, the speculative reason that searches for new places rather than the moral reason that tries to create a new state of mind”.²⁰ But the search for new places needs to be supported by new instruments. So, as Giorello stresses, Galileo’s telescope, the “optic glass” mentioned by Milton, “is the forerunner of the large equipment with which contemporary ‘artists’ (i.e. experimental scientists) study large-scale, far away objects or objects which are not far away but yet, they are infinitesimally small. [...] It is common knowledge that Galileo was not ‘the first inventor’ of the telescope and (probably) not the first one who used it in order to study the heavens either. But he was (almost certainly) the first one who understood the interest of the findings of his ‘excellent instrument’ and he turned them into material of a public debate for a new cosmology”.²¹

The “Tuscan artist” is mentioned a second time in Book III of *Paradise Lost*. After having left Hell, Satan has come down to the “bare convex of this world’s [i.e. the Earth’s] outermost orb”,²² “where wandering he first finds a place since called the Limbo of Vanity”.²³ He then arrives at the gate of heaven “and winds with ease through the pure marble air his oblique way amongst innumerable stars, that shone stars distant [...] Above them all the golden sun in splendor likest heaven allured his eye”.²⁴ Satan then goes towards that “all-cheering lamp” “that gently warms the universe”.²⁵

There lands the Fiend, a spot like which perhaps
Astronomer in the sun’s lucent orb
Through his glazed optic tube yet never saw.²⁶

This further allusion to Galileo obviously refers to the observations of the sunspots that the “Astronomer” made from 1610 on.²⁷ The Italian scientist appears for a third and last time in Book V of *Paradise Lost*, when God urges the archangel Raphael to reach Eden in order to admonish Adam by recounting to him Satan’s rebellion. As soon as the Almighty charges him with this task, the “wingèd saint”²⁸ flies without a moment’s hesitation through “th’empyrean road; till at the gate of heav’n arrived, the gate self-opened wide on golden hinges turning, as by work Divine the sov’ran Architect had framed”.²⁹

From hence, no cloud, or, to obstruct his sight,
Star interposed, however small, he sees,
Not unconform to other shining globes,

Earth and the gard'n of God, with cedars crowned
 Above all hills: as when by night the glass
 Of Galileo, less assured, observes
 Imagined lands and regions in the moon.³⁰

Therefore, the “Tuscan artist”, the “Astronomer” is now explicitly mentioned along with his “glass”. In all, the tribute that Milton pays to Galileo three times in *Paradise Lost* and his praise of him in *Areopagitica* could imply that Milton implicitly subscribed to the theories of Copernicus. Actually, the question is not that simple.

In fact, Milton’s position as far as Galileo’s astronomical theory is concerned is manifested in Book VIII of *Paradise Lost* where the poet specifically deals with the Copernican controversy without explicitly referring to the Italian scientist.

When Raphael comes down to Paradise on Earth, he gives Adam the divine message, that is he tells him about Satan, his rebellion, his defeat and his devious plans for revenge; he also tells him how and why the universe was first created. After listening to the angel “with wonder, but delight”,³¹ Adam asks for an explanation of the motions of the heavenly bodies, because he does not understand the glaring contradiction in the economy of Nature, a contradiction which becomes concrete in the geocentric cosmology. Adam asks why Nature, which is nevertheless “wise and frugal”,³² wastes so much energy in order for the vault of heavens to revolve around the Earth. The Earth, after all, is just “a grain, an atom, with the firmament compared”.³³ It is interesting to note that in the First Day of Galileo’s *Dialogo sopra i due massimi sistemi del mondo*, Sagredo also wonders whether nature has created so many great, perfect and noble heavenly bodies, impassible, immortal and divine, just to put them in the service of the humble, perishable and mortal Earth.³⁴

Raphael answers Adam’s question³⁵ using a utilitarian argument, accepting (at least for the time being) the geocentric hypothesis: the lamp of the universe does not shine for the Earth, but for its dweller, man.³⁶ Nonetheless, the angel criticises the Aristotelian-Ptolemaic “fabric of the heav’ns”,³⁷ as well as those who will offer “quaint opinions”,³⁸ and try to “gird the sphere with centric and eccentric scribbled o’er, cycle and epicycle, orb in orb”³⁹ in order to “save appearances”⁴⁰ of a divine plan which should only be admired rather than investigated.

If, at first sight, this answer does not seem to exhaust the discussion, afterwards Raphael apparently wants to further confuse Adam. After demonstrating the logic of the Ptolemaic system, the angel does not hesitate to present the Copernican alternative, describe its point of view and explain some of its principles.⁴¹ However, Milton’s tone remains neutral: as a matter of fact, Raphael’s answer is non-committal in that he does not seem keen on displaying a decided preference for either the geocentric or the heliocentric system. On the contrary, instead of removing Adam’s doubts, Raphael further complicates the topic by mentioning the possibility that there exist other inhabited worlds.⁴² Even when he puts forward the hypothesis of multiple creations, Raphael does not express any personal judgement.

But the angel should now draw the discussion to an end. His conclusion is quite surprising at first sight. Raphael tells Adam: “solicit not thy thoughts with matters hid”,⁴³ he urges him not to worry himself excessively with the mysteries of the universe because “heav’n is for thee [i.e. for all human beings] too high to know what passes there”.⁴⁴ Raphael invites him to “be lowly wise”⁴⁵ as some questions – including the controversy between the Ptolemaic and the Copernican system – must be left to God, and only God. On the face of this admonishment, one naturally wonders what happened to the intellectual commitment and the passion for freedom that Milton displayed in *Areopagitica*. Why, despite his tributes to Galileo, does the poet not explicitly pronounce himself in favour of the heliocentric theory, and, on the contrary, why does he seem to state through the archangel Raphael’s words that, after all, he is not interested in the Copernican controversy or, even, in science as a whole?

Roberto Sanesi argues that, apparently, Milton does not intend to attack astronomy or science itself, but rather warn against the risks of excessive curiosity so as to prepare the ground for Eve’s disobedience in the following Book.⁴⁶ Moreover, although Raphael finishes his answer to Adam by admonishing him not to worry himself excessively with the mysteries of the world, he has previously presented a confrontation of rival views, just as Galileo did. Raphael impersonates himself all three characters, Simplicio, Sagredo and Salviati, of the *Dialogo sopra i due massimi sistemi del mondo*.⁴⁷ “Therefore”, states Giorello, “Raphael (who presumably represents Milton himself) is not a conservative: he neither misses the old system where the whole universe revolves around the Earth nor is he influenced by the

fact that for centuries the scientific establishment has adopted that point of view. But this does not automatically mean he fully accepts the Copernican theory as accurate. Milton seems to support fallibility: he prefers criticising current theories to acquiring certainties".⁴⁸ In this sense, the fallibility that emerges from the dialogue between Adam and Raphael in Book VIII of *Paradise Lost* is probably meant to transmit the idea that, in any case, the truth is always partial. Exactly what Milton had stated in *Areopagitica*, that is to say, God "sees not as man sees, chooses not as man chooses".⁴⁹ Furthermore, since it is partial, the truth can only be discovered, understood and reconstructed by degrees: "for such is the order of Gods enlightning his Church, to dispense and deal out by degrees his beam, so as our earthly eyes may best sustain it" added Milton in his pamphlet.⁵⁰

After all, Galileo himself had replaced the concept of knowledge as heritage with another concept where knowledge meant discovering, inventing, obtaining results which are never definite. When Galileo was seventy, he wrote: "My restless mind cannot stop brooding over ideas and this is a great waste of time because my most recent idea forces me to reconsider all my previous findings".⁵¹ As Enrico Bellone stressed "it could ultimately be argued that [this] statement summarises Galileo's entire method".⁵² This statement also summarises the conduct of modern scientists who first arrange a series of ascertained facts in order to infer a theory, but are then ready to replace that theory with another when it cannot explain a new fact. So, from theory to theory they approach more and more the truth that Galileo, like Milton, considered unattainable since "only God can understand all matters philosophical".⁵³

In conclusion, whatever his views on science are, John Milton does not hesitate to honour Galileo repeatedly, both as a great 'artist' in science and (perhaps mainly) as a freethinker who was prevented by "a grosse conforming stupidity"⁵⁴ from freely putting forward the facts which corroborated his ideas. Nothing could be more abominable for a passionate liberal such as Milton. As he states in *Areopagitica*: "give me the liberty to know, to utter, and to argue freely according to conscience, above all liberties".⁵⁵

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Notes and references

- ¹ J. Milton, *Areopagitica*, Mariano and Hilary Gatti (eds.), Bompiani, Milan, 2002, p. 56 (italics in the original).
- ² Since this is the only time Milton mentions his visit to Galileo (which presumably took place in Arcetri, in the late summer of 1638 or in the spring of 1639), scholars have long debated on whether such a visit actually took place. For further information on this topic, see: D. Wood, "Milton and Galileo", *Milton Quarterly*, 35, 2001, p. 50-52; N. Harris, "Galileo as symbol: the 'Tuscan Artist' in Paradise Lost", *Annals of the Florence Institute and Museum of the History of Science*, 10 (2), 1985, p. 3-29.
- ³ The term *Areopagitica*, in particular, is taken from the title of a speech (written in approximately 355 B.C.) by the great Athenian orator Isocrates, who was a contemporary and rival of Plato. In ancient Athens, 'Areopagus' was the Supreme Court, which also exercised political functions.
- ⁴ G. Galilei, *Abiura pronunciata in Roma nell'aula del Convento domenicano di Santa Maria sopra Minerva, il 22 Giugno 1633*, in G. Galilei, *Opere*, Edizione Nazionale, Barbèra, Firenze, 1890-1909, XIX, p. 406.
- ⁵ Galileo, a Catholic himself, did not deny that the Church was the guardian of a precious heritage of truths revealed directly by God. However, he denied that such a heritage contained the whole truth or that the Holy Scriptures were the only path to the truth. In fact, the path of scientific research should run parallel to it. In Galileo's vision, Nature and the Bible derive from the same Divine Word: Nature carries out God's orders faithfully and the Bible is a book inspired by the Holy Spirit. But, whereas in the Bible God's word had to be adapted to the intellect of the humans, in Nature, God's will is inexorably accomplished. According to Galileo, it is therefore useless to try to understand Nature through the Holy Scriptures: natural laws are to be used in order to understand the real meaning of some – necessarily obscure – expressions of the Bible. After all, as Milton himself states in *Areopagitica*, [God] "sees not as man sees, chooses not as man chooses", J. Milton, *Areopagitica*, 2002, cit., p.88.
- ⁶ G. Galilei, *Dialogo dei Massimi Sistemi*, Mondadori, Milan, 1996, p. 120.
- ⁷ J. Milton, *Areopagitica*, 2002, cit., p. 74.
- ⁸ G. Galilei, *Il Saggiatore*, Libero Sosio (ed.), Feltrinelli, Milan, 1992, p. 247. The footnote 463, p. 247 reports that Barbary horses originate from Barbaria and are used exclusively as race horses whereas Friesian horses belong to an ancient breed from Friesland and are used as draught horses for light loads or for labour.
- ⁹ J. Milton, *Areopagitica*, 2002, cit., p. 82.
- ¹⁰ J. Milton, *Areopagitica*, 2002, cit., p. 84.
- ¹¹ G. Giorello, *Introduzione*, in J. Milton, *Areopagitica*, Giulio Giorello (ed.), Laterza, Rome-Bari, 1987, p. XXII.
- ¹² The first edition of *Paradise Lost* in 1667 comprised ten books; the second, definite edition in 1674 comprised twelve books.
- ¹³ On Milton's Galileo in *Paradise Lost*, see: J. Walker, "Milton and Galileo: the Art of Intellectual Canonization", *Milton Studies*, 25, 1993, p. 109-123; D. Friedman, *Galileo and the Art of Seeing*, in *Milton in Italy: Contexts, Images, Contradictions*, Mario A.

Di Cesare (ed.), Binghamton, 1991, p. 159-174; A. Boesky, "Milton, Galileo and Sunspots: Optics and Certainty in Paradise Lost", *Milton Studies*, 34, 1996, p. 23-43; N. Harris, "Galileo as Symbol: the 'Tuscan Artist' in Paradise Lost", cit.; H. Henderson, "A Dialogue in Paradise: John Milton's Visit with Galileo", *The Physics Teacher*, 39 (3), 2001, p. 179-183.

¹⁴ J. Milton, *Paradiso perduto*, Mondadori, Milano, 1999, pp. 8-9.

¹⁵ *Ivi*.

¹⁶ *Ibidem*, p. 10.

¹⁷ *Ibidem*, p. 18.

¹⁸ *Ivi*.

¹⁹ *Ibidem*, p. 20.

²⁰ N. Frye, *The Return of Eden*, University of Toronto Press, Toronto and Buffalo, 1965, p. 58.

²¹ G. Giorello, *Galileo, l'Artista Toscano*, preface to G. Galilei, *Il Saggiatore*, 1992, cit., p. XI. In particular, Galileo discovered with his telescope (and then wrote in *Sidereus Nuncius, The Starry Messenger*, in 1610) that the surface of the Moon was not smooth, uniform and perfectly spherical as Aristotelian and Ptolemaic philosophers would have it. On the contrary, it was uneven and rough, with valleys and mountain ranges, just as the Earth is. By drawing a parallel between the Earth and the Moon, Galileo blurred the dividing line between celestial and sublunary world and in so doing, he challenged the most deeply rooted convictions of his time.

²² J. Milton, *Paradise Lost*, op. cit., p. 106-107. From *The Argument*.

²³ *Ibidem*, p. 106.

²⁴ *Ibidem*, p. 136.

²⁵ *Ibidem*, p. 138.

²⁶ *Ivi*.

²⁷ Several hypotheses had been put forward on the sunspots phenomenon and a great deal of them aimed at maintaining the idea of an incorruptible Sun whose perfection could not be blemished by any kind of spots. In particular, the Jesuit Christopher Scheiner claimed that the spots were just clouds of small planets in orbit around the Sun. However, by observing the spots moving on the Sun through his "glazed optic tube", Galileo refuted Scheiner's theory deducing that the spots must be contiguous to the surface of the Sun and that, consequently, their motion indicated that the Sun revolved around itself. Galileo, who published the results of his research in 1613 in the collection *Istoria e dimostrazioni intorno alle macchie solari (History and Demonstrations Concerning Sunspots and their Properties)*, probably considered that result the final blow to the theory of the immutability of the heavens.

²⁸ *Ibidem*, p. 220.

²⁹ *Ivi*.

³⁰ *Ivi*.

³¹ *Ibidem*, p. 344.

³² *Ivi*.

³³ *Ivi*.

³⁴ G. Galilei, *Dialogo dei Massimi Sistemi*, cit., p. 64.

³⁵ Significantly, the angel's answer begins thus: "To ask or search I blame thee not, for heav'n is as the Book of God before thee set, wherein to read his wondrous works, and learn his seasons, hours, or days, or months, or years", J. Milton, *Paradiso perduto*, cit., p. 346-347. Therefore, the metaphor of the universe compared to a book where human eyes can see the truth, is present in Milton as well. This image can be found in many poets, theologians, philosophers and particularly in the best known excerpt of Galileo's works, an admirable epistemological summary, where Galileo states that "philosophy is written in a vast book (the universe) that is always open before our eyes but this book cannot be read until we have learnt the language and become familiar with the characters in which it is written. It is written in mathematical language, and the letters are triangles, circles and other geometrical figures, without which means it is humanly impossible to comprehend a single word. Without this language the search for truth is like going round in circles in a dark labyrinth", G. Galilei, *Il Saggiatore*, cit., p. 38.

³⁶ "Yet not to earth are those bright luminaries Officious, but to thee, earth's habitant", J. Milton, *Paradiso perduto*, cit., p. 348-349

³⁷ *Ivi*.

³⁸ *Ivi*.

³⁹ *Ivi*.

⁴⁰ *Ivi*.

⁴¹ "What if the sun be center to the world, and other stars, by his attractive virtue and their own incited, dance about him various rounds? Their wand'ring course, now high, now low, then hid, progressive, retrograde, or standing still, in six thou seest, and what if sev'nth to these the planet earth, so steadfast though she seem, insensibly three different motions move? Which else to several spheres thou must ascribe, moved contrary with thwart obliquities, or save the sun his labor, and that swift nocturnal and diurnal rhomb supposed, invisible else above all stars, the wheel of day and night; which needs not thy belief, if earth industrious of herself fetch day traveling east, and with her part averse from the sun's beam meet night, her other part still luminous by his ray", J. Milton, *Paradiso perduto*, cit., p. 350-351.

⁴² "What if that light sent from her through the wide transpicuous air, to the terrestrial moon be as a star enlight'ning her by day, as she by night this earth, reciprocal, if land be there, fields and inhabitants? Her spots thou seest as clouds, and clouds may rain, and rain produce fruits in her softened soil, for some to eat allotted there; and other suns perhaps with their attendant moons thou wilt descry, communicating male and female light, with two great sexes animate the world, stored in each orb perhaps with some that live" J. Milton, *Paradiso perduto*, cit., p. 350-353.

⁴³ *Ibidem*, p. 352.

⁴⁴ *Ivi*.

⁴⁵ *Ivi*.

⁴⁶ R. Sanesi, *Note al testo*, in J. Milton, *Paradiso perduto*, cit., p. 622.

⁴⁷ In *Dialogo sopra i due massimi sistemi del mondo*, Simplicio is a follower of Aristotle who backs the principles of traditional philosophy; Salviati argues for the new ideas and represents Galileo himself; Sagredo is the learned man who listens to the two opponents and functions as a link between them.

⁴⁸ G. Giorello, *Introduzione*, in J. Milton, *Areopagitica*, 1987, cit., p. XVII.

⁴⁹ See note 5.

⁵⁰ J. Milton, *Areopagitica*, 2002, cit., p. 88.

⁵¹ G. Galilei, *Lettera del 19 novembre 1634 a Fulgenzio Micanzio*, in G. Galilei, *Opere*, cit., XVI, p. 163.

⁵² E. Bellone, "Galileo: le opere e i giorni di una mente inquieta", *I grandi della scienza*, February 1998, p. 101.

⁵³ G. Galilei, *Opere*, cit., III, p. 398.

⁵⁴ J. Milton, *Areopagitica*, 2002, cit., p. 86.

⁵⁵ J. Milton, *Areopagitica*, 2002, cit., p. 82.

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