



Studies in Salesian Spirituality

Francis de Sales, the Galileo Affair, and the Autonomy of Modern Science

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The perennial debate between science and religion appears to be heating up again, especially in the area of evolution where the conflict between the two has been the most pronounced and protracted. Richard Dawkins takes the position that science does not need religion or God to understand the origin and evolution of the universe, while Michael Behe sees the importance of an 'Intelligent Designer' as necessary for filling in a big gap in Darwinism.(1) In a recent attempted rapprochement in this area, Pope John Paul II stated that he sees no inherent contradiction between the theory of evolution and Catholic teaching.(2)

It is not the intent of this study to argue for the complete autonomy of science in the sense of being totally unrelated to religion but rather to appreciate that they both can and should live in harmony. Religion, as one author has clearly, concisely, and persuasively demonstrated, can and should play a confirming role in its relationship to science.(3) It is this confirming aspect of religion that will be emphasized.

As an outstanding Christian humanist, Francis de Sales steeped himself in the knowledge of Sacred Scripture, the Fathers of the Church and the writers of classical antiquity and exhibited an openness to all genuine human values and achievements.(4) The further one delves into the works of this saint, the more one becomes convinced, as Karl Rahner says, that "Christianity is the most radical anthropology."(5) For de Sales, the Incarnation is absolutely indispensable to the meaning and understanding of human nature and its relation to the whole of creation since he views the universe as "a book which contains the word of God, but a language which each person does not understand."(6) The more we grasp the implications of the Incarnation, the deeper will be our understanding of humanity, our world and the role of the physical sciences. The depth of de Sales' understanding and appreciation of the Incarnation is truly remarkable. He not only envisions this mystery as God's kiss, but also as an unending, passionate embrace of humanity. "He unites himself to us by an incomprehensible union in which he grasped and hugged our nature so strongly, indissolubly and incomparably that never was anything so tightly joined and pressed to humanity" (7)

As we read on in this same chapter, the well-known Christological texts from St. Paul become anthropological in his rather bold paraphrase of them. "And he about whom it has been often written: 'I live, says the Lord,' could afterwards say, using the words of his Apostle: 'I live now not I, but man lives in me.' 'For me life means being a man and dying for man is my gain.' 'My life is hidden with man in God'."(8) Notice that these familiar scriptural texts in which man dies and Christ lives become texts in which man lives and God, so to speak, dies. De Sales seems to speak as if the divinity died in Christ to make room for his humanity. He appears to turn the *kinoesis* on its head.

The Incarnation has for its purpose not so much to divinize but rather to humanize us, i.e., "to teach us how to live . . . with and according to reason."(9) De Sales does not see any conflict between faith and reason. "They are," he says, "daughters of the same Father.... They can and must live together as very affectionate sisters." With great clarity, he adds:

Both in nature and supernature, reason is always reason and truth,. Just as our eyes are receptive of different kinds of light, for example, the light of the sun and artificial light to see various objects, so our understanding is given the light of reason and the light of faith to arrive at truth which is indivisible. Thus, it is certain that truth, whether supernatural or natural, is always the same. There are only different lights that show it to our understanding....(10)

This fundamental compatibility of faith and reason is important for understanding how he helped to prepare the way for the development of the autonomy of modern science. It is against the background of the saint's Incarnational humanism that the discussion of the Galileo affair and the autonomy of modern science is set.

Vatican II and the Autonomy of the Natural Sciences

The validity of the experimental method is based on the acknowledgment of the autonomy of culture and especially of the natural sciences. This autonomy is stressed by Vatican II:

If by the autonomy of earthly affairs we mean that created things and societies themselves enjoy their own laws and values which must be gradually deciphered, put to use, and regulated by men, then it is entirely right to demand that autonomy. Such is not merely required by modern man, but harmonizes also with the will of the creator. For by the very circumstances of their having been created, all things are endowed with their own stability, truth, goodness, proper laws and order.(11)

In an obvious reference to the Galileo affair, the Council concludes: "Consequently, we cannot but deplore certain habits of mind, sometimes found among Christians, which do not sufficiently attend to the rightful independence of science."(12) It is here especially that St. Francis de Sales, by his insights into Sacred Scripture and the openness that it can produce, has anticipated the Council.

The Experimental Mind and Secularization

The Salesian teaching on the centrality and importance of the Incarnation, which stresses the eternal possibilities of all that is genuinely human, invites us to consider the world and human life as they are in themselves. Our world has a value in itself and consequently deserves our attention and solicitude. The Christian interpretation of creation and of the origin of the world lays the very foundation for secularity, that is, for the attitude that desires the world and all creation be given its proper value. In the polytheistic religions of the Near East, there was no clear-cut distinction between God, humanity and the world. Their myths on the origins of the world confused gods, human beings and animals in such a way that there were sacred animals, beings that were half-man, half-animal and half-god. A cosmogony of this type is an obstacle to all experimental science. The confusion that reigns in such a conception of creation does not allow man to examine the world in an objective way. The birth of modern science was favored by the Christian interpretation of the creation of the universe, for it is in the Bible that one distinguishes for the first time humanity and the world.

The polytheistic cosmogony conceives of creation as a sacralization, while the biblical cosmogony, and especially the Christian understanding of it, sees it as a desacralization or as a secularization. In the Christian view, the creation of the world in Genesis receives its full meaning only in the light of the Incarnation. This central mystery of Christianity teaches us that each desacralization has to be accompanied by a sacralization. The notion of secularity for the Christian or for the believer comes from revelation and in particular from Genesis where the word of God desacralizes the polytheistic culture of the Ancient Israelites and establishes the value and goodness of the things of this world in themselves. The very apogee of this secularization was the Incarnation when the Word of God, that is the very person of God, entered human history. The Incarnation leads, on the one hand, to secularization and, on the other, to sacralization. Creation and the Incarnation make possible a conception of secularity and help us understand the relationship between the natural sciences and Christianity. A contemporary priest-scientist sees the Incarnation as radically affecting creation and the way science is done and man's role in the continuing evolution of the universe. Through the mystery of the Incarnation, "God enters into both the process and the event of creation's growth as part of it." The essence of the goodnews for humankind is that "creation is free in Christ and is not determined by any necessary process. This is. . . the assumption upon which all true experimental science is built, namely, the intelligibility of the physical creation is a free (as opposed to necessary) intelligibility."(13)

Interestingly enough, Francis de Sales considers the spiritual life and asceticism as a kind of secularization, indeed as an indication of this "free intelligibility" of the universe. Since man has been fashioned out of the clay of the earth, he has a tendency of identifying himself with it, of becoming a microcosm, i.e., subject, like the world, to cyclic and fatalistic forces. In this Greek conception of man as microcosm, he becomes "world and the world becomes man." By a Christian life, man frees and secularizes himself in the sense that he separates himself from the world; he puts a certain distance between himself and the world, which he regards as a chaos that he must master. This effort of separating oneself from the world permits man to achieve self-identity, to become more human. To "secularize" our life is to make us aware of the reality and value of the world but without confusing it with our human life. The saint's words bring out much better this intriguing idea. "The ancient philosophers seem to say that man has become world and the world man when they call man a microcosm, namely, a little world. St.

Augustine, speaking of the world says: 'What is the world? It is nothing else but man; and man, what is he but the world.'" Here is the way Francis de Sales interprets the great Augustine: "Man has become so attached to honors, riches, titles...and his own esteem that he has for that reason lost the name of man and received that of the world; and the world has so strongly drawn to itself the affections and appetites of man that it is no longer called world but man."(14)

The world as chaos is the enemy of man. As microcosm, man becomes world and the world becomes man. There is no difference between them, but complete identification. However, man as man has been called, has been drawn from the world of chaos by the hand and Word of God; the Creator transcends the world. To separate and free himself from the world, to fulfill himself, he must follow reason, which is understood as a participation in the Logos joined to the Spirit of God and introduces order, value, goodness and peace in the world of man. It is in this way that man restores the image of God in himself, becomes more human and discovers his own true worth and the value of creation.

These preliminary observations on secularization, secularity and free intelligibility are intended to help us appreciate the role of Francis de Sales in the emergence of the autonomy of modern science.

Scholasticism and Modern Science

In 17th century France there was a group of independent thinkers known as the libertins érudits (François La Mothe le Vayer, Gabriel Naudé, Guy Patin and Pierre Gassendi) and their forebearers (Erasmus, Montaigne, and Pierre Charron) who considered the scholastic method, which reigned unchallenged in most of the universities of their day, as the very negation of experimental science.(15) These men, who held Francis de Sales in high esteem and shared a number of his ideas, helped to fashion an ideal of man which was marked by a basic shift in emphasis.(16) Like some of the Church Fathers, whom these independent thinkers read and admired, they believed that man's being was not primarily determined by his essence but by his activity. In scholastic terminology, it was not so much a question of *agere sequitur esse* (action following being or nature) but rather of *esse sequitur agere* (being following action). Man was capable of shaping the kind of person he wanted to be. Pierre Charron, one of the mentors of this group of independent thinkers, leveled three basic criticisms against scholasticism. In his view, it had an "exaggerated respect for authority in the field of philosophy, an obstinate attachment to prior principles, [and] the belief in a unique and typical form of civilization."(17)

The University of Padua was not the first nor the only university to reject scholasticism. "But more dramatically than elsewhere students could see there the crumbling of the harmony established by St. Thomas between Aristotelianism and faith."(18) It should be noted that De Sales attended the University of Padua from 1588-1592 and witnessed the decline of scholasticism there.

François La Mothe le Vayer attacked scholasticism because it was an excellent example of the tendency of men to divinize, sacralize and hence absolutize their ideas and their philosophical systems. "[Just look at] how many volumes of reveries, " he exclaims, "that they define as

revealed, how many scholastic fantasies that they would like to be accepted as articles of faith."(19) This tendency naturally leads to useless contentions and controversies. By blindly accepting the ideas of others "as infallible oracles, people revere answers without examining them."(20) Such a mentality militates against a critical and experimental mind and creates almost insurmountable obstacles to the pursuit of truth.

Gabriel Naudé's disdain for scholasticism is due to his great admiration for Aristotle. In his mind the advent of scholastic philosophy overturned and replaced Aristotle.(21) Guy Patin, a very close friend of Naudé's, attributed , to a great extent, the violence and vehemence of the quarrels on grace in the Jansenist controversies to scholastic theology.(22)

Of these four liberal or independent thinkers, it is Pierre Gassendi who launched the most formidable and most systematic attack against scholasticism and the metaphysics of Aristotle.(23) Gassendi did not allow for any metaphysical system in his philosophy. In his eyes scholastic metaphysics "made of philosophy . . . a seed-bed of quibbling that was apt to encourage quarrels."(24) He accused the Scholastics of never going back to the sources and of being content to repeat accepted ideas.(25)

Gassendi did not teach a destructive kind of skepticism. On the contrary, his teaching was midway between two dogmatisms: that of metaphysics and that of an absolute skepticism. "It would be difficult for me to tell you who irritates me the most. Those who say that we know nothing [there you have it for the skeptics] or those who refuse us even the permission of knowing nothing. [there you have it for dogmatism]."(26) When he states we know nothing, we must look closely at what he means. "I mean nothing that touches the intimate nature of reality . . ."(27) He rejects Aristotelian science which is based on an analysis of the essence of things. Consequently, for him "physics no longer rests on principles; it rests on experience and is constructed exclusively by it."(28) From this fundamental notion and the atomism of antiquity, Gassendi constructs a philosophy of experimental science.

Scholasticism and Francis de Sales

Although De Sales was formed in the tradition of scholastic philosophy while studying at the Collège de Clermont in Paris and learned a good deal from its content and methodology, his works are not characterized by its method and terminology. This is all the more remarkable when we consider that he wrote the pamphlets that were later collected and published as the *Les Controverses* at almost the same time that Pierre Charron published his *Trois Verités* to answer the *Traité de l'Eglise* of Du Plessis de Mornay. This work of Charron is entirely in the scholastic tradition, using its method and terminology throughout. In a marginal note on the subject of miracles and diabolical power in the *Les Controverses*, the saint wrote, "The words and the scholastic terms have to be reduced here."(29) Moreover, he realized that the Calvinist ministers in the Chablais region were not convinced by the "subtle distinctions of the scholastics." Public debates with these ministers were not to be presented "after the manner of scholastic disputations, by logical argument, for this method gives ordinarily all the more obstinacy to the will than light to the intellect."(30) When one tries to explain to the Calvinists the mystery of the Eucharist, the word of God is always preferable to philosophy and to scholasticism. "Although it would be very easy," Francis admits, "to answer by using

philosophy the way the Scholastics do, why should I rely on philosophy when I have the word of God on my side."(31) This text certainly highlights his skepticism toward philosophy and metaphysics when it is a question of grasping the truths of the Christian mysteries.

During his lifetime De Sales was considered to be an outstanding theologian, but not in the formal, scholastic sense. We see this especially from the fact that Dom Eustache de St. Paul, a doctor of theology at the Sorbonne, asked him his advice on a summa theologica he was writing.(32) The saint advised him to make it more "palatable and pleasing by cutting out words dealing with method and useless questions like 'Whether Angels are in a place by their essence or by their operation,' 'Whether they move from one place without passing through another' "(33) As a matter of fact the entire letter that Francis wrote to him in this regard corroborates the following testimony given by Jean Baptiste Gard at the process of his canonization. "President Favre also told me that Cardinal de Perron, de Berulle, Monsieur Duval, all the other doctors of the Sorbonne. . . used to say that he was the most learned theologian of his century. . . ." (34)

The reservations that De Sales had with regard to the value of scholasticism as a method rest on the conviction that reality is much too varied and too diverse to be explained by a single philosophical system. And so his method was oriented toward an eclectic and experimental approach. His theory of knowledge has a lot in common with Gassendi's.(35) It gives a central and indispensable role to experience and the senses. "Experience then and the knowledge of the senses," the saint exclaims, "are very genuine, but the conclusions that we draw from them betray us." To emphasize these two elements, he adds, "The one who fights against the knowledge of the senses and personal experience fights against reason and overturns it, for the basis of all reasoning depends on the knowledge of the senses and on experience." (36) We could add that the knowledge of the senses forms the basis for all the natural sciences and scientific inquiry.

It was this same preference for observation and the experimental method that led him to bequeath his own body to the medical students at the University of Padua. But the strongest evidence we have of his support of the autonomy of modern science and the validity of the experimental method is his relationship with a young Barnabite priest by the name of Redentore Baranzano.

Baranzano and The Galileo Affair

One of the most remarkable minds of the first half of the 17th century was John Anthony Baranzano. He was born in 1590 in the northern part of Italy in the diocese of Vercelli. In 1608, just about the time that Francis de Sales was finishing his first edition of the Introduction to a Devout Life, Baranzano entered the Barnabites at Milan, made his first profession of vows the following year and took the name of Redentore. When the Barnabites were asked by Francis to take over the Chappusian College at Annecy, Baranzano arrived in the month of October 1615 to teach physics, philosophy and Hebrew. At the time, he was only a deacon and was ordained to the priesthood by De Sales in December of the same year. The young scientist and scholar remained there several years and died at the age of thirty-two while founding a new house in France.(37)

The way this young priest taught was impregnated with a new spirit, a fresh approach. "Baranzano . . . began to shake off a little the yoke of Aristotle by looking for new systems . . ." (38) He was on friendly terms with the greatest scientists of his day, like Kepler, Tycho-Braché, Francis Bacon and Galileo. (39) Nicéron reproduces a letter of Francis Bacon to Baranzano where he gives a resumé of the scientific method outlined in his *Novum Organum* and leads us to believe that the young Barnabite used this method in his classes at Annecy. (40) As a result of these relationships, Baranzano's reputation went far beyond the frontiers of Savoy and Italy. The foursome of liberal thinkers mentioned above (P. Gassendi, F. La Mothe Le Vayer, G. Patin, G. Naudé) had a great deal of admiration for this young scientist. One of them said of him: "Redentore Baranzano . . . was a great mathematician, a great chemist and a great innovator, capable of writing against Aristotle and the greatest minds of Antiquity." (41) La Mothe Le Vayer places him among the greatest minds of his century. . . ." (42)

Francis took a great deal of interest in the College of Annecy where he presided "on public occasions, disputations, plays and other exercises in order to encourage the students. . . . He assisted particularly "at the public disputations on philosophy at the end of the school year." (43) Along with the town fathers, he attended Baranzano's defense of his thesis on the whole of philosophy in August of 1617.

The enthusiasm that Baranzano engendered in his courses led two of his students, Louis des Hayes and Muratori da Savigliano, to have his lecture notes on astronomy published. This book entitled *Uranoscopia, seu de coelo* (1617) teaches the Copernican theory and some ideas of Galileo. (44) This work had neither the approbation of Francis nor that of Baranzano's Superior General. Inasmuch as the Copernican theory had been condemned the year before by the Congregation of the Index, Baranzano's Superior General had him called back to Milan. Interestingly enough, de Sales intervened on Baranzano's behalf and wrote to his Superior General requesting to send him back to Annecy. "Father Redento returns where holy obedience calls him. He has very good qualities and has given us a good deal of edification. I know that he was at fault for having published his books without the necessary authorization, but I also know that the principal reason for this fault is a certain simplicity and inadvertence." (45)

It is very important to note the "fault" that Francis speaks about has to deal with Baranzano's failure to obtain the necessary ecclesiastical permissions before publishing his books. In the light of academic freedom *avant la lettre* and the autonomy of science, it is very significant that even though the Copernican theory had been condemned as "formally heretical", de Sales does not censure in any way the contents of this book. (47) He certainly must have been aware of its contents because, as was mentioned above, he attended Baranzano's thesis defense on the whole of philosophy which, at that time, included physics and astronomy.

The Superior General complied with the saint's request, and Baranzano returned to Annecy on October 30, 1617. A little later Baranzano wrote an opusculum entitled: *Nova de motu terrae copernico juxta Summi Pontificis mentem disputatio* (A New Disputation on the Movement of the Earth According to the Mind of the Holy Father) in which, if we are to believe the editors of the Annecy edition of the saint's works, "he generously repaired his fault." (48) The word fault or mistake takes on here the meaning of a doctrinal error. The editors and many commentators fall back on the opinion of Colombo, who says that Baranzano "renounces the Copernican doctrine as contrary to the meaning of Sacred Scripture." (49) Baranzano's position, however, is much more nuanced than this commentator believed. Colombo's opinion and those who follow

it lead us to believe that the young scientist abandoned the heliocentric theory. To support his argument, Colombo is content to quote only the first sentence of the last paragraph of this "retraction" where we read: "After all that has just been said, I conclude that the Copernican theory of the movement of the earth is untenable if one believes that it is based on fact. It is in conflict then with Holy Scripture and is rightly condemned by the Pope for this reason" (Emphasis added).(50)

"Based on fact" (prout de facto procedit) become the key words in this passage. Baranzano maintains in this so-called retraction that one can hold the heliocentric theory but only as an hypothesis. In the 1617 edition of the Uranoscopia, he tried to use Scripture to bolster his argument. He acknowledges, however, in the New Disputation that we have no right to base this theory on Sacred Scripture. It is in this sense that his opusculum is a retraction. What he is saying implicitly in the New Disputation is that the two areas of knowledge, science and faith, are autonomous and should not be confused nor conflated. This is the way that Baranzano interpreted the decree of the Holy Office. Briefly, what he says is that if the Copernican theory cannot be reconciled with the Scriptures, it agrees perfectly, in his opinion, with astronomy and the evidence of our senses, in short, with the physical sciences. The applicable passage is of capital importance in understanding his position. It reads as follows: "Quam ob rem concludere possumus omnia, quae ibi dicuntur. . . non repugnare, & problema illud de possibili verum quoad utramq: quod autem de possibili doctrina ibi tradita verificetur patet, quia, nec astronomice, nec optice, nec omnino physice copernicus damnari posse videtur, licet ut scripturae repugnans merito reprobetur." (Emphasis added.) Therefore, one can hold the Copernica theory as a real possibility in the realm of science.(51)

This interpretation of Baranzano's "retraction" explains very well why it was placed in the appendices of the 1617 edition of the Uranoscopia and also in a book containing two works of Kepler in which the astronomer teaches, defends and elaborates on the heliocentric theory.(52) Furthermore, Baranzano's position, which was essentially a belief in the autonomy of the natural sciences, was the one later adopted by Galileo himself. In his Letter to the Grand Duchess Christina, he writes, "There is an underlying positive idea. . .the principle of autonomy, according to which physical investigation can and should proceed independently of the Bible."(53) It must have also reflected the opinion of Francis de Sales, who undoubtedly counseled this young genius in his trying moments after the publication of his first book. This can be supported by the fact that the saint gave his approbation to another work of Baranzano entitled *Novae opiniones physicae* (New Opinions in Physics, 1618). This is the way that Francis characterizes this work:

It does not contain, in my opinion, anything contrary to the faith and to the teachings of the Catholic Church . . and presents . . a very worthy philosophical teaching that is remarkable for its clear organization, a singular subtleness, a pleasant brevity, an uncommon erudition, which in this field is something quite rare.(54)

In this work Baranzano defends the possibility of a "certain irregular movement in the earth's center," an opinion that is in direct conflict with Aristotelian science and was at odds with the censure of the Holy Office.(55) He formulates the proposition he defends in the following way: "It is no longer valid to say with Copernicus that a movement of the earth is to be situated in the fourth sphere, but rather. . that there is in the center of the earth a certain irregular motion

that keeps it in a state of equilibrium."(56) The reason for this movement is set forth, as Baranzano himself tells us, in the last edition of the Uranoscopia (1619) where he refers to the decree of the Index. We can deduce from this that Baranzano gave the widest interpretation possible to the decree on the Index and was supported by Francis de Sales because the young scientist informs us that this new edition of the Uranoscopia also has the approbation of the saint.(57)

Conclusion

The whole relationship of Francis de Sales with Baranzano gives a fresh and unaccustomed look into the character of the saint. The fact that he came to Baranzano's defense when he faced a serious threat to his career as a teacher and scholar, not to mention his priestly vocation, by an authoritative decree of the Church indicates very clearly that de Sales acknowledged the autonomy of science and of other secular disciplines as they were beginning to emerge. The approbation given to the later works of Baranzano show that the Barnabite's scientific writings, though at odds with a Church censure, did not contravene the faith in de Sales' view. From the position that the saint took in this very delicate and potentially explosive issue, we can justifiably conclude that he maintains the right of the scholar and scientist to pursue the truth by refining his thought and by competently and responsibly handling the methodology of his particular discipline. As noted above, this is essentially the position taken by Galileo in his Letter to the Duchess Christina . The saint's support of the experimental method and of freedom of research in the natural sciences when threatened by an abuse of Church authority is very much in keeping with the official teaching of Vatican II on the autonomy of the secular disciplines. It explains why Pope Paul VI could say of him: "No one of the recent Doctors of the Church more than St. Francis de Sales anticipated the deliberations and decisions of the Second Vatican Council with such a keen and progressive insight."(58) One well-known Salesian scholar, understanding the supportive and confirming role of Francis de Sales as the physical sciences were extricating themselves from both philosophy and theology to stake out their own legitimate turf wrote:

At the dawning of modernity, do we value Francis' "resistance?" If he had been understood, the Church could have been spared the Galileo Affair. In any event, his attitude still inspires scientists who are Christian and want to be faithful to their twofold calling, to scientific research and to their Christian faith. Let us admit that he renders us a noble service in the scientific explosion of our 20th century. (59)

NOTES

1. Cf. David L. Wheeler, "A Biochemist Urges Darwinists to Acknowledge the Role Played by an 'Intelligent Designer,'" Chronicle of Higher Education, 1 November 1996, A.13 and Kim McDonald, "Oxford University' Richard Dawkins Preaches Evolution to a Skeptical Public," Chronicle of Higher Education , 29 November 1996, A 14.
2. "Message to Pontifical Academy of Sciences on Evolution," Origins, 14 November 1996, vol. 26: no. 22.
3. John F. Haught. Science and Religion: From Conflict to Conversation (Mahwah, N.J.: Paulist Press, 1995).

4. Cf. Alexander Pocetto, "An Introduction to Salesian Anthropology," *Salesian Studies*, (Summer 1969): 36-62.
5. Karl Rahner, "Jesus, Christ," *Sacramentum Mundi* (New York: Herder and Herder, 1968), 3: 208.
6. François de Sales. *Oeuvres de saint François de Sales, évêque et Prince de Genève et Docteur de l'Eglise* (Annecy: J. Niérat, 1892-1932), 12:307. (hereafter cited as OEA). The translations from this work as well as other works are the author's unless otherwise noted.
7. OEA, 5: 230.
8. Loc.cit.
9. OEA, 9:456.
10. OEA, 1:330-33. Cf. Alexander Pocetto, "Love and Critical Thinking in the Writings of Francis de Sales" *Proceedings of the Patristics, Medieval and Renaissance Conference*, 14 (1989): 12.
11. *Gaudium et Spes*, n.36, *The Documents of Vatican II*, ed. W. Abbot (New York: America Press, 1966), 233-234.
12. Loc.cit.
13. Robert A. Brungs, S.J. "A Catholic Perspective on Creation," in *Some Christian and Jewish Perspectives on Creation* (St. Louis: ITEST, 1991), 53-54.
14. OEA, 9:343.
15. Cf. René Pintard, *Le libertinage érudit dans la première moitié du XVIIe siècle* (Paris: Boivin, 1943).
16. Cf. Alexander Pocetto, "S. François de Sales et les libertins érudits" (Ph.D. diss. Université Laval, 1970).
17. J.B. Sabrié, *De l'humanisme au rationalisme, Pierre Charron (1541-1603): L'homme, l'oeuvre, l'influence* (Paris: Alcon, 1913), 298.
18. Henri Busson, *Le Rationalisme dans la littérature de la Renaissance* (Paris: J.Vrin, 1957), 194.
19. *Deux dialogues faits à l'imitation des anciens sur l'opiniâtreté et la divinité* (Paris: Coll. chefs-d'oeuvre méconnus, 1922), 198.
20. *Ibid.*, 178
21. Cf. James V. Rice, *Gabriel Naudé 1600-1653* (Baltimore: John Hopkins Press, 1939), 83.
22. *Lettres de Gui Patin* (Paris: J.A.Reveillé-Parise, 1846) 2: 235.
23. Cf. *Dissertationes en forme de paradoxe contre les Aristotéliens (Exercitationes paradoxicae Aristoteleos)*, Livres I et II, texte trad. et annoté par B. Rochot (Paris: J. Vrin, 1959).
24. *Ibid.*, Liv. I, Diss. I, 2-4, 26.
25. *Ibid.*, 28.
26. Cited by B. Rochot, "Gassendi et le Syntagme Philosophicum," in *P. Gassendi sa vie et son oeuvre* (Paris: A. Michel), 76. The words in brackets are those of Rochot.
27. *Op. cit.* Liv. 2, Diss. VI, 7-8, 505.
28. B. Rochot, "Gassendi et le Syntagme philosophicum," 70.

29. OEA, 1:320.

30. Cited by E.J. Lajeunie, *Saint François de Sales, l'homme, la pensée* (Paris: Guy Victor, 1966) I : 516.

31. OEA, 7:334

32. Cf. OEA, 15: 117. The complete title of this work is: *Summa Theologiae tripartita, de Deo, rebusque divinis ac supernaturalibus*.

33. *Ibid.*, 15:119.

34. *Déposition de Jean Baptiste Gard, 2e Procès de Genève, Fol. 164*. This manuscript is housed in the archives of the Visitation monastery in Annecy, France.

35. Cf. B. Rochot, "La vraie philosophie de Gassendi," *Actes du Congrès du tricentenaire de Pierre Gassendi (1955 4-7 août -Digne)* (Paris: Presses Universitaires de France, 1957): 236-237.

36. OEA, 1:332.

37. Cf. Giuseppe Colombo, *Intorno alla vita ed alle opere del P. Redento Baranzano, scienziato da Serravalle-Sesia* (Torino: Vincenza Bona, 1878).

38. Jean-Pierre Nicéron, *Mémoires pour servir à l'histoire des hommes illustres dans la République des lettres* (Paris: Briasson, 1727-1745) 2:44. A fellow Barnabite describes him in the following fashion: "Di ingegno aperto, tendenzialmente indagatore e sperimentatore, il barnabita [Baranzano] affronta gli stessi punti toccati da Galileo - la 'teoria copernicana' e la 'controversia su alcuni brani della Scrittura' -, esprimendo una piena adesione al sistema eliocentrico, e sviluppa con discorso coerente quei concetti di 'gravita' ed di 'forza centrifuga', chiariti e precisati più tardi da Isaac Newton (+1727). È tra i primi preoccuparsi di stabilire in confini che separano 'filosofia' e 'scienza' ha il coraggio di varcare i limiti consentiti, nonostante la sua condizione di religioso; ma, ancor troppo legato alla tradizione scolastica, non riesce - come Bacone - in una vera e propria opera di rinnovamento e - diversamente da Galileo - è troppo rispettoso dell'autorità per resistervi" (Mauro Reggazoni, *La fisionomia culturale e spirituale dei Barnabiti e l'influsso storico della persona e opera di San Francesco di Sales: Una collaborazione apostolica e un'amicizia spirituale*, 279-280). This author is obviously following the opinion of Emile Caillot, who in his "La philosophiae annecienne de Don Redento Baranzano," *La Revue Savoisiennne* (117e année, 1977) argues that Baranzano was not an innovator since he readily abandons the heliocentric theory in his later work, *Novae opinionones*, which is, in his view, in its content, style and method essentially Aristotelian despite attempts to call into question the Stagyrite's positions. We will demonstrate below that Baranzano did not abandon the Copernican theory and did call into question some aspects of Aristotle's teaching.

39. Romualdo Paste believes that Baranzano's relationship with Galileo is not well-founded but emphasizes several common points in Baranzano's works with the first trial of Galileo. Cf. "Il P. Giov. Antonio Baranzano Vercellese e la questione Galleana," in *Archivio della Società Vercellese di Storia e d'arte*, 1921, no. 1 and 2: 211.

40. Nicéron, *op.cit.*, 45-51.

41. *Naudeana et Patiana, ou singularitez remarquables des conversations prises de MM Naudé et Patin, l'édition augmentée par Pierre Bayle* (Amsterdam:F. Van der Plaatz, 1703), 81-82.

42. Florence Wickelgren, *La Mothe Le Vayer, sa vie, son oeuvre* (Phd.D diss., Université de Paris, 19344, 25-26.

43. *Déposition de Claude Chaffarod*, cited in OEA, 15:239.

44. The complete title is: *Uranoscopia, seu de coelo, in qua universa coelorum doctrina clare, dilucide et breviter traditum* (Coloniae Allobrogum: P. et J. Chouet, 1617). The Chronology of his works is not clear. That of Ducis in *Notice sur Dom Baranzano Père Barnabite professeur au collège d'Annecy du temps de Saint François de Sales* (Annecy: Perrisin, 1881) is not accurate because the dates do not correspond with those that are in the works themselves. For the *Uranoscopia*, we believe with Vaucelle that Baranzano's students had his notes printed without his permission. As a result he had to publish a more accurate version. Cf. Vaucelle, "P. Baranzani" in the *Dictionnaire*

de Biographie française (Paris: LeTouzey, 1951), 4 :186-187. This commentator does not give us a reason, but his position seems to explain the fact that we find the words "Nova editio" on the title page after the Preface on p. 17, which is not numbered in the edition of 1617.

45. OEA, 18:94-95.

47. Cf. Pietro Redondi, *Galileo Heretic (Galileo Eretico)*, trans. R. Rosenthal (Princeton: Princeton Univ. Press, 1987), p. 38. "With unanimity of opinion, the theological experts of the Holy Office judge the heliocentric doctrine to be philosophically foolish and absurd, formally heretical, and the doctrine of the earth's movement to be erroneous de fide, inasmuch as the first contradicts the Scriptures and the second does not conform to them." This condemnation was communicated to Galileo on February 26, 1616.

48. OEA, 18:95-96.

49. Colombo, *op.cit.*, 43. Here is the Italian text: "si stacca dalla doctrina copernicana siccome contraris al senso delle Sacre Scritture." See also Mauro Regazzoni, *op. cit.*, 282.

50. Baranzano, *Nova de motu terrae copernicaeo juxta summi Pontificis mentem disputatio* (n.p., n.d.), 30. It is important to cite the Latin text: "Ex omnibus supra datis concludo improbabilem esse prout de facto procedit, opinionem copernici de terrae motu & sacrae scripturae adversari meritoque a summo Pontifice hac de causa damnatam." (Emphasis added).

51. *Ibid.*, 15.

52. Cf. Joannis Kepleri, *Mathematicis Caesarei Dissertatio cum nuncio Sidereo nuper ad mortales misso a Galileo Matematico Patavino . . .*, 1610. The copy that was consulted is found in the library of the University of Geneva, Switzerland.

53. Marurice Finocchiaro, "The Methodological Background to Galileo's Trial," *Reinterpreting Galileo*, ed. William Wallace (Washington: The Catholic University of American Press, 1986), 268.

54. OEA, 24:200. The complete title of this work is *Novae opiniones physicae, seu tomus primus secundae partis Summae Philosophicae Anneciensis (Lugduni: J. Pillehotte, 1618)*. It is strange that the saint's approbation is found in the appendix of the copy of this work in the Mazarin Library but not in the copy of the Bibliothèque Nationale.

55. *Novae opiniones*, 150.

56. *Loc.cit.* The original text reads as follows: "non licet amplius cum Copernico dicere, terram in quarta sphaera mobilem collocari; dic tamen, si placet, in ipso centro aliquo motu titubationis librari."

57. *Uranoscopia* (1619), 145. "Read my *Uranoscopia*, which is now revised, augmented, corrected and with the approvals of not only the most illustrious and Most Reverend Francis de Sales, Bishop of Geneve. . . but also of the Most Reverend Jerome Boerio, Superior General of our Congregation."

58. Paul VI, *Sabaudiae Gemma*, Apostolic Letter, trans. N. Kilty (Hyattsville, Md:Institute of Salesian Studies, 1967), 5.

59. "A l'aube des temps modernes, mesure-t-on bien la valeur de la 'resistance' de François? S'il avait été entendu, l'Eglise se serait économisée l'affaire Galilée. . . Quoi qu'il en soit, son attitude inspire encore les savants chrétiens qui se veulent fidèles en même temps à leur double vocation, à leur recherche de savants et à leur foi de chrétiens. Avouons qu'il nous rend un fier service dans l'explosion scientifique de notre XXe siècle!" André Ravier, "François de Sales, Un Homme Ouvert sur l'Avenir," *L'Unidivers Salésien: Saint François de Sales Hier et Aujourd'hui*. Actes du Colloque International de Metz, 17-19 septembre 1992. Textes réunis et publiés par H. Bordes et J. Hennequin. Univ. de Metz, 1994, p. 299).