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It is commonplace to observe that the profound scientific changes that took place in the 16th and 17th centuries were deeply intertwined with issues and institutions in the larger society and culture, and that resistance to the new ideas then transforming the world picture went far beyond any purely rational doubts about their validity. At the one end of the historiographical spectrum we have the 19th-century caricatures of the far-sighted and noble seekers after truth, such as Copernicus, Galileo, and Bruno, facing the benighted forces of religious conservatism, who vainly sought to maintain an outdated picture of an anthropocentric universe and the authority of the oppressive religious institutions that they represented against the rising tide of truth. Recent studies have gone a long way towards producing a more subtle and nuanced picture of the process of change during the so-called Scientific Revolution, and understanding the complex dance between tradition and innovation during this period. We now understand in much more detail the rise of Copernicanism and complex social factors that surrounded such events as the condemnation of Galileo. But there is still a great deal of work to be done.

In the literature of the last fifty years or so, perhaps from Kuhn’s *Copernican Revolution*, the emphasis has been on the astronomical revolution and the social factors surrounding the introduction and eventual acceptance of heliocentrism. However, there was another important scientific transformation during the same period: the rejection of Aristotelianism in natural philosophy and its eventual replacement by a new mathematical and corpuscular physics. Certainly there have been many studies of late Aristotelian natural philosophy and the development of early-modern alternatives. But there has not been much attention to the social dynamics of the process of change in this case. The transformation between Aristotelian natural philosophy and mechanist was every bit as revolutionary and unsettling as was the transformation between the Ptolemaic universe and the Copernican, and while there is no event associated with that change quite as visible as the condemnation of Galileo, it occasioned, in its way, as much anxiety and social discord as heliocentrism did.

That is what I would like to explore in this essay, some of the social factors that surrounded the rise of an anti-Aristotelian natural philosophy. In particular, I would like to look at the specific case of the debate over Aristotelianism that took place over Aristotelianism that took place in Paris in the mid-1620s. In 1624, a group of three scholars announced a public meeting in which they proposed to refute Aristotelian natural philosophy and defend a variety of atomism. This meeting was forbidden

1 The *locus classicus* for these views are Draper (1874) and White (1896). Both books were reprinted often well into the 20th Century.
2 Kuhn (1959).
3 Of particular note here are Ariew (1999), Des Chene (1996), and Dear (1995).
by the authorities, the theses condemned for opposing officially approved doctrines and authors, and the unfortunate three were exiled from Paris. In examining the reaction to this event in some detail, we shall confirm some generally accepted commonplaces about the opposition to the new anti-Aristotelian philosophies, that the opposition derived from a kind of blind conservatism, that medieval scholastic thinkers had so linked Aristotle with Christian theology that an attack on the one was regarded as an attack on the other, and so on. But we will also find something else: in the context of early 17th-century France, defending Aristotle against the new scientific ideas was seen as necessary for the stability of society itself. This, in any case, is what I shall argue.

The condemnation of 1624

My story begins in the summer of 1624, in Paris. There, three young scholars who opposed the peripatetic (Aristotelian) philosophy then taught at the schools announced a disputation to refute Aristotle. The three young scholars (whom I will call the Gang of Three for short) were Jean Bitaud, "Anthoine Villon, called the Soldier Philosopher," and Étienne de Clave, identified in one document as "Physician and Chemist." The disputation, scheduled for Saturday and Sunday the 24th and 25th of August, in "the Palace of Queen Marguerite," was announced on Friday, the 23rd of August, by posting a broadside in Latin containing fourteen anti-Aristotelian theses on the street corners of Paris.4

The theses were something of a grab-bag of doctrines and criticisms. Theses I-III were directed against Aristotle's three principles in physics: matter, substantial form, and privation. What was being denied here, apparently, was the Aristotelian conception of body and change, the idea that bodies have innate natures and tendencies (forms), that inhere in undifferentiated matter, and that bodies can only change their characteristic behavior by shedding one form and acquiring another. However, the authors of the theses were careful enough in their broadside to follow the official Catholic doctrine that the human soul is the substantial form of the human body; in eliminating substantial forms, rational forms, human souls were excepted.5 The remaining theses were somewhat more technical, and dealt with a theory of

4 The details of this event are reported in Morin (1624), pp. 5ff. According to his anonymous biographer, Morin was present for the affair; see Anonymous (1660), p. 39; Morin implies as much in Morin (1624), p. 18. Another shorter account, perhaps derived from Morin's, can be found in the Mercure François, vol. X (1625), 503-504. There are numerous short references to the affair in the literature, and a few articles that focus on it, but the disputation of August 1624 has received its most extensive treatment in an excellent recent article by Didier Kahn (Kahn (2001a)), pp. 241-286. In this article, and in his thesis (Kahn (1998)), forthcoming from Librarie Droz, Kahn exhaustively discusses the documents, people, and events connected with this affair. His very careful and thorough work renders all other accounts superfluous. Despite the impressive account he offers, though, I disagree with some aspects of his interpretation of the significance of the event. Kahn is mainly interested in showing that the condemnation of the theses was not a condemnation either of alchemy or of atomism, but was connected with some of the religious consequences of the theses. He also sees the objections to the theses as arising from disputes between the University of Paris and the Jesuit College de Clermont, and more generally, between the French universities and the Jesuit colleges. (See Kahn (2001a), pp. 243-244.) My claim is somewhat different, as will be seen.
elements and mixtures. Thesis IV dealt with the number of elements, which, according to V and VI, are the basic elements of everything, and are ungenerable and incorruptible. All diversity among things derives from different proportions among these elements in a given mixture (VII) and all action proceeds from the mixture of these elements. (VIII). Theses IX and XI dealt with the specific makeup of the elements found in our regions, earth and water, air and fire. Theses X, XII and XIII denied the Aristotelian account of change, and argued that all change happens by the rearrangement of parts, which themselves cannot be transmutated. And finally, the last thesis asserted that "everything is in everything" (that is, that everything contains at least some amount of each of the elements), and that everything is composed of atoms or indivisibles (XIV).  

But things did not work out for the Gang of Three. On Thursday, the premier President de la Cour de Parlement saw copies of the theses, and he forbid them to sustain the theses on pain of death. The next day, Villon had the daring to seek him out at his home, and ask for the ban to be lifted. Though that was not granted, Villon and de Clave, without mentioning the ban, were able to gather eight or nine hundred people at their chosen site. The crowd waited in the late August heat until three o'clock for the disputation to begin. When people complained about the length of the wait, two large packets of the theses were handed out. After this, Villon went into the hall twice, and told the crowd that it was necessary to carry the seats to the courtyard, because the room couldn't hold the crowd. When it was pointed out that there was no problem in the hall, Villon went out a third time, and finally told the crowd that he was forbidden to sustain the theses, and so he would not sustain them. After much booing and whistling, the crowd left.

But the affair wasn't over. The Parlement sent the theses to the Faculty of Theology of the University of Paris (the Sorbonne) for their examination on 29 August. A few days later, the Sorbonne replied with a censure of some of the theses, 7 and through an Arrest of 4 September 1624, the "Cour de Parlement" ordered Villon, de Clave, and Bitaud to leave Paris, never to teach again within their jurisdiction, on pain of corporal punishment. 8 But the Parlement did not limit their attention to the unfortunate three. They wrote:

"Be it forbidden to all persons, on pain of death, to hold or to teach any maxims that go against the ancient and approved authors, nor to conduct any disputations but those which are approved by the Doctors of the aforementioned Faculty of Theology." 9

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5 For the official statement of the Catholic dogma on this question, see Denziger (1952), pp. 222-223 (§ 481) and pp. 272-273 (§ 738). The former is from the Council of Vienne (1311-12) and the latter is from the Fifth Lateran Council (1512-17).

6 The theses are given in their entirety in translation in Appendix 1 below. In the notes I discuss the sources of the text.

7 The report of the Faculty of Theology can be found in Launoy (1653), pp. 125-134, and in d'Argentre (1728-31), vol. 3, pp. 215-216. It is interesting to note that the Launoy text was subsequently republished as an appendix to Bernier (1653), part of a defense of Gassendi to an attack made against him by Jean-Baptiste Morin, who was very much involved in the affair of 1624. (See Martinet (1992), pp. 47-64, esp. p. 62.) Launoy's point, and Bernier's point in including the text, was that Aristotle had been controversial since his reintroduction into the Latin West in the 13th century, and that contrary to Morin's claims, rejecting Aristotle is not contrary to religion. The comments of the Faculty of Theology on the theses can be found in translation, along with the theses, below in Appendix 1. The main body of the text of their report is translated below in Appendix 2.

8 The document can be found in a number of places, including in the Mercure X, pp. 504-506.
Among the “ancient and approved authors,” Aristotle clearly stood at the head. While this event may not have had the visibility of the condemnation of Galileo in Rome eight years later, it did have its reverberations. Copies of the documents relating to the event are found both in published and unpublished sources outside of France, and as a legal precedent, it was prominently cited for many years to come.\(^9\)

There are many fascinating questions that one might ask about this incident. But there is one big question I would like to address now: Why did anyone care? Why was a list of theses, posted in Paris in Latin, claiming to refute the thought of someone dead for 2,000 years and under serious attack for more than 200 years, sufficiently alarming to bring in the big guns of the civil government, the Church, and the University, and result in the exile of three scholars? Who objected and why?

Two Defenders of Aristotle in 1624

Among the many who were involved in this event and who argued against the Gang of Three, I would like to examine two, the young Marin Mersenne, author of a recently published commentary on Genesis, and a young physician and astrologer named Jean-Baptiste Morin.

Morin was later to become rather a visible person in the scientific life of early seventeenth-century Paris.\(^11\) But at the time of the condemnation, he had done rather little of note, and had rather more in the way of ambition than success. At that point he was the physician to the Duke of Luxembourg, having passed through a number of other patrons earlier. But he was interested in much more than medical practice. Some years earlier, with the help of one of his patrons, he had undertaken a trip to Hungary and Transylvania to inspect the mines there. On the basis of his experiences there, he wrote a short treatise, published in Paris in 1619, *Nova Mundi sublunaris anatomia*, in which he argued for an astrological theory of the heat he found in the middle-European mines. In 1623 he had published a little book in Paris, *Astrologicarum domorum cabala detecta*, an argument for the twelve houses of the Zodiac largely on Cabalistic and numerological grounds, a work bizarre even for Morin; also, he was still basking in the glow of a correct astrological prediction he had made of a former patron’s fall from power and influence, something perhaps not so surprising given that particular person’s deep involvement in court politics. But then in late 1624 (the dedication is dated 29 November), Morin injected himself in another kind of debate by publishing a curious pamphlet entitled: *Refutation des theses erronees d’Anthoine Villon ... & Estienne de Claues...*, apparently self-published (on the title page it is said to be available “chez l’Auteur”). According to his contemporary biographer, he had attended the disputation, prepared to refute the group on the spot, and disappointed that he could not, he put his objections into print.\(^12\)
Morin offers a long and complex attack against the posted theses, an attack too long even to summarize here; each one gets careful scrutiny and refutation. (In this, Morin goes even farther than the Fathers of the Sorbonne, who were willing to allow that some of the propositions were unproblematic.) But the most basic argument seems to be the following. Morin seems to take as basic and beyond serious question the Aristotelian view that “matter ... and form united are the essence of body as such.” He thus argues that without matter and form, there can be no bodies. And so, he argues, since they deny matter and form, for the Gang of Three the human being isn’t a body. This leads to the denial of God. For if man is not a body, then neither is Jesus Christ. So, if there is no matter and form, Christ must have been lying when he declared that “this is my body.” And if God can lie, then there is no God. Thus heresy, blasphemy, and atheism follow “tres-euidemment” from the doctrines of these philosophers. A curious argument, but there it is.

We shall return to Morin shortly, but for the moment, I would like to tum to another contemporary writer who took an interest in this event, Marin Mersenne. In 1624 Mersenne was a relatively young man (36 years old at the time), a graduate of the prestigious Jesuit College of La Flèche, who had recently established himself in Paris; a member of the order of Minims, he had already published a number of religious tracts by the time our three disputants had announced their refutation of Aristotle. Among Mersenne’s works were two fat tomes, the Quaestiones celeberrimae in Genesim (Paris, 1623), and L’impiété des deistes (Paris, 1624). The Quaestiones ... in Genesim is in the form of a commentary on the book of Genesis (though the commentary only extends to the first six chapters). But in fact, the book is much, much more. One central theme concerns natural philosophy. Interspersed with the discussions of purely exegetical matters are many discussions of natural philosophy; God says “let there be light,” and Mersenne responds with a treatise on light; God creates the earth, and Mersenne responds with a treatise on the earth and its place in the cosmos, including a detailed examination of the Copernican hypothesis (he was against). There is method in all of this, though. In addition to the intrinsic interest there is in these discussions, Mersenne is out to demonstrate that a good Catholic can be a good natural philosopher too; Mersenne wants to undermine attacks from the new philosophers, not to mention the atheists and heretics against the Catholic church by showing that a rational person with an open mind should accept the doctrines there taught. Catholics had gained the reputation of being doctrinaire Aristotelians, Mersenne thinks; the new philosophers, the followers of Campanella, Bruno, Telesius, Kepler, Galileo, Gilbert, among others have spread the view that “that the Catholic

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13 Morin (1624), p. 36.
14 Ibid., pp. 48-49.
15 On Mersenne’s life and career, see Lenoble (1971), chaps. 1 and 2, and Beaulieu (1995).
16 Genisis, chapter I verse 2 (“Dixitque Deus; fiat lux, et facta est lux”) is finally given in column 731, followed in col. 735, after some philological and textual commentaries, by verse 3 (“et vidit Deus lucem, quod esset bona”), Mersenne launches into an extended treatise on light and topics in optics (col. 737ff). Chapter I verse 10 (“Et vocavit Deus aridam, terram ...”) is given on col. 861, followed in col. 867ff by a lengthy treatise on the earth, focusing on the question as to whether or not the earth moves. Note that the references to the Quaestiones ... in Genesim are given by column number. The copy in the French Bibliothèque Nationale (cote A 952 (1)), which I am using, contains two versions of cols. 669-674, the famous Colophon against the Atheists. It seems that Mersenne pulled the first version because it was too violent, and substituted a somewhat milder version. Following normal practice, I shall refer to the first version by adding an asterisk to the column number (i. e., cols. 669*-674*).
Doctors and Theologians clearly follow only Aristotle and swear by his word.” Mersenne continues:

“These idlers try to persuade the world that Catholics ... are in the highest ignorance of philosophy; or that Catholics do not want to admit opinions that are true or probable, but instead pressure Christian souls, as if by ancient tyrannical persuasion, to accept false or less true opinions. But this is completely false. If indeed there are any to whom truth has ever been a friend, it is most friendly to Catholics ...”

This leads to a second important theme of the work. Much of the commentary is directed squarely against atheism and heresy. When the word “God” first appears in Genesis, Mersenne follows it with 670 columns of attacks against the atheists. This attack is continued, in French, in *L'impitét des deistes*, which appeared in June of 1624, just a couple of months before the disputation.

Mersenne must have taken great interest in the disputation; like Morin, he may well have been in attendance. Mersenne’s discussion of the event occupies a prominent place in the work that he was probably working on at the time, *La vérité des sciences*, published in Paris in August 1625. *La vérité des sciences* is a dialogue among three characters, the Christian Philosopher, the Sceptic, and the Alchemist. Needless to say, the Christian Philosopher wins the argument. But the treatment of the event in 1624 is interesting. None of Mersenne’s three discussants has anything nice to say about the Gang of Three; both the Christian Philosopher and the Sceptic defend Aristotle against their attacks, and though the Gang of Three are identified as alchemists of sorts, even the Alchemist in the dialogue dismisses them as charlatans. What is interesting, though, is how little argument there is against them. The Sceptic tells the other two about the events, and, in fact, goes through all fourteen theses that were posted. But while all three express disapproval, the only real argument that any present is perhaps an abbreviated version of Morin’s main argument, that the Christian Philosopher offers: “... if there is no matter and no form, then man has neither body nor soul, something contrary to the Catholic faith.”

Both Mersenne and Morin are interested in the content of the proposals put forward by the Gang of Three, and in refuting their position. One cannot doubt that both of them are deeply committed to defending Aristotle and Aristotelian at least in part because they genuinely believe that it is true, or, at least, the best that we have at that moment. But there is something else going on in their discussions of the issues, another theme that is at least as important as the discussion of the philosophical and theological issues. It is evident to anyone who reads the two polemics, that of Morin and that of Mersenne, that under the words and

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17 Mersenne (1623), unpaginated. (Translation by Paul Mueller.) Though Mersenne stands up for reason, there still is a very conservative streak in the science of the *Quaestiones ... in Genesim*. Never does he suggest, for example, that Aristotle should be abandoned. However, Mersenne is clearly attracted by certain elements of the newly emerging mathematical sciences. This emphasis, together with the clear focus on the connection between science, mathematics, and piety make Mersenne appear very much the ancien élève of the Jesuits that he was. On the importance of mathematical science among the Jesuits, see Dear (1995).

18 See Mersenne (1625), pp. 100-101.

19 Ibid., pp. 79f.

20 Ibid., p. 81.
behind what arguments there are, there lies another, deeper reason for opposing the disputation. In the end, I think, it is not entirely a debate about Aristotle and certain abstract philosophical positions. What engages the polemics in Morin and Mersenne, and, I suspect, what draws the attention of the Parlement of Paris, the Sorbonne, is something else, issues concerning truth and debate in general and with respect to Aristotelianism in particular that underlies the whole incident.

Morin expresses an important sentiment in the very opening sentence of his letter of dedication:

"There is nothing more seditious and pernicious than a new doctrine. I speak not only in theology, but even in philosophy."21

Morin's sentiment here is by no means novel itself; his wording here, in fact, echoes the opening of the main body of the report of the Doctors of the Sorbonne.22 Morin goes on to argue that since knowledge of natural philosophy leads us to knowledge of God, false principles lead us to heresy and atheism. It is obvious, then, why the Church should be interested in what philosophers teach. But, Morin thinks, so should the State. For false philosophical views, and the heresies they lead to, might cause sects to be formed, sects "from which follow division and the ruin of provinces and whole kingdoms."23 Belief is not a matter of individual choice; it is a matter of politics, and well-ordered states, "tous Estats bien policez" have an obligation to prevent such intellectual novelties from arising, and to punish severely those who try to spread them. Thus, he argues, the Church, the University, and the State must oppose the Gang of Three. Aristotle, it must be remembered, was at the core of the educational system in the early seventeenth century, just as he had been since the fourteenth century. It was Aristotelian philosophy that you learned in college, and what was the background for any advanced work in law, medicine, and theology.24 In denying Aristotle, these disputants, arrogant and proud, set themselves against the established authorities and best minds of the Church and the University. As Morin writes, the Gang of Three has presented "a public challenge to all the schools, sects, and great minds" of Paris.25 They must be answered

"... to defend the truth, which is here impugned with great licentiousness, ... for the sake of the honor of the sect of Aristotle, which is here reviled, ... and for the honor of the celebrated city of Paris, and to prevent Villon from bragging here or elsewhere that in Paris there isn't any man who has the boldness or capacity to refute these theses, and that he [Villon] can overturn the doctrine of Aristotle."26

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21 Morin (1624), Dedicatory letter to Monseigneur Halligre, Chancelier de France, p. 3. Note that the dedicatory letter is paginated separately from the rest of the text.
22 See Appendix 2 below.
23 Morin (1624), Dedicatory letter, pp. 4-5.
24 On the centrality of Aristotle in the philosophy curriculum in France in this period, see Brockliss (1987), chapt. 7.
26 Ibid., pp. 19-20. Morin seems particularly upset that the Gang of Three would dare to hold their disputation "not in a village, but in the city of Paris, opposite the Sorbonne, the entire University, and the most famous senate in the world."
Morin thus approves completely the official condemnation of the disputation. But, he feels, one should go further than that; one should also refute the theses, and show how they are wrong, something, strangely enough, that neither the Parlement nor the Sorbonne saw fit to do in issuing their condemnations. This is what he tries to do in his pamphlet.

For Morin, it is important to establish the falsity of the claims made by the disputants and the truth of the Aristotelian system. For Mersenne, on the other hand, truth seems irrelevant, in a strange way; true or false, Aristotle must be followed, and his competitors must be rejected. Like Morin, Mersenne holds that it is the responsibility of the authorities to determine what it is permissible to publish and teach. In La vérité des sciences, Mersenne’s Christian Philosopher declares that it is not up to just anyone to decide what is true and false, orthodox or heretical; that is up to the Doctors and the Doctors alone to decide. Otherwise, just anyone could post whatever they liked, and through their sophisms, confuse the populace into believing things dangerous and heretical, he claims. As with Morin, belief is a matter of politics and not personal conscience. Just as the king can ban card games, dice, and the like, if he judges that such bans are needed to maintain order in his kingdom, he can ban any books heretics use to attack the faith, whether they are true or false. Indeed, Mersenne argues, if “heretics or other enemies of God’s Church” were to make use of Euclid’s Elements or Aristotle’s logic to undermine our faith, then the authorities would be right to ban them. Under such circumstances, Mersenne argues, the authorities could even ban the publication of the Bible! And so, despite the fact that Mersenne doesn’t hold that Aristotle’s philosophy is completely true, he still recommends it as worthy of our belief, in part because of the fact that it is generally accepted, tried and true if not true, and the fact that alternative ways of thinking are likely to lead to heresy, atheism, and social chaos. Mersenne’s Sceptic frankly admits that “je n’estime pas la doctrine d’Aristote veritable;” but yet he still recommends it above all others, since it seems to be “better for human commerce, for the order [of society] [“la police”] and for common usage” than the main competitor Mersenne there considers, alchemy. Even Mersenne’s Sceptic is an Aristotelian in his own (sceptical) way.

For Morin and Mersenne, the problem is not merely that the theses advanced by the Gang of Three are false and heretical (though they are both); indeed, for Mersenne questions of truth and falsity seem to be almost irrelevant. The Gang of Three are not seen as disinterested seekers after truth. They are using their arguments to challenge legitimate authority, and there is a real danger that they will succeed in convincing many of the impressionable youth. What comes up again and again is their arrogance, the presumption that such know-nothings have in challenging the consensus of the learned world on the basis of nothing but their own flimsy intellects and their arrogant pride.

27 Ibid., p. 19.
28 Ibid., Dedicatory letter, p. 6, and main text, pp. 18-20.
29 Mersenne (1625), p. 111.
30 Ibid., p. 112.
31 Ibid., p. 113.
32 For Mersenne’s critique of Aristotle, see Mersenne (1625), pp. 119-26.
33 I owe this phrase to Roger Ariew.
34 Mersenne (1625), p. 84.
Attacking Heterodoxy

The Gang of Three are perceived as troublemakers, people of bad character, arrogant opponents of established authority, intellectual, theological, and political and they are attacked as such. In this respect, the attack on the Gang of Three echoes a broader attack against heterodoxy in general, and religious heterodoxy in particular.

The period in which the Gang of Three announced their disputation was a period of intense nervousness about heterodox opinion in France. Starting in the mid and late 1620s, the so-called "libertins érudites" began to flourish, a loose movement of humanist free-thinkers in France that looked to the pagan past for a model for living largely outside of the constraints of traditional religion. However, in the preceding years, for those of heterodox opinion who were not erudite, or not discrete enough or skilled enough at hiding their views, or unlucky enough to lack the proper connections, there could be big trouble and hell to pay. There are a number of instances of people brought to trial and in some cases burned at the stake, all punished for the supposed danger of their opinions. Often cited by contemporaries was Julius Caesar Vanini, condemned first in Paris, then burned as an atheist in Toulouse in 1619. Two years after the execution of Vanini in Toulouse, in December 1621, there was another celebrated execution for spreading heresy and atheism, this time in Paris. The candidate this time was a young man of thirty-three named Jean Fontanier. But the most celebrated attempt to suppress heterodoxy in this period is probably the famous trial of the poet Théophile de Viau, a trial that was going on at just the moment that our unlucky three disputants had announced their disputation in August 1624. A sign of the nervousness of the times is the Rosicrucian scare of 1623. Though now thought to have been a student prank, posters announcing the arrival of members of this mysterious and secret alchemical sect in Paris from Protestant Germany produced considerable anxiety, and generated a considerable reaction.

One of the more visible opponents of atheism and heterodoxy was Marin Mersenne. Writing in his *Quaestiones ... in Genesim* (1623), Mersenne reported 50,000 atheists in Paris alone, with as many as twelve to a house. If true, that would mean that better than one in ten residing in Paris in 1623 was an atheist! One suspects that this must be something of an exaggeration, even if we remember that "atheist" was a term of derision that applied not only to non-believers, but to those whose beliefs were unorthodox or heretical, such as protestants would appear to a Catholic such as Mersenne. But it certainly does convey a sense of alarm.

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36 On Vanini, see Namer (1965); Namer (1980); and Spink (1960), pp. 28-42.
37 On Fontanier, see Lachèvre (1920), pp. 60-81; and Garasse (1623), pp. 147-153.
38 On Théophile and his trial, see Adam (1966); Lachèvre (1909); and Spink (1960), pp. 42-45.
39 On this incident and the Rosicrucian movement more generally, see Yates (1986), chapt. 8. For a more recent treatment, see Kahn (2001b), pp. 235-344. Kahn discusses the very convincing evidence that it was a student prank on pp. 244-252.
40 Mersenne (1623), col. 671*: "At non est quòd totam Galliam percurruras, nisi siquidem non semel dictum fuit unicam Lutetiam 50 saltem Atheorum millibus onustum esse, quae si luto plurimum, multo vero magis Atheismo foeteat, deo ut in unica domo possis aliquando reperire 12, qui hanc impietatem tumultat."
41 Paris had fewer than half a million inhabitants at the time; see Chartier (1980/1998), pp. 31, 295. If one were to exclude young children from the count, then the proportion of atheists would be considerably more!
Mersenne explicitly linked the problem of heterodoxy with the problem of the stability of the state. According to Mersenne, heterodoxy often derives from a weak character, or is a consequence of having been seduced by bad arguments. But sometimes Mersenne sees something more nefarious, a desire to overthrow religion, Church, and even State. In one place he claims that “they appear to have had no other great plan in publishing their books but to make us give up the truth of Religion, and to make us suck the venom of their wretched opinions, and their fantastic and bizarre imaginations.” Similarly, the Deists have taken their name only “to abuse simpler and more credulous souls with the impression they give of recognizing a God.” But their real aim is “silently to undermine the columns and foundations of the Catholic truth.” But even if the heterodox were honest and honestly mistaken, he and his writings are dangerous, and must be carefully controlled, indeed, eliminated. Some of these writings are so dangerous, Mersenne thinks, that “even a single page of these books damages the soul of curious men.” Even with books that are less dangerous, we must proceed with caution. In his discussion of Charron’s De la sagesse, Mersenne concedes that even if someone “with a strong mind, well formed, and who has well beforehand had the fear of God imprinted in his soul, can profit from it,” nevertheless “his book doesn’t fail to be dangerous for weak minds, such as those of libertines and deists.” For this reason he recommends that

“... it not be permitted to publish his view when one judges or when one ought probably to judge that it will harm and will be the cause of the loss of numerous minds. Now, I maintain that De la sagesse has caused more harm than good, and has led more people away from the true Religion than it has kept from error.”

More generally, Mersenne exhorts the booksellers to stop thinking about profits alone, and writers to teach true virtue and true knowledge, rather than writing the wretched books that they do. Had they done this, Mersenne thinks, “we wouldn’t see as many restless, lost, and almost idiotic youth.” He continues:

“It is to be desired that the authorities bring order to this, since it is very important for the public peace of mind, for the conservation of the state, and to maintain the respect that one ought to give Princes, Legislators, and the Law.”

More generally still, Mersenne addresses what should be done to combat those with heterodox opinions. One should, of course, address their arguments and refute their sophisms. This is an important part of the programs of the Quaestiones ... in Genesim and the Impiété des déistes. But not all of Mersenne’s opponents are so reasonable: referring specifically to the atheists, Mersenne asserts that “... many don’t obey reason, and live like beasts ....” Since

42 While Mersenne does distinguish atheists, strictly speaking, from others of doubtful character (Mersenne (1623), col. 225, e.g.), in at least one place he does identify the two. See the marginal note on Mersenne (1623), col. 235: “Haeretici sunt Athei.” On the meaning of atheism in the period, see Kors (1990), chapt. I.

43 Mersenne (1624), p. 236.

44 Mersenne (1624), letter of dedication, λιγ v-λιγ r.

45 Mersenne (1623), col. 670*. The specific author under discussion in this passage is Lucian.

46 Mersenne (1624), pp. 197-198.

47 Mersenne (1624), pp. 94-95.
lack of appropriate faith is in part due to a weak intellect or a perverse will, rational arguments, however strong, will not always do to combat atheism. And so, Mersenne suggests, we must consider stronger methods. In the suppressed “Colophon against the Atheists” in Quaestiones ... in Genesim, Mersenne recommends that the rulers not allow books that promote atheism to be written or published in the state; indeed, he suggests that such books be cast into the flames. But he is also capable of suggesting action even stronger than casting books into the flames. For example, in the Quaestiones ... in Genesim he writes that the victory over atheism

“... will easily be brought about if the magistrate, or the King, or another of their officials treat the atheists and the impious with the same punishment that the Athenians gave Diagoras Melius, indeed, who, because of the enormous monstrosity of the atheist, annihilated his homeland, one of the Cycladic Islands called Melos.”

He does, however, stop short of suggesting that the Prince cast the author into the flames along with his books, the fate that Bruno met in 1600 in Rome, and Vanini in 1619 in Toulouse. In the Preface au lecteur of the Impiété des deistes, discussing the quatrains of the Deist that are the focus of much of the book, Mersenne warns their author that he will be burned by the authorities, if he is found. Mersenne claims that he himself seeks only to convert the atheist or deist, and does not recommend that the Prince burn the unfortunate author. However, he does not dissuade the authorities from undertaking such a punishment either.

Mersenne’s reflections on religious heterodoxy extend directly to philosophical heterodoxy. What Mersenne said in the Impiété about the atomist Nicholas Hill and the Epicureans holds, for him, more generally about those who reject Aristotle: "... au bout du conte ils sont tous Heretiques ..." More generally, in the Quaestiones ... in Genesim, Mersenne warns his readers against novelty:

“... I warn everyone that they should beware of new opinions, which in [these] days, the wickedly idle heads of men give birth to, which lead to the subversion of the true

48 Mersenne (1623), col. 669*.
49 Mersenne (1623), cols. 671*-672*. Cf. cols. 1829-30.
50 Mersenne (1623), col. 670*; cf. col. 1830. A short account of Diagoras (fl. 466 BC) can be found in Bayle’s Dictionaire Historique et Critique, article “Diagoras.” While Bayle wrote, of course, later than Mersenne, the article gives a good idea of the view taken of Diagoras in the 17th century. Bayle identifies Diagoras primarily as an atheist. In note E, Bayle relates the legend, which he attributes to a commentator on Aristophanes’ Frogs, that to punish Diagoras for his atheism, the Athenians “did a great deal of mischief to Melos, the birthplace of that atheist.” It is not clear what exactly Mersenne is proposing in this passage. Perhaps he thinks that France should invade Geneva? I would like to thank Shadi Bartsch for helping me track Diagoras down.
51 Mersenne (1624), Preface au lecteur, p. [ix]. (The pages are unnumbered, and I have numbered them in lower-case roman starting with the first page of the Preface.) Note also the following passage from Mersenne (1624): “Or s’il se retrouvoit quelque Mathematicien qui fust si etourdy, & si insensé que de s’oublier de Dieu, & de sa providence, ie serois d’advis qu’on l’y fust perdre la vie de laquelle il seroit tout à fait indigne. Mais on ne sera s’il plais à Dieu en ceste peine, car ie ne croy pas qu’il y en ait aucun qui se laisse emporter à ceste extreme impieité ... .” [p. 138]
52 Mersenne (1624), p. 239.
It is no wonder, then, that Mersenne often treats the new philosophers in the same breath as atheists, heretics, and deists: they are all of a piece. And like the atheists and their band, Mersenne recommends that we keep the new philosophers like Villon and de Clave on a short leash, that we refute their views and prohibit them from publishing, that we burn their books and broadsheets, that we exile them and forbid them to teach.

The attack on the Gang of Three in 1624 was less a genuine defense of Aristotle than it was an attack on those who challenge authority and received opinion; it was, in essence, an attack on the idea of open debate and the toleration of heterodox opinions on certain central issues. In this respect, it is very similar to the kinds of attacks that one finds in the same period against other kinds of heterodoxy. But to understand the extreme vehemence of these attacks, to understand why heresy and heterodoxy was such a pressing issue, we must turn to the larger historical context.

**Civil War and Uncivil Dissent**

In a way, the subtext that we find behind the critique of the theses of August 1624 is something common to much Christian literature, from the Bible on down. The emphasis on authority and on orthodoxy and the deep suspicion of novelty is a common theme running through a great deal of intellectual history. In their report to the Parlement on the disputation of August 1624, the Doctors of the Sorbonne supported their injunction against novelty with a long string of biblical quotations. It didn't matter much that many of them were taken out of context; the point, in a way, didn't need to be argued carefully. The *Oxford Latin Dictionary* lists „subversive, seditious“ as one of the meanings of the word „nouus“, literally „new“ in classical Latin, supported with quotations from Cicero, Suetonius, Tacitus, and Hirtius. This view was reflected in the Jesuit’s *Ratio Studiorum*, the rules governing their wide-flung network of schools. In the 1599 version of that document, teachers are warned that they must “flee novel opinions,” “even in matters which don’t endanger faith and piety.” Unlike today, novelty was not always considered an obvious good.

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53 Mersenne (1623), col. 714.
54 Note here the encyclopedia of error that Mersenne claims that he is planning; see Mersenne (1624), pp. 237-241. There he mixes natural philosophers such as Gorleus, Basso, Hill, and Campanella, with Deists such as Bruno, Vanini, Charron, and Cardano. The association of the new natural philosophy with atheism and heresy is also found in England. See Briggs (1996), pp. 172-199, esp. p. 174 and p. 197n5.[
55 See the notes to the translation of that document in Appendix 2.
But there are some very special reasons why people were suspicious of new ideas and heterodox opinions in France in the 1620s, on the eve of the Scientific Revolution. It must be remembered that the shadow of the religious wars of 16th-century France still darkened Paris when the three bold disputants announced their program in August 1624. Though there were skirmishes between Huguenots and Catholics from the early 16th century, an outright civil war between the two parties began in early 1562. Bloody wars and civic violence continued for more than thirty years, as armies led by royalty and nobility loyal to the Catholic Church fought those who had adopted the Protestant faith. The reign of Henri IV, starting in the early 1590s, was a respite from the violence and instability of the earlier part of the century. The religious wars were officially ended with the Edict of Nantes in April 1598, which established Catholicism as the official religion in France, while guaranteeing the Huguenots certain rights. Henri then set about rebuilding Paris and a country that had been torn apart by war. But on May 14, 1610, François Ravaillac, a fanatic Catholic, assassinated Henri in Paris, and political instability returned when the throne went to his nine-year-old son, Louis XIII. Stability had still not entirely returned in August 1624, the moment when Armand-Jean du Plessis, the Cardinal de Richelieu, and later the architect of the absolute monarchy, was appointed head minister in Louis’ Royal Council.

It is hard to overestimate the violence of these religious wars, and the viciousness of the hostility between the different sides, between the Catholics and the Protestants, and on the Catholic side, between the fanatics who looked to Rome, and the more independent Gallican Catholics. The war was not one fought merely by professional soldiers and their commanders on the field of battle: it was fought in the streets, houses, and gutters of the cities and towns all over France, by farmer and townsman, housewife and maid. An extreme, but not atypical example of the kind of violence the dispute provoked can be found in the infamous St. Bartholomew’s Day massacres of August 24-26, 1572. At the end of the three days of horror, roughly three thousand people lay dead, the Seine red with their blood and clogged with their bodies, and countless houses were burned and looted in Paris alone, as the violence spread to other parts of France.

In this way, we can understand that heterodox belief was much more than an intellectual issue in theology for the French in the 16th and early 17th century. It was also very much a social and political issue. It was a political issue insofar as it led to the formation of armies that could and did oppose the legitimate power of the government. It was, in addition, a social issue insofar as the dispute elicited powerful hostilities between Catholics and Protestants, leading to massive civil disorder and brutal violence. In these circumstances, it is no wonder that novelty and heterodoxy was problematic. Writing in the 1588 version of his Essais, Montaigne expressed his genuine revulsion at the idea of intellectual innovation:

“I am disgusted with innovation [nouvelleté], in whatever guise, and with reason, for I have seen very harmful effects of it. The one that has been oppressing us for so many

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58 For a general history of the wars of religion in France, see Holt (1995). The relations between Catholics and Protestants in Paris is treated in Diefendorf (1991). For an account of the city of Paris in the years following the accession of Henri IV, see Ranum (1968). The period following the death of Henri IV is treated in Tapie (1967). 59 On the St. Bartholomew’s Day massacre, see especially (Diefendorf 1991), chapt. 6 and (Holt 1995), chapt. 3. The extreme violence of the conflicts is the focus of a justly famous essay by Davis (1987).
years [i.e. the Reformation] is not the sole author of our troubles, but one may say with good reason that it has accidentally produced and engendered everything, even the troubles and ruins that have been happening since without it, and against it; it has itself to blame. ... The unity and contexture of this monarchy, this great structure, having been dislocated and dissolved, especially in its old age, by this innovation, as wide an entry as one could wish is opened to similar attacks. ... But if the inventors have done more harm, the imitators are more vicious in that they wholeheartedly follow examples whose horror and evil they have felt and punished. ... Thus it seems to me, to speak frankly, that it takes a lot of self-love and presumption to have such esteem for one's own opinions that to establish them one must overthrow the public peace and introduce so many inevitable evils and such a horrible corruption of morals, as civil wars and political changes bring with them in a matter of such weight – and introduce them into one's own country."

The Reformation in France gave heterodoxy a very bad name. In an age in which intellectual innovation had led to such disastrous consequences, intellectual conservatism must have looked enormously attractive.

It is unsurprising, then, that there was a feeling of crisis in France in the late 1610s and early 1620s. In August 1624, older residents of Paris must still have remembered the violence of the religious wars of the 16th century, and even the St. Bartholomew's Day massacres, which occurred almost fifty-two years to the day before the scheduled disputation. While there was no fighting in the streets, the political situation in Paris was unstable enough that a renewed outbreak of the earlier uncivil hostilities was reasonably to be feared.

The historical experience of the wars of religion in the sixteenth century and the events that followed in the early seventeenth century led the members of the Parlement, the doctors of the Faculty of Theology, and thinkers like Mersenne and Morin to the inescapable conclusion that difference in belief breeds violence. It is this specific historical experience that is behind Morin's observation in his pamphlet that false philosophical views, and the heresies they lead to might cause sects to be formed, sects "from which follow division and the ruin of provinces and whole kingdoms." In this context, the new anti-Aristotelian philosophies seemed every bit as dangerous to the public welfare as the heresies of Luther and Calvin, and those who proposed them as dangerous to the state as Vanini, Fontanier, and Théophile, and of a piece with them. In the account of the August 1624 event in the Mercure François, the anonymous author made explicit reference to the trial of Théophile, then in progress, saying that Villon fled because "he didn't want to keep Théophile company in prison, which was threatened him." Similarly, in his account of the affair, Morin makes explicit reference to one of the chief heretics of his day. Referring to the fact that Villon was a "professeur peripatetique en l'université de Paris," he notes: "He reminds me of Luther, haughty and seditious heretic as he always was, who after having crossed over into the error of heresy, did not fail to wear his Augustinian habit, although he preached against all of the orders of the Church, including his own."
The response to the three unlucky disputants of August 1624 is in many ways a direct translation of the general arguments concerning religious heterodoxy and the proper treatment of heretics into the domain of philosophical heterodoxy. Or better, it represents the assimilation of philosophical heresy as a species of religious heresy. The danger the authorities saw was social disorder, the kind of civil war that France experienced in the 16th century. Their solution: forbid intellectual innovation. In the Chapelle du Sépulcre in the Church of St. Étienne du Mont (Morin’s parish church, in later and more prosperous times), there now hangs an anonymous 17th-century painting of Christ on the cross, with the Virgin, St. John, St. Louis and Louis XIII. Lurking in the shadows of the picture, on the left side is yet another figure, one that might seem extremely strange to us to include in such a scene of religious devotion. It is Aristotle himself, once a pagan, now symbolically present at the Crucifixion. United together in this one picture are the Church, the State, and Aristotle. So closely tied is Aristotle to the workings of both religious and secular society, that any attack on Aristotle is read as an attack on the whole enterprise.

Concluding Remarks

Let me end with a few brief remarks to pull the case together. The question posed was why there was such passionate opposition to those who would reject Aristotle and replace him with a different natural philosophy. Why was it so problematic? The answer I offered focused on the French context in the early seventeenth century. I argued that the immediate reason (at least among the figures I was examining) had to do with the challenge to legitimate authority: for Morin and Mersenne, at least, the challenge to Aristotle was a challenge to the university, to the learned professions, and to the state. At a deeper level, though, I argue, it was associated with other kinds of heterodoxy, in particular with the Protestant heterodoxy that lead to wars of religion of the 16th century. For them, and for their contemporaries, the very idea of novelty, the very idea of disagreement was deeply threatening, and could lead to violence and bloodshed and to the dissolution of civil society. In this respect, the defense of Aristotle was really, for them, part and parcel of the fight against heterodoxy in general, a defense of society as they knew it.

Let me add some final caveats and clarifications to my argument. First of all, my claim is made for France and France alone. I suspect that the argument generalizes, but I am reluctant to make that claim now. Second, I would claim that there is nothing special about the fact that it was Aristotle who was being defended, that Aristotle qua Aristotle had no particular internal link with the status quo. Aristotelianism was important not in and of itself, but only because it was the reigning orthodoxy. And challenging orthodoxy itself was what was dangerous. Here I diverge from the kind of sociological analysis offered, for example, by Shapin.

64 Didier Kahn notes that the issue of the Wars of Religion also come up explicity in Naudé’s reaction to the Rosicrucian scare of 1623; see “The Rosicrucian Scare,” loc. cit., pp. 191-94. Michael Hunter has made a similar argument for the “new philosophy” in England in the second half of the 17th century. See Hunter (1990), pp. 437-460.
and Schaffer, for whom there seems to be a kind of internal link between Boyle and Hobbes and their respective political views, if I understand them correctly.65 I make no such claims. In the third place, I don’t mean to suggest that this is the only reason why people supported Aristotle and Aristotelianism and resisted those who would replace him with one or another alternatives. Within the universities, for example, there are other reasons to be an Aristotelian. Given the extent to which Aristotelianism had permeated the curriculum, and given the investment that teachers had in their lecture notes and class preparations, it is not surprising that university teachers, for example, would strenuously resist change. (Think here of the conservatism of some of your own colleagues.) Nor do I want to deny that there must have been many who defended Aristotle and Aristotelianism because they genuinely believed that it was true and better fit the world than the alternatives then under consideration. In a celebrated line in La vérité des sciences, Mersenne wrote: “Aristotle is an eagle in philosophy, and the others are like chicks, who wish to fly before they have wings.”66 Mersenne may well have been justified in this remark, given the particular alternatives then available in 1625. And finally, in focusing on a broadly sociological explanation for those who defended Aristotle, I don’t mean to suggest that we don’t need to explain why the opponent to Aristotelianism opposes Aristotle every bit as much as we need to explain why the supporter supports him. Saying that Aristotelian physics is wrong is not good enough. But that is a different task than the one that I attempted here, one for another day.

All of this leaves the advocate of an alternative to Aristotelian natural philosophy with a double challenge. He must, of course, answer the Aristotelian arguments and make a convincing case for the philosophical and scientific superiority of the alternative that he supports. But it is at least as important for the opponent of Aristotelianism to show that giving up Aristotle and adopting his alternative will not undermine the stability of society. This, I think, was one of the central tasks for those who advocated a new philosophy.67

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67 This essay is a much abbreviated version of a chapter in my book, How Aristotle Was Refuted: the Prehistory of the Mechanical Philosophy, currently in progress. I have been working on this material for much too long, and have too many audiences to thank for their help. But I would like to thank especially Roger Ariew, who was with me when the larger project was first dreamed up, the participants in my NEH Summer Seminar, which I co-directed with Roger in the summer of 2000 at Virginia Tech, where I worked through the material. I would also like to thank the participants in the conference, “Ideal and Culture of Knowledge in Early Modern Europe: Concepts, Methods, Historical Conditions and Social Impact,” at the Johann Wolfgang Goethe-Universität, December 1-3, 2000, especially Mario Biagioli and Eileen Reeves, both of whom gave me the hard time I so richly deserved. Finally, I am deeply indebted to Didier Kahn, who read an earlier version of this paper, and saved me from a number of embarrassing mistakes. Though we still disagree about some of the larger questions, his archival research has revealed a wealth of new insights into this and other related areas.
APPENDIX 1

PUBLIC THESESA
AGAINST THE ARISTOTELIAN
Paracelsian and Cabalist Dogmas

[DEDICATED TO] HOLY IMMORTALITY

1.

Primary matter, which the Peripatetics constitute as the subjective principle in transmutation, whether it has an existence in itself, or from form, is utterly fictitious and clearly has not been provided with any foundation by Aristotle. For in his [conception of] generation, which he believed to happen in these lower regions, he was mistaken, and with him, the others who embraced his position.71 [FACULTY OF THEOLOGY: This first proposition is temerarious and erroneous in faith.]

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68 The text is taken from an original copy of the broadside conserved in the Paris Bibliothèque Nationale, Paris, ms. Dupuy 630 fol. 72. There were at least two versions of the text, as implied in Morin (1624), p. 6. Morin notes that the broadside was distributed twice, suggesting the origin of the two different versions. Kahn has recently discovered a copy of this second version, in the Bibliothèque Nationale, ms. Cinq Cents Colbert 163, fol. 168ro; see Kahn (2001a), p. 246. The text of this second version can also be found in Launoy (1653), pp. 128-135, as part of the text of the report of the Faculty of Theology. (The report consists of a text, given below in Appendix 2, followed by a copy of the broadside, noting their reaction to selected theses. That reaction is given below in translation.) The second version of the broadside, with further variants, can also be found in Sennert (1635), pp. 86-91. For a discussion of the two versions, see Kahn (2001a), pp. 245f. In this appendix I make no attempt at a genuine edition of the text. I will follow the text in the version in the ms. Dupuy, except for the one paragraph, indicated below, which is not found in that version.

69 This may be a specific reference to Morin's Astrologicarum Domorum Cabala Detecta of 1623, published, incidentally, by Jean Moreau, the same bookseller who published Villon's L'usage des Ephemerides the following year. See the following note. The Cabalists are mentioned only in thesis VIII, and then only in the earlier of the two versions of the broadside.

70 Note Morin's remark on this phrase this in Morin (1624), p. 22: "He wanted to imitate me in these words .... " Morin's Astrologicarum Domorum Cabala Detecta also had on the title page "Immortalitati Sacra." As Morin had intended it, the dedication was supposed to ensure the survival of the doctrine he was setting forth in the book: "... Lest it perish through the injustice of our times, we dedicate our Cabala to IMMORTALITY, with noble boldness." ("Cabalam nostram, ne injuria temporum pereat, IMMORTALITATI generaosa consecramus audacia." p. 7) This, together with the reference to "cabalist dogmas" in the title of the broadside suggest to me that the theses may have been intended to mock Morin, who, from all indications, took himself very seriously. (A careful reading of the text of Morin's Refutation suggests that he and Villon knew one another personally.) It would have been interesting to see the look on Morin's face when he first saw a copy of the theses posted on the Pont Neuf.

71 Primary matter is what is supposed to remain the same in substantial change. It is subjective in the sense that primary matter is the subject of change. For the Aristotelians, generation and corruption only happen in the sublunar world.

72 After each thesis on which the Faculty of Theology commented is given their remarks.
2. Also, all substantial forms (except for the rational ones) are defended by the Aristotelians no less absurdly than matter is defended, since they understand by them certain incomplete substances constituting with matter a substantial composite that is one in itself. For if the matter is eliminated from the natural composite, then the forms, at very least the material forms, must be eliminated as well. [FACULTY OF THEOLOGY: This proposition is temerarious and near heresy.]

3. In natural transmutations (however they are understood to happen), since they are motions, the Aristotelians posit privation as the principle or terminus à quo. But this is incorrect, since even in the opinion of those who accept matter and form as the two other principles, generation is possible without any preexistent privation in matter, as can easily be noted by those who inquire carefully.

4. The Peripatetics incorrectly determine the number of the elements, which they understand either as the integral parts of the sublunar world, or as the bodies from which mixtures are composed and into which they are resolved, for this world is composed of fewer than four [elements] and mixtures are composed of more. Both of these agree with experience, reason, and the anatomy of all mixtures.

5. For a mixture is constituted of five simple bodies or elements, actually and formally existing in it, namely Earth, Water, Salt, Sulfur or Oil, and Mercury or Acidic Spirit. These should be considered the only true natural principles, which cannot be brought about from one another or from anything else, but from which all physical composites are brought about.

6. These principles are ingenerable and incorruptible, and in all mixtures, they are of the same lowest species, whatever the ignorant crowd of chemists might object, along with Paracelsus. For the diversity of sulfurs, salts, and mercuries, if they appear so in various resolutions of mixtures, in the end are reduced to homogeneity through purification and separation by those who are skillful. [FACULTY OF THEOLOGY: Concerning the previous four theses the Faculty said nothing, since they are purely physical or chemical.]

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73 As noted above, De Clave and Villon are very careful to exempt rational forms from their claim here.
74 Earth and Water are two of the four Aristotelian elements. Of the other two, Air is here identified with Water, and Fire is banished from the sublunar world and identified with the Empyrian Heaven. (see thesis IX). Salt, Sulfur, and Mercury are the three basic principles (tria prima) of the Paracelsian alchemical philosophy.
7. Nevertheless, from the different mixture and proportion of these five principles, in accordance with their quantities, arises all variety which is found in purely material composites, be they generic, specific, or individual, since all composites (with the exception of humans) consist of their union and mixture, without the production of any new entity.

8. Also, all action and motion, at least the corporeal action and motion found in any sensible subject [*suppositum*] whatsoever, arises from differences in the mixture and proportion of these principles and not from that universal agent and spirit, namely fire, which the Cabalists contrive as the World Soul and the latent principle of all actions, I suppose, and which have been treated by their followers, quite ridiculously, as the greatest secret.\(^{75}\)

9. Moreover, this sublunar world consists of exactly two elements, Earth and Water, as its integral parts, for Air does not differ essentially from Water, nor is elemental Fire found within the concavity of the moon, since it is not different from the Empyrean Heaven. Even if this seems to differ from the commonly accepted philosophy, all of these things would not be very difficult to prove through demonstrations. [FACULTY OF THEOLOGY: These two propositions should be sent to the Philosophers, as they may lead to the following theses, which are of some importance.]

10. The Peripatetics were dreaming, when, having spoken at odds with the nature of things, they said that true and physical alterations happen through the introduction or destruction of some new and unique accidental entity, while the subject remains invariant with respect to substance, since no [alteration] can happen naturally without the addition or subtraction of Principles, or their different mixtures. [FACULTY OF THEOLOGY: This proposition is false, temerarious, scandalous, and in some way attacks the sacrosanct sacrament of the Eucharist.\(^{76}\)]

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\(^{75}\) In the version sent to the Faculty of Theology, this last phrase reads: "...which some contrive as the World Soul and the latent principle of all actions, and which have been treated as the greatest secret by some prominent persons in this city." [Launoy (1653), p. 131]

\(^{76}\) Thesis X claims that change does not happen through "the introduction or destruction of some new and unique accidental entity." This is precisely what it is that happens in transubstantiation, when the bread becomes the body of Christ and the wine becomes his blood through the introduction of a new form. Rather, the thesis claims, change must happen through the addition and subtraction of one or another of their five principles, earth, water, salt, sulfur, and mercury: bread can become body, and wine blood only through an alteration of their compositions. This would appear to be in clear contradiction to the official church doctrine of the Eucharist.
Moreover, the Aristotelians err when they attribute to Fire the highest degree of dryness, since it is the wettest of all bodies, and the dryness, which the common among the philosophers think pertains to it, is fictitious. It is the same with the maximal heaviness of Earth, which in the true philosophy is lighter than Water. Though at first glance, Earth is observed hide itself under Water, this can be ascribed to mixture and heterogeneity. [FACULTY OF THEOLOGY: This proposition is false, and inconsistent with common sense.]

The Aristotelians admit without foundation virtual qualities productive of the primary [qualities], since all experiments which they toss about in favor of their opinion easily can be dispelled through substances actually and formally existing in such bodies, producing such actions, as a more subtle investigation of such effects can inform anyone even a little knowledgeable in natural things. [FACULTY OF THEOLOGY: This proposition is false, and temerarious.]

Nothing is more absurd, and nothing more inconsistent with experience than the transmutation that the Peripatetics acknowledge among the elements. For Earth is always Earth, nor can it be transmuted in any way into Water or any of the other Elements, nor can Water be transmuted into Earth, or Air into Fire. We strongly assert that the same should be said about the other principles, Salt, Oil, and Spirit. [FACULTY OF THEOLOGY: This proposition is false, temerarious, and erroneous in faith.]

From all of these things, it is most obvious that everything is in everything, and that everything is composed of atoms or indivisibles, two statements of the Ancients that were mocked and insulted by Aristotle, either ignorantly or, rather, maliciously. Since they are in conformity with reason, the true philosophy, and the anatomy of bodies, we defend both tenaciously and sustain them intrepidly. [FACULTY OF THEOLOGY: This proposition is false, temerarious, and erroneous in faith.]

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77 On standard Aristotelian doctrine, fire is supposed to be hot and dry, and earth heavier than water. This is a position shared with Campanella (see Morin (1624), pp. 98-99) and Telesio (see Frey (1646), pp. 29-89, esp. chapt. XI, p. 58).

78 For the Aristotelians, the primary qualities were hot, cold, wet, and dry, those in terms of which the four elements can be defined. The idea against which Villon and De Clave are arguing seems to be that a thing can have heat, say, virtually, in the sense that it can produce heat in other things without it being actually hot.
We reserve for the next set of theses to be published some other things which Aristotle, Paracelsus, and the entire Cabala of the ancients teach us on the qualities and mixture of the elements, on the organization and animation of living things, on the generation and alteration of meteors [i.e., meteorological phenomena], on the nature and properties of the heavens, all against the true way [ratio] of philosophizing.

The impregnable truth of these theses will be examined, God willing, by JEAN BITAUD of Saintonge, with ANTOINE DE VILLON, Soldier-Philosopher, and otherwise Peripatetic Professor at the University of Paris sitting as judge and president.

And so that everything might be even more entertaining for the listeners, Étienne de Clave, Doctor in Medicine, will be present. De Clave, on the basis of his own experience, and supported by careful and profound meditation on nature, will offer some words, where necessary, in support of the truth which he has long since discovered against those who favor the elements of Aristotle and Paracelsus, this so that from next Monday on, by performing experiments and rehearsing the arguments, he can prove his point to such an extent, and open everyone's eyes so widely that all present will admit all of these truths together, in one single voice. 79

Next Saturday and Sunday, the 24th and 25th of August, 1624, for the entire afternoon. In Paris, at the Palace of Queen Margaret.

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79 This paragraph is not found in the copy preserved in the Dupuy version.
APPENDIX 2

Report of the Faculty of Theology of the University of Paris to the Parlement

Here follows the censure of certain published theses put forth against the Aristotelian, Paracelsian, and Cabalist principles by Jean Bitaud of Saintonge, Antoine de Villon, and Éstienne de Clave, to which the said Bitaud was to have responded under the direction of de Villon, with the third using the chemical art to demonstrate their truths through experiments, were it not for the fact that the Supreme Senate had silenced them in order to make this request to the Faculty of Theology of the University of Paris.

Clearly, nothing is more dangerous in a Christian Republic and, according to the common judgment of the Fathers, nothing should be guarded against with more care than novelty, especially novelty which is known to be obviously opposed to true knowledge and sacred doctrine. Thus, from the earliest times of the Church, the Holy Spirit, the very author of truth, warned about this, through the witness of the Holy Apostle, who often recommended that new and foreign opinions in doctrinal matters should be avoided with all zeal and diligence.

As is said in I Timothy 6 [20]: “O Timothy, keep safe that which has been entrusted to you, avoiding the profane novelities of the babble [profanas vocum novitates], and the contradictions of what is falsely called knowledge, expecting much from it with regard to faith, how certain have been disappointed!”

Ephesians 4 [14]: “We are no longer to be children, tossed by the waves and-whirled about by every fresh gust of teaching, dupes of crafty rogues and their deceitful schemes.”

And I Timothy 4 [1-2] “The Spirit says expressly that in after times some will desert from the faith and give their minds to subversive doctrines inspired by devils, through the specious falsehoods of men whose own conscience is branded with the devil’s sign.”

And Hebrews 13 [9]: “Do not be seduced by fickle and foreign [peregrinis] doctrines.”

Therefore, we should take all care and zeal that what leads to the corruption of morals, the snaring of the people, the shaking of religion, and ruin of souls should not be published, or, if it happens to be brought to light, that it should immediately be taken out of public view, and, condemned with harsh criticism, crushed far and wide. Therefore, since recently, in these our wretched times, in which there is open access with impunity to all sorts of inquisitiveness and novelties, and to depraved and free thinkers [liberioribus ingeniis], certain printed propositions have come to the attention of the Faculty of Sacred Theology of the University of Paris which are to be discussed openly and publicly by certain people (driven by arrogance, doubtlessly), propositions which, as they acknowledge, oppose the Aristotelian...
lian doctrine of all philosophers, without challenging the principles, and which also oppose the common and custom of all academies; several of them also seem to involve dangers against the principles of faith. These authors are, perhaps, among the number of those about whom the Apostle once wrote (Colossians 2 [8]) that we should be warned: "Beware that someone not deceive you by philosophy and empty fallacy." Therefore, after they were diligently examined by several doctors of that same Faculty, specially deputized, and discussed in the private chambers of that same Faculty, at last, on September 2, 1624, after celebrating Mass of the Holy Spirit in the usual manner, having gathered the opinions of the individual masters in the general assembly, [the Faculty] expressed the opinion that these theses are extremely dangerous, not only from the point of view of the true philosophy, which has been received by the common consensus of all schools for many centuries, but also they were observed to oppose not a little the principles of faith and religion. Several of them, standing in for others, are noted for particular censor.

[What follows in the text are the notes of the Faculty on the individual theses. These notes are given above in Appendix 1.]

85 "Be on your guard; do not let your minds be captured by hollow and delusive speculations ...." New English Bible. "Beware lest any man spoil you through philosophy and vain deceit ...." Authorized King James version.
References


Bayle: *Dictionnaire Historique et Critique*.


Sennert, Daniel (1635): *Auctarium Epitomes Physicae ...*. Hamburg: Jacob Rebenlinius.


