Human history presents itself in stories about the past. Wherever these stories are not records of first-hand experience, they are based on the examination of archival materials, old books, archeological digs, paintings or material objects. History books present smaller or larger segments of this past in an organized narrative and inevitably from a certain perspective. Taken together, these books provide something like a large map of everything of which we know or believe, on the basis of a rational reconstruction, that it has been the case or has happened.

The resulting composite map of the past might be compared to those early nineteenth-century maps of Africa, on which strategically important elements, such as coastal lines, islands, estuaries and the main rivers and their larger tributaries, are drawn with great accuracy; while other, less accessible areas are indicated as blanks, as unstructured pieces of terra incognita. Like the explorer, the historian feels the allure of those unknown regions, and particularly of those regions that seem to hide a mystery or hold out a particular promise.

The present book is the result of such a blank spot and the presence of a particularly alluring mystery. The mystery to be explored carries the name of David van Goorle, an early modern Dutchman who is better known as Gorlaeus, his Latinate name, which we shall use in this book.

The reason why it seems desirable to reconstruct and narrate Gorlaeus’ life, thought and influence is threefold. The first reason has to do with the fact that Gorlaeus died at the mere age of 21, but left behind two manuscripts, published posthumously, that testify to an extraordinary intellectual maturity. Wunderkinder are usually found in music or poetry, but not in systematic philosophy. The attempt undertaken in this book to capture as much as possible of his life and intellectual circumstances is the result of the desire to understand the author of this premature work as well as the forces that led him to write such books in his late teens. The second reason is that, irrespective of Gorlaeus’ precocious age, his philosophical and scientific thought is unusual, fascinating and in several respects ahead of its time. Indeed, until about 1650, he was regarded as one the most important European innovators (novatores) in philosophy. Yet, despite his early fame, Gorlaeus has not yet found a secure place in the historiography of early modern

Chapter 1

Introducing Gorlæus
Dutch intellectual life. The third reason for dedicating a book to him is that Gorlaeus’ philosophical and scientific proposals appear to have exercised a notable influence on the evolution of Dutch thought and most interestingly on the ideas of Descartes’ early associates.

Gorlaeus’ thoughts and circumstances have never been investigated in a comprehensive way. This study attempts to fill this lacuna. However, it is evident to the present explorer that additional expeditions will be required to map this territory completely. The reader is therefore asked to regard the present book as a provisional expedition report and as a call for further explorations.

I.1. THE TOMB

David Gorlaeus died on 27 April 1612, at the young age of 21. He was buried in the village church of Cornjum, in the Dutch province of Friesland, a few footsteps from the aristocratic mansion in which his parents resided. Both the location and the elegance of his tomb reflect the elevated status of the family to which he belonged. Today’s visitor can visit his grave, which lies under a glass pane right in the middle of Cornjum’s handsome church, below the pulpit and visible from all the pews that line the church’s four walls. When the black carpet that usually covers it is removed, the onlooker must in fact fight the sensation that the church has been purposefully built around Gorlaeus’ centrally placed tomb.

Like a ribbon along the rim of the tombstone (see Figure 1) runs a Dutch sentence that provides some factual bits of information: “In the year 1612, on 27 April, the very erudite and wise youth David van Goorle died, who is buried here.” The middle of the tombstone features a coat of arms (which was brutally disfigured during the French occupation in 1796), together with a Latin poem, “To the honor and memory of the splendid youth David Gorlaeus.” Its iambic hexameters translate as follows:

Here lies buried that flower of youth,
Gorlaeus, taken away in the very spring of his life,
While he was rising to the highest endeavor of ancient praise.
Death, which does not allow anything sublime to last for long,
Has carried away from the Earth this ornament, which is due to the Heavens,
As the Earth was incapable of carrying such a gift.
This very illustrious mind and heavenly spirit,
Freed from its futters and the weight of the body,
Sought the Havens, whence had come its seed.
And there it [sc. Gorlaeus’ spirit] views Him who is born through the Eternal Father,
Who through His death has atoned for the human crime,
Christ, the world’s mediator and giver of peace.
This is safety; this is the peak of the highest good,
Greater than which our mind cannot desire anything.  

The task of epitaphs is to be excessive in lament and flattery alike. This particular tombstone might however be accused of excessive restraint in both Dutch and Latin. Gorlaeus was not just a promising youth whose life was broken before it reached its bloom. Judging by his writings, which were to appear in print a number of years after his death, he may well have been one of the most original thinkers of early modern Dutch intellectual history. Eight years after his death, in 1620, a first, densely argued treatise appeared under his name, which carried the following long title: “Philosophical Exercises (Exercitationes philosophicae), in which the entire body of theoretical philosophy is discussed, and in which several essential dogmas of the Aristotelians are overturned.”  

Fully three decades later, in 1651, a second and much shorter treatise saw the light of the day, entitled Idea physicae (“Sketch of Physics”). This book is conspicuous for the brevity, precision and boldness with which it attempted to cast a new basis for physics.
Because of his early death, Gorlaeus’ fame among his contemporaries rested almost exclusively on their acquaintance with the contents of the *Exercitationes* and to a much lesser degree of the *Idea*, which was published late and enjoyed a much more limited circulation. Even in the Netherlands, only few readers knew who their author was or what had motivated him. The extended 1643 edition of Valerius Andreas’ *Bibliotheca Belgica*, for example, only contains the following barren and uninformative entry:

David Gorlaeus, from Utrecht, published with the types of Commelinus his *Philosophical Exercises, in which the Entire Body of Theoretical Philosophy Is Discussed*, 1620, 8°.5

Jean-François Foppens’ bibliographical encyclopedia of 1739, identically named *Bibliotheca Belgica*, provides in its 1168 pages a plethora of information about the lives and works of all known authors from the Low Countries. And yet, unaware even of Gorlaeus’ *Idea physica*, which had been published in the meantime, it simply reiterates Andreas’ laconic entry of a century earlier.6

For the general public, Gorlaeus’ intellectual reputation was entirely disembodied: there existed two treatises proposing a series of uncommon ideas, and their title pages sported their author’s name, yet there was no historical personage to whom one could have attached these ideas, nor a *vita* that could have shed light on them. As a possibly inevitable consequence, Gorlaeus ended up entering the history books under a number of different guises. Fictitious identities had to stand in as the lieutenants of an absent historical persona.

We encounter the first of his multiple personalities merely two hundred steps from the church of Cornjum, where Gorlaeus lies buried. There, the visitor comes across a burial mound covered by beautiful old trees and containing the tombs of the last inhabitants of Martenastate, the mansion in which Gorlaeus’ parents had lived. A signboard placed there so as to explain the site to the passer-by refers to David Gorlaeus as “the Dutch Galileo.” The board fails to motivate this comparison, although it is probably due to a parenthetical remark in Dijksterhuis’ *Mechanisation of the World Picture*. There, Gorlaeus is said to have anticipated Galileo’s distinction between the geometric-mechanistic properties of matter and those secondary, sensory properties that are generated merely in the perceiver.7 However, not only has Dijksterhuis here misread Gorlaeus, but the comparison between Galileo and Gorlaeus is also generally misleading. But then, one wonders, which comparison wouldn’t be? Both as an historical figure and as a thinker, Gorlaeus is hard to label and to compare. The anomaly of his case begins of course with his
early death, which implied that he passed away before he had acquired any fame, quite unlike the world-renowned Italian with whom the signboard compares him. Secondly, whereas it is easy to explain Galileo’s fame, for example, by reference to his telescopic discoveries, his law of free fall or the heliocentric views for which he was condemned by the Inquisition, Gorlaeus’ achievements are decidedly more difficult to explain in a few words to the tourist visiting Cornjum.

But what did seventeenth-century readers think of his work? The first reactions stem from the 1620s, soon after the *Exercitationes* had been published. In his belligerent youth, the future irenic ‘Secretary of the Republic of Letters’, Marin Mersenne, repeatedly invoked Gorlaeus’ name among a host of important anti-Aristotelians and heretics who needed combating: together with Patrizi, Basson, Bodin, Carpenter, Hill and Olivi, Gorlaeus is bashed for his anti-Aristotelianism.

Their attitude of opposition was both futile and arrogant, Mersenne wrote, because “Aristotle is an eagle in philosophy, while these others are mere chicks, who wish to fly even before they have any wings.” In 1624, Mersenne announced his intention to publish an encyclopedia “in favor of all truths against all kinds of lies, in which I shall carefully examine the views advanced by Gorlaeus, Carpenter, Basson, Hill, Campanella, Bruno, Vanini, and some others.” Such was thus the hostility with which Gorlaeus’ *Exercitationes* were greeted by those who defended the inherited philosophy. But such were also the names with which he was associated: at least Giordano Bruno (1548-1600), Tommaso Campanella (1568-1639) and Jean Bodin (1630-1596) still feature prominently in the historiography of philosophy.

Although Mersenne himself would soon thereafter transform himself into a model of open-mindedness, those who remained faithful to the traditional ways of teaching philosophy felt similarly opposed to Gorlaeus in later decades. In 1641, for example, the Utrecht theologian Gijsbert Voetius described Gorlaeus as a thinker who had committed theologically dangerous fallacies, “misled by his youth.” And again twenty years later, in 1662, the influential Franeker professor of philosophy Arnold Verhel deplored the miserable conditions of contemporary metaphysics: “I do not understand what fatal catastrophe has overcome our philosophical studies in this deplorable age.” Metaphysics, he cried, was everywhere under siege, and its enemies were seen to triumph at the universities, on the pulpit, in the courtroom.

Moreover, in their noisy brawls and jeers they revile Aristotle himself, the father of metaphysics and the prince of all philosophers. Against him grunts the zeal of the Ramists, the gainsaying of the Gorlaeans, the high-browed arrogance of the Cartesians, and the authority of certain teaching doctors.
This reference to ‘Gorlaeans’ is conspicuous, as it suggests that there existed a current of philosophers who worked explicitly in Gorlaeus’ tradition.

Towards the end of the century, however, there were few north-European philosophers left to defend Aristotle with drawn sword. The majority view was that the Aristotelian system needed serious overhaul if not total replacement. The battle being over and won, anti-Aristotelianism came to resemble the proverbial beating of the dead horse, as historians turned to writing the pre-history of this victory over the scholastic system. As must be evident, Gorlaeus plays a positive role in these narrations. Take, for example, the historian of philosophy Daniel Georg Morhof (1639-1691), to whom Gorlaeus’ *Exercitationes* seemed quite ingenious. It opens with a treatment of philosophy in general and then moves on to metaphysics and logic, stating many things that deviate from the Aristotelian view. It subsequently turns to physics, in which it pursues its own hypotheses, attacking Aristotle’s. The principal hypotheses are that the heavens are nothing else but the extension of air; it also postulates only two elements of mixture, namely earth and water, for it excludes fire from the list of elements, defining it as a mere accident. This was also the dogma of the first Cartesians.

Mersenne, Voetius, Verhel and Morhof document that the most obvious label that contemporaries stuck to Gorlaeus was that of anti-Aristotelianism. In fact, Burman’s eighteenth-century *Traiectus eruditus* opens its entry on Gorlaeus with the words: “He was a famous author, and is counted among those who dared to battle against Aristotle.”

But Morhof’s short characterization of Gorlaeus’ work, which we have just cited, also comments on the order in which the philosophical disciplines are presented. The *Exercitationes* starts, so Morhof tells us, with a definition of philosophy in general, subsequently casts a metaphysical basis, turns to logic and finally reaches physics, a domain in which it comes up with new results. Noteworthy about this description is the suggestion that Gorlaeus anticipated “the first Cartesians” in certain respects. These two themes – the order in which Gorlaeus presents his philosophical doctrines and his possible influence on Descartes and the Cartesians – frequently return in early modern comments on Gorlaeus. In several of them, Gorlaeus is said to have anticipated not only a number of Cartesian doctrines, but also certain features of the structure of Descartes’ system. To understand better how this view might have arisen, let us cite a passage from Daniel Garber’s pathbreaking study, *Descartes’ Metaphysical Physics*:

It is fair to say that [Descartes’] view of the order of knowledge may well have presented a significant departure from the mainstream of the scholastic tradition.
Though there were many differences between different scholastic writers, there was wide agreement that knowledge of physics is largely independent of knowledge of metaphysics, however precisely either discipline is defined. And so, they claimed, one can (and, in fact, ought to) study physics before undertaking the more elevated studies of God and being as such that pertain to first philosophy. In demanding that physics must be grounded in some sense in metaphysics, in knowledge of God and the soul, Descartes is stepping clearly outside that tradition. And so when by the 1630s Descartes came to hold to the priority of metaphysics in the strong sense he held it, his view would likely have been recognized as a clear departure from the received view.\(^\text{14}\)

But it seems to have been exactly this ‘departure’ that some early modern readers claimed that Gorlaeus had carried out before Descartes. For indeed, as Morhof pointed out and as will be shown in detail in chapter 2, Gorlaeus’ physics is, at least in the *Exercitationes*, made to depend on his metaphysics.

But in addition to this possible methodological anticipation, early modern historians of philosophy also commented on a real moment of contact between Cartesianism and Gorlaeus. When discussing the latter’s philosophy in his famous *Dictionary*, Pierre Bayle reported the following incident:

When Regius, a disciple of Descartes, was harassed for a thesis concerning the union of the soul with the body, he claimed that he had merely used Gorlaeus’ own terms. That did not however help him in the least; as a consequence, Voetius, professor of theology, flung as much dirt at Gorlaeus’ views as he could.\(^\text{15}\)

Considering this specific episode as well as certain methodological and doctrinal overlaps between Gorlaeus and Descartes, some early modern commentators jumped to far-reaching conclusions. Morhof felt that Gorlaeus “certainly deserves praise for having recognized before Descartes what Descartes later wanted to make appear as his own doctrines.”\(^\text{16}\) These words amount to the claim that Descartes took some of Gorlaeus’ methods and doctrines and sold them as his own. Jacob Friedrich Reimmann, another early modern German historian of philosophy, made the additional claim that after the 1641 clash between Regius and Voetius, “Cartesians accepted most Gorlaean theses into their system,” suggesting that Gorlaeus’ philosophy was to become an integral and constitutive part of Cartesianism.\(^\text{17}\)

These surprising claims deserve to be examined with care. That Descartes was indebted to the Dutchman Isaac Beeckman is well known.\(^\text{18}\) By contrast, there is no modern scholarship that has taken the claims of Morhof or Reimmann seriously or even examined them. Such an examination will be carried out in our fourth chapter.
With respect to the historiography of philosophy, the situation presents itself roughly as follows: while early modern historiographers appreciated, and possibly lionized, Gorlaeus' role as an anti-Aristotelian reformer of philosophy and as a possible ancestor of Cartesianism, most contemporary historians of philosophy have pretty much forgotten him. Precisely the opposite development has occurred in the history of science. There, Gorlaeus has in the past 120 years come to play a completely different and in fact more prominent role, namely as a pioneer of atomism. He acquired this label, and the fame that has come with it, in the late nineteenth century; that is, in the period that witnessed renewed debates in physics, chemistry and philosophy over the existence of atoms.

Two things ought be remembered about the label 'atomism', however. The first is that this term is an early modern neologism. According to Robert and Henri Estienne's *Thesaurus Linguae Graecae* of 1572, it first appeared as a Greek term in the *Antirrheticon* (ca. 1470) of Theodor Gazes (1400-1475). In his *Democritus revisviscis* of 1644, Jean-Chrysostôme Magnen spoke of a 'Philosophy of Atoms'. But the term 'atomism' only appeared in the last quarter of the seventeenth century, possibly first in Ralph Cudworth, who used the term 'atomicism' to denote a materialist and atheist version of a true corpuscular philosophy. The second point to keep in mind is that early modern authors did not use 'atomism' when grouping philosophical positions into camps. Robert Pasnau's allegation that "atomism [was] a view that barely mattered," is correct, "insomuch as very little turns on whether one thinks the material realm is or is not infinitely divisible." It was not the metaphysical question of divisibility that ultimately defined the camps. Take Descartes, who was an 'anti-atomist' and yet provided the first illustrated guide to Democritus' materialistic world of particle-filled vortices; or the late Daniel Sennert of the *Hypomnemata physica*, who could be viewed as an 'atomist' simply because he postulated the existence of such physical indivisibles, but who took his atoms to be the carriers of the substantial forms that Descartes so adamantly rejected. As a consequence of his particular physics, Descartes would routinely be grouped with the Epicureans (to his great displeasure, of course); while Sennert was often grouped with the Aristotelians.

Historically speaking, the doctrine that all matter is ultimately composed of indivisible particles is of course a doctrine of ancient Greek extraction. But because of Aristotle's numerous intelligent objections to Democritus' physics, the scholastic tradition had presented the idea of indivisible yet extended magnitudes as a schoolbook example of erroneous reasoning. Only in the later sixteenth and seventeenth centuries did an atomic view of matter manage to resurface in any significant way. The reasons for this atomistic revival will be discussed later. What
is of importance for our present purposes is that, partly in response to Gustav Theodor Fechner’s Neo-Kantian approach to atomism in Über die physikalische und philosophische Atomenlehre of 1855, a ‘historico-critical method’ was developed that sought epistemological answers to the atomistic debate by examining the historical sources. A typical expression of this approach is found in Arthur Hannequin’s Essai critique sur l’hypothèse des atomes of 1895, where we read: “The contemporary theories are thus in agreement with history on this point: they give their blessing to the predominance of the atomist hypothesis.” The most acute and reliable among these historico-critical authors was Kurd Lasswitz, whose admirable two-volume Geschichte der Atomistik still constitutes an historiographic treasure trove. It was Lasswitz who rediscovered Gorlaeus and labelled him an ‘atomist’. Not least because of the fact that he also had access to one of the exceptionally rare copies of the Idea physicae, his analysis of Gorlaeus’ philosophical and physical system went beyond everything that had previously been written about this author. Lasswitz described the ontological basis of Gorlaeus’ matter theory, its link to a nominalist logic, its theory of substances and qualities and the resulting atomistic physics.

The path by which Gorlaeus arrived at his atoms, however, looked unlike anything that Lasswitz had encountered elsewhere. He therefore tried to obtain information about this mysterious author. The bits of information that the Dutch scholars he contacted could provide him with seemed inconclusive. The most important discovery was that Gorlaeus had enrolled as a student in theology in Leiden in 1611 – a disciplinary background to atomism that Lasswitz had not expected. Finding that the title of the Exercitationes of 1620 merely mentioned that the author had in the meantime passed away, and considering that most other early modern atomists published their views after 1620, Lasswitz remained puzzled. Unable to place the author and his treatises intellectually, he made the following appeal: “A monograph on Gorlaeus and this important decade is a great desideratum.”

Thanks to Lasswitz, Gorlaeus entered the historiography of atomism in 1890 and he has been treated as an atomist ever since. As such, he came to enjoy a new career as a scientific author and matter theorist. Even historians of philosophy now came to regard him in this specific light. The Dutch historian of philosophy Jan Pieter Nicolaas Land, while praising Gorlaeus’ scientific curiosity, depicted him at the same time as a victim of his theological training: “Had he paid more attention to the natural phenomena and the principles of motion, his project would have been crowned with greater success than his particular education for the church seems to have allowed for.” For Land, then, Gorlaeus’ strivings were essentially ‘scientific’, but his disciplinary choice for theology revealed itself as an intellectual impediment. With a greater sense of the historically plausible – after all, the laws of motion were defined only after Gorlaeus had already passed away – Ferdinand
Sassen characterized Gorlaeus as a “lonely figure” who “liberated himself in important respects from the Aristotelian physics” long before others, “attempting to replace it with an atomistic natural philosophy.” In one word, then, after Lasswitz, Gorlaeus has generally been perceived as a proto-scientist, even though historians found it difficult to establish the value of his scientific contribution. “Maybe a qualified author will one day find the time to assess the merits and shortcomings of a man who did his best to become one of the reformers of science,” Land suggests, shrugging off his perplexity.

Gorlaeus has been unable to shake off his taxonomic species name ever since, being remembered either as an ‘atomist’ or not at all. Frans Maurits Jaeger’s important study of 1918, which to this day constitutes the most fruitful attempt to fill the historiographic lacuna spotted by Lasswitz, carries the title “On David van Goorle as an Atomist.” Andreas van Melsen’s *From Atomos to Atom* repeatedly turns its attention to the doctrines of “the Dutch atomist David van Goorle.” Tullio Gregory’s study, which bundles up Gorlaeus with the chemist and Wittenberg professor of medicine Daniel Sennert, appeared as a part of his “Studies on Seventeenth-Century Atomism.” In Dijksterhuis’ *Mechanisation of the World Picture*, Gorlaeus appears as a precursor of the atomistic treatment of qualities in Galileo’s *Assayer*; Hooykaas mentions him in one breath with Isaac Beeckman, considering these two men of “Flemish-Calvinist” extraction as “being among the first who based their physical explanations entirely on the atomistic doctrine.”

For twentieth-century historians of science, the importance of Gorlaeus lies exclusively in the fact that he was among the first to have rejected a scholastic theory of matter and its substantial forms in favor of an atomistic theory, stating that “nothing is real in bodies apart from the atoms.” His insistence, as Jaeger puts it, that “no rational explanation of natural phenomena is possible without the acceptance of the idea of an atomistic structure of matter,” made him appear as a pioneer in the history of a concept that had begun as a metaphysical proposal in Greek antiquity, had been suppressed for centuries, had begun to resurface in the late sixteenth century and would win its ultimate triumph around 1900.

In the process, Gorlaeus’ fame became utterly lopsided: from the anti-Aristotelian philosophical *novator*, as seventeenth-century readers had understood him, he had turned into an empirical natural scientist. Ignoring its metaphysical anchoring, for example, the eminent historian of chemistry James Partington praised Gorlaeus’ “scientific” form of atomism, which he contrasted with the philosophical “speculations” of Giordano Bruno; the latter he considered to be “of no physical importance.” In his historical survey, *Elements and Atoms Once and Now*, Jaeger confidently described Gorlaeus as a predecessor of Jan Baptist Van Helmont and Robert Boyle because of this quantitative and structural approach to matter.

A new step in Gorlaeus’ transformation into a scientist is reached in Lancelot
Law Whyte’s *Essay on Atomism*, where our young hero, misspelled as “Garlaeus,” appears in a list of fourteen important men who coupled a “new attention to quantity […] with the lively interest in atomism.” The other names are: Bodin, Galileo, Basson, Sennert, Berigard, Borelli, Huygens, Magnen, Charleton, Gas-sendi, Boyle, Leeuwenhoek, Newton and Halley. Whyte has appended Gorlaeus’ portrait in an imposing gallery. But does Gorlaeus really belong to this family? He only does if one recognizes the incongruity of this ‘family’ and applies to it Wittgenstein’s notion of partial family resemblances. At the same time, however, this insertion into the pedigree of ‘scientific atomism’ does violence to both his larger project and to his particular intentions.

The apotheosis of this scientific persona is to be found in Leiden University’s decision to name its largest science laboratory as well as its science library after Gorlaeus (see Figure 2). Incidentally, how the *Gorlaeus Laboratory* received its name deserves to be mentioned here, because it says much about the perils to which forgotten authors are exposed. Egbert Havinga, a professor of chemistry who had overseen the construction of the new chemistry facilities, had in truth proposed a different name. If it had been up to him, the buildings would have been named *Sylvius Laboratory* — after Franciscus de la Boë, called Sylvius in Latin (1614-1672). In 1669, Sylvius had effectively set up the Netherlands’ first chemical university.

FIG. 2: The Gorlaeus Laboratories at Leiden University. (Courtesy of Gorlaeus Laboratories)
laboratory at Leiden University. However, Professor Havinga’s proposal met with fierce opposition from the students, who by 1970 had conquered the right to be involved in the running of the university’s faculties. A student called Frans van Kleef went to the University Archives to check up on Sylvius. What he found was subsequently printed in *Chimica*, the university’s chemistry journal. Sylvius was no chemist, Van Kleef protested, but a physician (which of course is true, as his chair was in medicine, like that of many other early modern chemists); he had furthermore fathered an illegitimate child (which was an odd complaint coming from the lips of a rebellious student); and, finally, students were overheard punning about the *Syphilislab*. The conclusion was damning indeed:

> With their choice of a name for the chemical building complex, the present sub-faculty has made itself guilty of laziness, of the entirely improvised proposal of a name without any further desire to get to know anything about the man behind that name, and subsequently of an attempt to falsify history. Thrice shame on them!

Professor Havinga had to withdraw his proposal. The faculty journal *Chimica* celebrated this as “a proof of the fact that students really do have a right of participation in faculty matters.” Had the research been properly conducted, there should of course have been plenty of reason to reject Gorlaeus and return to the original proposal; but the two authors, who based themselves (among other things) on Partington and Van Nieuwenburg’s *Short History of Chemistry*, and cited Gorlaeus’ longer work wrongly as *Exercitationes physicae*, somehow managed to convince themselves that Gorlaeus was an appropriate namesake for the new laboratories. Merely out of a sense of historical justice, it ought to be added here that nowadays Leiden also boasts a Sylvius Laboratory, suitably situated on Sylvius Street.

But we must return to Gorlaeus himself. Irrespective of whether his atomism did influence the subsequent evolution of an atomistic conception of matter – that such an influence existed will first have to be documented – his depiction as a pioneering natural scientist is clearly excessive for three reasons. First, his two extant treatises nowhere proceed along empirical lines. While it is true, as we shall see, that his works contain the occasional reference to optical, astronomical and chemical observations, his argumentation is rooted in metaphysics and natural philosophy. Second, Gorlaeus’ short biography simply does not allow for much experimental practise. When he died at age 21, he was a first-year theology student who presumably had an Arts degree from Franeker University in his pocket. While
his young age and his chosen discipline do not rule out an interest in the nascent experimental sciences, there is no circumstantial evidence to allow for the conclusion that his theory of matter was driven by first-hand experimental evidence, let alone by chemical practise.

In order to understand Gorlaeus’ project, one must therefore find an answer to the following question: what may have brought a twenty-year old student to develop a new philosophy, and one moreover that relies on the existence of atoms? It is one of the chief objectives of this book to provide an answer to this question.