

CHAPTER 3

FOR CHRIST'S SAKE

PIOUS NOTIONS OF THE HUMAN & ANIMAL BODY IN EARLY JESUIT PHILOSOPHY & THEOLOGY

Christoph Sander

IN A SATIRICAL PASSAGE of Traiano Boccalini's *Ragguagli di Parnaso* (1613), the Greek god Apollo is about to judge some Renaissance heretics and among them Pietro Pomponazzi is also brought to trial.¹ Apollo is in favor of making short work of him, so he decides to burn Pomponazzi together with his library. He accuses Pomponazzi of writing a book in which he tried to prove that men are beasts (*provare che gli uomini erano bestie*), because they lack an immortal soul. Pomponazzi, fearing his death, protests and claims that he postulated the mortality of the soul only as a philosopher (*solo come filosofo*)—while, as a pious Christian, he naturally believed in the immortality of the soul. This leads Apollo to make a remarkable concession in his instructions to the executioner: accordingly, Pomponazzi should be burned only as a philosopher (*solo come filosofo*).

The sarcastic punchline of the story, hinting at Roman censorship, gives us an interesting insight into some crucial aspects of early modern intellectual history. The fictitious trial has to be understood against the background of the centenary of the papal bull *Apostolici regiminis* (1513) issued by the Fifth Lateran Council.² The bull was probably not issued in response to Pomponazzi specifically, but rather to a style of reasoning advocated by Pomponazzi and others, which challenged the Catholic Church by proposing a so-called notion of “double truth.”³ According to this

position, philosophy could arrive at different conclusions from those that are true and certain according to faith. This raised an epistemic problem, namely to what extent natural reason could prove doctrines of faith.

Of the questions on which these two domains of reason and faith allegedly contradicted one another, the most important concerned the nature of man, in particular his immortal soul.⁴ As Apollo puts it, denying the immortality of the soul means abolishing the distinction between men and beasts. As Christian scholars adopted Aristotelian philosophy during the Middle Ages, the scholastics conventionally explained human beings in relation to brute animals—*secundum convenientiam et differentiam*, as it was called.⁵ Animals and men share certain abilities related to their physical and organic existence, such as nutrition and sense perception, and differ with regard to their intellectual and incorporeal abilities, such as free will or discursive thinking.⁶ It was considered heresy to deny that reason was unique to man, just as it was to claim that beasts have reason.⁷ Man's intellectual abilities were attributed to an immortal rational soul, which made human beings the noblest animal (*homo animal nobilissimum*).⁸ The human soul, as the Council of Vienne in 1311 famously declared, was defined in Aristotelian terms as the form of the body (*forma corporis*) in order to guarantee the unity of a human being made out of body and soul.⁹ Hence the Aristotelian science of the soul was of the utmost theological importance.

Among early modern Catholics, however, it was especially the Society of Jesus (SJ, founded in 1540) that designed a philosophical and theological curriculum to preserve the heritage of the Lateran Council, following Aristotle in philosophy and Thomas Aquinas in theology.¹⁰ By means of its official *Ratio studiorum* (1599), the Jesuit order explicitly advised its philosophy teachers to adhere to the decree of 1513 by defending the pious position of the Church whenever a philosophical conclusion appeared to contradict the faith.¹¹ While it is abundantly clear that in the aftermath of the Lateran Council the immortality of the soul was an urgent topic for Catholic authors, very few studies have focused on how the Jesuits approached the human body within the framework of Christianized Aristotelian philosophy.¹²

But did the Jesuits investigate the human and animal body? Jesuits neither ran medical faculties nor taught medicine.¹³ They did not comment on any of Aristotle's zoological works.¹⁴ And in contrast to several secular Italian universities, where the study of philosophy was considered a preparation for medicine, Jesuit universities taught philosophy to prepare their students for the study of theology.¹⁵ Hence, anatomical and physiological

questions seemed to have very little to do with Christian goals. In fact, though, this is only half the story. The Jesuits cared about the functions of the human body with regard to healthcare and exercise.¹⁶ Jesuit philosophy courses are full of quotations from a wide variety of contemporary anatomical and physiological literature and show considerable interest in Aristotle's zoological works.¹⁷ And, as I will show below, the nature of the human and animal body was very relevant to certain theological issues.

This chapter will begin with the first official case of philosophical censorship in the SJ. In 1565, the so-called *Decretum Borgianum* (DB) prescribed that certain doctrines about the human/animal body and soul had to be taught in Jesuit schools. I shall focus particularly on the obligatory tenet that blood should be called "part of the body." The two questions I would like to answer are: Why did such a proposition trouble the Jesuits with regard to piety and orthodoxy? And how did the motives behind this tenet shape the philosophical understanding of the human and animal body in works written by members of the SJ? In order to answer these questions, I will proceed in four steps. First, I shall introduce the propositions of the DB and shed light on their compilation against the background of the early pedagogical culture of the *Collegio Romano*. Then I will briefly explain the Aristotelian physiology and the Christian theology involved. Third, I shall outline how the prescriptions were put into practice by Franciscus Toletus (SJ, 1534–1596), a teacher at the *Collegio*, focusing on his commentaries on Aristotle's *De anima* and on Thomas Aquinas's *Summa theologiae*. Fourth, I shall give a rough overview of how the Jesuits maintained an orthodox yet philosophical understanding of the human and animal body over the next 100 years. Finally, in an epilogue, I will tell how the Catholic notion of blood informed the inquisitional trial of the Belgian physician Jan Baptist Van Helmont.

Ledesma vs. Perera: Christ's Blood at the *Collegio Romano*

In November 1565, the Superior General of the SJ, Franciscus Borgia (SJ, 1510–1572), issued a brief decree (DB) to be sent to all Jesuit colleges.¹⁸ The decree consisted of two lists. The first list covered five general points outlining what Jesuit teachers at the colleges must not do in general; for example, they should not teach anything either in philosophy or in theology that is not in agreement with faith. The second list enumerates seventeen propositions that the teachers should defend and teach with regard to topics such as God, the angels, and the soul. The following four

propositions from this list may be considered a unit and are particularly relevant for the purpose of this chapter (nos. 8–II in the decree):

- (a) There are—according to Aristotle, true philosophy, and natural reason—neither several souls in man, namely, an intellective, a sensitive, and a vegetative soul, nor a vegetative and sensitive soul in beasts (*Non sunt plures animae in homine, intellectiva, sensitiva, vegetativa; nec in bruto sensitiva et vegetativa, secundum Aristotelem, veram philosophiam et rationem naturalem*).¹⁹
- (b) The soul in man or in beasts is not in hair of the body or of the head (*Anima in homine aut in brutis non est in pilis aut capillis*).
- (c) The sensitive and vegetative faculty in man or in beasts is not immediately based in the prime matter (*Potentiae sensitivae et vegetativae in homine aut in bruto non subiectantur in materia prima immediate*).
- (d) The humors are somehow parts of man and animals (*Humores aliquo modo sunt partes hominis seu animalis*).

First, I shall briefly reconstruct why these propositions were put on this list. The most likely scenario is the following: the Prefect of Studies of the Roman College, Diego de Ledesma (SJ, 1524–1575), considered the censorship of instruction a crucial part of his pedagogical reform plan to ensure the soundness and unity of doctrine in philosophy.²⁰ According to Ledesma, philosophy should be taught in such a way that it supported theology (*sic doceatur philosophia, ut serviat theologiae*).²¹ Most of Ledesma's measures were probably prompted by a colleague named Benito Perera (SJ, 1535–1610), whose philosophical teachings were suspected of “Averroism”; Perera had also been accused of skepticism for claiming that some philosophical matters crucial to the faith could not be known by natural reason.²² In 1564, Ledesma compiled a list of incriminating propositions that Perera's pupils had supposedly adopted.²³ According to this list, Perera's pupils almost literally rejected the propositions (a) and (d) that were prescribed shortly thereafter in the DB. Additionally, Ledesma compiled two more lists at the same time, covering a total of thirty-five philosophical propositions that he wanted all teachers to defend and to teach as “according to true philosophy and according to Aristotle.”²⁴ Not only are propositions (a) and (d) spelled out at greater length in these two lists, but most of the remaining propositions of the DB also appear in Ledesma's preliminary work of 1564. Hence, it is most likely that Ledesma was the ghostwriter of the DB.²⁵

At least with regard to propositions (a) and (d), it seems likely that

Perera was responsible for their inclusion in the DB. Although I was unable to find these positions in Perera's own writings, Ledesma mentions that Perera's pupils indeed defended them:²⁶ (*a) There are three distinct souls (*animae totales*) in man (*vegetativa, sensitiva et rationalis*). (*d) Blood and the humors are not part of the human body (*partes corporis humani*).²⁷ In Ledesma's preliminary lists, we read under the heading "On the soul" that man has only one rational soul.²⁸ Under the heading "On the human body," he writes that blood and the humors are part of the integrity of nature and its truth (*de integritate naturae ac de veritate eius*), that they should somehow be called "part of the body" (*sint dicendi aliquo saltem modo pars corporis*), and finally that everything that follows from this must be admitted and everything contrary to it must be refuted.²⁹ Moreover, when collecting Perera's errors, Ledesma explains that (*d) seems to contradict the hypostatic union of Christ's blood and humors, the integrity and truth of the body in Christ's resurrection (*veritas ac integritas resurgentis Xpi. corporis*), and the consecration of his blood in the Eucharist.³⁰

While some of the DB's propositions concern the nature of the human and animal body and soul, the case of (d) in particular shows that it was the nature of Christ's body that was at stake. As a result, the body in general became a relevant theological issue and hence the subject of censorship. I shall explain how this came about by briefly summarizing a commentary Ledesma had written on the DB probably in 1574.³¹ Ledesma primarily aimed to accomplish two things with this commentary. First, he wanted to determine which propositions should still be subject to Jesuit philosophical censorship. Second, he justified his selection by describing the particular heresy a proposition targeted and which authorities, both philosophical and theological, supported the soundness of the prescribed tenet.

In the case of (a), Ledesma first refers to the condemned error of the Manicheans, who mistakenly assumed an intellective and a sensitive soul in every man.³² He then quotes the Fourth Council of Constantinople (*octavus Synodus generalis*, 869–870), which declared that "the Old and New Testament teach that a man or woman has one rational and intellectual soul."³³ Ledesma immediately points out that the error of assuming two separate souls leads to problems in Christology: did the hypothetical sensitive soul remain united with or separate from Christ's body in the grave during the *triduum mortis*, that is, the time between his death on the cross and his resurrection three days later?³⁴ Was the sensitive soul resurrected simultaneously with the rational soul? A teacher might not be able to answer these

questions without slipping into heresy (*non facile quis ad haec respondere poterit absque aliqua impietate*), and Scripture frequently mentions the soul as a unit.³⁵

After these strictly theological considerations, Ledesma proceeds to give philosophical reasons—an approach that is important to Ledesma’s whole idea of the DB, since he explicitly intended to defend the proposition *secundum Aristotelem et veram philosophiam*. He first makes an argument *ad absurdum*: “The sensitive soul, when informing the body, would form an irrational, not a rational unit together with matter. Thus, man would be composed of a brute part and a rational soul, as if someone were to say that man is composed of a goat (*ex capra*) and a rational soul.”³⁶ Ledesma next lists some supporters of his hylomorphic account of the soul, above all Thomas Aquinas, whose opponents William of Ockham, John of Jandun, and Paul of Venice, according to Ledesma, explicitly contradicted the saints and the church decrees by assuming several souls in man.³⁷

Unfortunately, Ledesma does not comment on propositions (b) and (c) but merely remarks that they may be omitted at present, not because they are wrong or should not be held, but rather because it seems that they should not be included with the other propositions.³⁸ Ledesma in fact dedicates a very extensive commentary to proposition (d) in order to prove that the humors are part of man and animal. He first narrows down the question: blood is one of the four humors. He then attempts to prove that blood is truly part of the body and pertains to the “truth of nature.”³⁹ Ledesma’s first ecclesiastical proof comes from the rather recent thirteenth session of the Council of Trent (1551), which defined the doctrine of transubstantiation in the Eucharist: “the body of Christ is present in the Sacrament in the form of wine, and the blood in the form of bread, and the soul in both, by the natural force of that connection and concomitancy whereby the parts of Christ (*partes Christi*) our Lord, who has now risen from the dead, to die no more, are joined together.”⁴⁰ To make a long story short: when laypeople do not receive the chalice containing the wine, this does not prevent them from partaking of Christ’s blood, because his blood is part of his body which is given as host. The theological concept of the Catholic Counterreformation that justified this view was called *concomitantia* and had its roots in the writings of Aquinas.⁴¹

Ledesma turns next to the issue of the incarnation and quotes the Council of Ephesus (431), which specifies that God became a real man composed of the parts of real blood and a real body.⁴² The hypostatic union of the Logos (*Verbum*) and the human nature of Christ included his blood, and deviating from this doctrine had also been condemned. Ledesma cites

papal decrees connected to Pope Clemens VI, namely a council at Barcelona (1350) and the bull *Unigenitus dei filius* (1343).⁴³ Finally, he cites several passages from Aristotle's zoological writings (*De partibus animalium*, *De historia animalium*) and a relevant article of Aquinas's *Summa theologiae*.⁴⁴ Ledesma explains, anticipating a potential objection, that when Aristotle does not consider blood part of the body in a particular passage, because blood lacks feeling, he is attributing a different meaning to the word "part." In this rather narrow meaning, Aristotle is referring only to body parts like the hands that have organs of touch.⁴⁵ The fact that Aquinas considers blood only a part in potency (*pars in potentia*) in a particular passage is likewise no counterargument, because Aquinas also acknowledges that blood is the seat of life (*sedes vitae*) and provides heat to all parts of an animal.⁴⁶ By "part in potency" Aquinas simply meant that another part of the body can be generated from blood, just as cartilage is formed from flesh.

Even the brief and superficial outline of Ledesma's commentary on the DB given above shows that the nature of the human body was theologically relevant to the sacrament of the Eucharist and to Christology. Furthermore, it also proves that these orthodox doctrines were integrated into the philosophical curriculum. Hence, Ledesma was intent on finding philosophical support for the prescriptions of the DB, since the bull of 1513 had decreed that natural reason could not contradict the truth of faith. I now shall give an overview of the theological and philosophical presuppositions that were at stake in the doctrines tackled thus far.

Splitting Hairs: How Scholastics Tackled the Question of Essential Parts in Human Beings

Already the earliest church fathers struggled with the question of how to understand Christ's incarnation and bodily resurrection in physiological terms.⁴⁷ Which parts of the human body are essential, so that the divine nature was united with them in the hypostatic union? When Christ rose from the dead, did he leave behind any parts of his body? Is the food he had eaten included in the resurrection? What about fingernails and hair? Although a great number of scriptural passages partially answer these questions, Christian theologians attempted to give a more systematic and general account of the physiological nature of the resurrection. The technical notion of the very core of the human body was called the "truth of human nature" (*veritas humanae naturae*), an expression that had become popular in medieval scholasticism from Peter Lombard's *Sentences*. But as soon as

Aristotelian natural philosophy arrived in the Latin west, this concept was contested by peripatetic biology and subsequently reformulated in peripatetic biological terms, thus giving rise to a “scientific account”: “Scholastic theology is distinctive in its readiness to dispute or incorporate doctrines from the natural sciences.”⁴⁸

Given the physical presence of God on earth and the promise of individual bodily resurrection, it is abundantly clear why Ledesma paid so much attention to the philosophical account of the body and soul. Christ’s resurrection was the “example of our resurrection” (*resurrectio Christi est exemplar nostrae resurrectionis*) and hence constituted a model and a goal for philosophical inquiries into the body and soul.⁴⁹ The unity of Christ’s soul and his blood as part of his body were crucial issues in this respect. Yet, the question of Christ’s blood in particular led to difficulties and controversy. Although most scholastics agreed that Christ’s blood was hypostatically united with the Logos, there was considerable debate about certain difficult cases. For instance:⁵⁰ Was the Logos united with the blood that Christ had shed during his martyrdom? What happened to the blood during his stay in the grave (*triduum mortis*)? If all of Christ’s blood was resurrected with him, what is actually contained in the many blood relics? Controversy over such questions was fought out especially between the two mendicant orders of the Dominicans and the Franciscans—and was still raging when Ledesma taught at the College in Rome.

Lecturing on scholastic theology at a Jesuit college meant reading the *Summa theologiae* of Thomas Aquinas, and teachers were guided by questions posed by scholastics like Jean Capreolus, Duns Scotus, Durandus of Saint-Pourçain, Gabriel Biel, and Thomas de Vio “Cajetan.”⁵¹ Some fifteenth-century authors, such as Biel or Alfonso Ribera “Tostado,” denied that Christ’s blood was part of his body.⁵² Durandus, Capreolus, and Scotus maintained that blood was not informed by the rational soul. Moreover, the view that Christ’s blood was not directly assumed by the Logos and that not all of Christ’s blood was resurrected was pinned particularly on Durandus.⁵³ These cases surely played a part in triggering Ledesma’s censorship, which favored the contrary position taken by Aquinas. However, regarding Christ’s blood, the authority of two rival Dominican theologians seems to have been especially important to early Jesuit authors.

The Dominican Inquisitor Silvestro Mazzolini “Prierias” compiled an influential ecclesiastical collection (*Rosa aurea*, 1503) of papal decisions and inner-Thomistic debates on the question of whether Christ’s blood was part of his body.⁵⁴ Not only did Ledesma use this collection, it also proves

that the topic remained a delicate subject of discussion in early sixteenth-century Italy. The Dominican Cardinal Cajetan, who was attacked by Prierias, had offered an interpretation in the last part of his commentary on Aquinas's *Summa* (1522) as to how and how much of Christ's blood was actually resurrected.⁵⁵ As a member of the Lateran Council in 1513, Cajetan did not completely agree with the bull and was attacked by other Catholics for his commentary on *De anima*, in which he expressed sympathy for the view that natural reason and faith do not always agree with one another.⁵⁶ Cajetan had already claimed in his commentary on *De anima* (1510) that Aristotle did not regard blood as an animal part. Hence, in his commentary on the *Summa*, he questioned whether it could be proven by the principles of Aristotelian biology that blood is part of the body, yet Cajetan considered an affirmative answer strictly a matter of faith.⁵⁷ He mentions the point that Aristotle considered blood the last link in the chain of nutrition and thus concluded that it could not be part of an animal.⁵⁸ Cajetan therefore attempts to draw a distinction between strictly nutrimental blood, which was not part of Christ's body, and a type of blood more thoroughly integrated into the body. Documents from the Roman Congregation for the Doctrine of the Faith (*Sanctum Officium*, *Censura Librorum*) reveal that attempts had already been made to "expunge" this view during preparations for Pope Pius V's ambitious project of a new edition of Aquinas's *Summa* printed together with Cajetan's commentary (*Editio Piana*, 1570).⁵⁹ Ledesma was not involved in this project and does not explicitly mention Cajetan in this context. His censorship, as argued above, was probably triggered rather by the local scandal surrounding his colleague Perera. Still, Ledesma criticizes Cajetan in his commentary regarding other doctrines, and Cajetan surely can be considered one of the most important exponents of early sixteenth-century Thomism, whose influence on the early Jesuits has yet to be explored.⁶⁰

For the purpose of this chapter, it is neither necessary to give a full-length account of the theological subtleties or the biological account involved: what matters is precisely the point that both domains were fully intertwined. The effort to ensure agreement between doctrines of faith and a semi-medical understanding of blood was the background against which details of the human—and by extension the animal—body were relevant to Christian believers. However, one major reason why early sixteenth-century Catholics put so much effort into reconciling both accounts appears in the bull of 1513 that condemned the possibility of two separate "camps of truth" (natural vs. theological).

Bloodline: How Toletus Implemented Ledesma's Censorship

Let me sum up some provisional results: for certain theological reasons, Ledesma censored specific philosophical doctrines of the animal and human body. Ledesma was compelled to act, because philosophy was considered a preparation for the study of theology in Jesuit colleges; in other words, mistaken views in philosophy might ultimately result in heresy in theology. Ledesma's agenda, however, does not necessarily imply that it was put into practice by philosophy teachers when lecturing in class. We moreover must clarify how the prescribed doctrines specifically influenced the understanding of the human/animal body in natural philosophy itself. I shall address these two points below by presenting a case study, while leaving more extensive comparative studies to be conducted in subsequent research.

Franciscus Toletus taught philosophy and theology at the Jesuit college in Rome at the same time as Ledesma was active there. His commentary on *De anima*, printed in 1575, is the first Jesuit commentary published on this particular work.⁶¹ Ledesma himself served as one of the official censors of the work.⁶² Toletus and Ledesma even lectured on scholastic theology together (1563–1564), and Toletus commented on the *Summa*, including the part dedicated to Christ's incarnation (1565–1566).⁶³ As we shall see, Toletus gives us outstanding insight into the relationship between philosophy and theology of the body, as well as the impact of Ledesma's censorship on Toletus's lectures.

In fact Toletus's commentary on *De anima* begins with an extensive chapter of ten propositions that ought to be defended according to faith.⁶⁴ Although tenets (a)–(d) of the DB are not included, the syllabus covers several other propositions from it and explains them in almost the very words Ledesma used in his commentary on the DB. It is thus not surprising that Toletus defends doctrines (a)–(d) elsewhere. He argues for the unity of the soul (a'), attacking Ockham, and emphasizes the heretical implications of divergent views for the doctrine of resurrection.⁶⁵ He frames an argument against a (Scotist) commonplace by maintaining that the vegetative, sensitive, and appetitive potencies of the soul are not immediately inherent in prime matter (c'), but only the will and intellect.⁶⁶ Although (a') and (c') deserve closer analysis, my intention here is merely to underline the basic agreement between Ledesma and Toletus on a superficial level.

Toletus defends doctrines (b, "hair") and (d, "humors") in the context of the question of whether the soul is in each part of the body.⁶⁷ He opens the section by elucidating the Aristotelian account of the nature of a living

body.⁶⁸ Animal bodies are divided into heterogeneous (e.g., hands) and homogenous parts. The latter include solid (e.g., bones) and fluid parts (e.g., humors). The soul is in all these parts with its whole substance, but not with all its potencies. Although there is only a single soul in a single animal, different faculties in this single soul perform different functions. Hence, for example, animal parts like bones lack feeling, because they lack the sensitive potency of the soul.

Toletus seems to have been particularly interested in determining the nature of blood and hair. Blood, Toletus affirms, must be part of the body and to argue otherwise is improvident (*temerarius*), since it has been officially approved by the Councils of Trent and Ephesus, that is to say, with regard to the *concomitantia* of Christ's blood and body in the Eucharist and with regard to the incarnation (d').⁶⁹ Nonetheless, Toletus admits that blood can be considered a part in potency only. The fact that blood has no sense perception does not affect its status as an animal part. I will omit Toletus's reasons here and only refer to the fact that Ledesma had already conceded both these points. Thus far, Toletus is completely in line with Ledesma. Toletus, however, takes on one pressing question that Ledesma did not tackle: is blood alive? The urgency of this question derives from the philosophical quandary of whether every part of a living body can itself be considered a living part. Addressing this problem, Toletus quotes a passage from Aristotle's *Historia animalium*, where Aristotle seemingly admits that blood is animated (*sanguis animatur*).⁷⁰ Although Toletus grants this view some probability, he ultimately answers in the negative. According to Toletus, blood receives its being from the soul but cannot properly be called "alive" (*licet non diceretur vivens, tamen dicitur Esse accipere ab anima*).⁷¹ Not even the vegetative soul informs blood; rather, Toletus conceives of it merely as a mixture of elements (*esse simpliciter mixti*). Likewise he understands the passage of Aristotle to mean that blood is converted into the living body by virtue of its function as a nutriment but is not alive itself. The reader will look in vain for an argument in support of this interpretation: obviously, Toletus does not question the role of blood as a nutriment for the body and thus is reluctant to call blood "alive." Moreover, he firmly rejects fingernails and hair as parts of the body, since they are not informed by the soul (b').⁷² They exhibit none of the operations of living substances, and their growth is merely the accumulation of excrement and not the result of an internal force that attracts nutriment.

If we now turn to Toletus's theological discussion of the incarnation in his commentary on the *Summa*, we get a full picture of the interdependency of philosophy and theology.⁷³ Toletus again repeats that blood is not

alive. Commenting on the same passage of the *Historia animalium*, he draws an illustrative analogy for the nutrition argument: blood is “animated” (*animatur*), because it is converted into the animated body, just as oil is “fired” (*ignitur*), because it is converted into fire.⁷⁴ He explicitly discusses Cajetan, who—according to Toletus—considered blood to be animated: an idea contrary to the fundamental principles of philosophy (*imaginatio contra fundamenta philosophiae*).⁷⁵ Blood and the remaining three humors, however, are necessary for life, as confirmed by the simple experiment of complete exsanguination. For this reason, all humors are hypostatically united with the Logos. Hair, in contrast, is not immediately assumed by the divine nature, for the very reason that it is not part of the body at all.⁷⁶

At first glance, Toletus appears to have closely followed the instructions of the DB concerning the doctrines that must be defended in philosophy classes. His commentary on *De anima* clearly laid the groundwork for the theological integration of philosophical doctrines concerning the animal body. Approaching the nature of the human body within the framework of the Aristotelian science of the soul, Toletus not only took interest in whether blood and hair were parts of the human body, but also inquired whether they were informed by the soul, whether they were alive. Toletus can deny that blood is alive, because he does not consider it inconsistent with the theological requirement that blood is an essential part of Christ’s body. The DB had urged philosophy teachers to deny that the soul is in the hair; Toletus does not even consider hair part of the human body, and consequently Christ’s hair is not immediately united with the Logos.

To a modern reader, the questions of whether hair pertains to the body or whether it is a superfluous part might appear to be superfluous or even literally splitting hairs. But the scholastics had indeed disputed these problems. Toletus’s teacher, for instance, the Dominican Domingo de Soto, had affirmed that hair (and fingernails) were directly united with the Logos, not despite the point that they were ornaments of the body, but precisely because they were.⁷⁷ The issue was often raised again in the debate over the sacrament of baptism:⁷⁸ is it sufficient to sprinkle only the hair with the baptismal water? The answer depends on whether one accepts that hair is an integral part of the body.

Bloody Business: How Christ’s Blood Informed Jesuit Natural Philosophy

In Toletus’s two works, both questions of natural philosophy arise in a theological context and theological questions in the context of natural

philosophy. In order to make their teaching more efficient by avoiding unnecessary overlap between philosophy and theology, Jesuit educational planners enumerated several questions that should not be discussed when reading the *Summa*, but rather receive adequate attention in the philosophy curriculum. The question about the living nature of hair was one such case. The first draft of the *Ratio studiorum* (1586) stated that theologians should leave the hair question to the philosophers (*relinquatur philosopho*).⁷⁹ This was stipulated with regard to the article in the *Summa* where Aquinas outlines the difference between procreation and generation, alluding to the growth of hair as a clear case of generation.⁸⁰ The first book of *De generatione et corruptione* is a key passage in the *Corpus Aristotelicum* in which the notion of generation is discussed. In chapter 4 of this book, however, Aristotle does not mention hair, but rather blood generated from seed.⁸¹ Against this complex background of the relationship between certain topics and mention of them in Aristotle's works, the Jesuits of Coimbra dedicated extensive chapters of their commentary on *De generatione* I, 4 (1597) to questions such as the following: Are hair and fingernails animated? Are blood, the humors, and the vital spirits suited for life? Are semen and milk alive?⁸²

The Coimbra Jesuits undertook a detailed analysis of philosophical, philological, medical, and theological investigations into the nature of blood and hair by quoting about fifty authors over a space of more than ten pages. In their refutation of the argument that blood is alive, they remark, for example, that the relevant passage of Aristotle's *Historia animalium* (cited by Toletus) in the Greek manuscripts lacks the addition that the Latin translation of Theodorus Gaza renders as "only blood is animated" (*sanguis unus animatur*).⁸³ A biblical passage in Leviticus 17.11, where the soul of flesh is said to be in the blood (*anima carnis in sanguine est*), is interpreted, following Augustine, to mean that blood is only a necessary condition for life. Cornelius a Lapide (SJ), for example, endorses this interpretation by referring to the particular reading of the text in the Hebrew language.⁸⁴ The Conimbricenses cite the empirical fact that the hair/fingernails grow in all three dimensions during young boys' growth spurts—which allegedly proves that their growth is not simply the one-dimensional accumulation of excrement.⁸⁵ They also consider the opinions of ancient and contemporary medical authors, such as Galen, Girolamo Fracastoro, Jean Fernel, and Thomas a Veiga, on the matter.⁸⁶ These few examples suffice to show that the topic of blood and hair by no means fell under the exclusive jurisdiction of theology, but rather received substantial attention

Table 3.1. A brief survey of selected major Jesuit works from the period that consider blood and hair as alive.

Author	Commentary on	Is hair alive?	Is blood alive?
Diego de Ledesma (1524–1574)	DB (1565/1572)	no	n/a
Franciscus Toletus (1534–1596)	DA/ST (1575/?)	no	no
Franciscus Suárez (1548–1617)	DA/ST (1575/1592)	no	no
Collegium Conimbricense	DGC (1597)	yes	no
Gregorio de Valentia (1550–1603)	ST (1597)	yes	yes
Alfonso Salmerón (1515–1585)	SS (1601)	yes	yes
Girolamo Dandino (1554–1634)	DA (1610)	n/a	no
Antonio Rubio (1548–1615)	DA (1613)	yes	no
Cornelius a Lapide (1567–1637)	SS (1616)	n/a	no
Gabriel Vázquez (1549–1604)	ST (1621)	no	no
P. H. de Mendoza (1578–1641)	DA (1617/1624)	no	yes
Rodrigo de Arriaga (1592–1667)	DA/ST (1632/1643)	yes	yes
Francisco de Oviedo (1602–1651)	DA (1640)	no	yes
T. Compton Carleton (1591–1666)	DA (1649)	yes	no
Richard Lynch (1610–1667)	DA (1654)	yes	yes

in its own right. We can easily corroborate this fact by casting a glance at later Jesuit commentaries, such as those of Antonio Rubio (SJ) and Girolamo Dandino (SJ).⁸⁷ The latter even dedicated three whole books to the humors and parts of animals as integral parts of his commentary on *De anima*.

After Borgia issued his decree in 1565, the topic of blood and hair was treated in all Jesuit philosophical and theological *cursus* I could find until the 1650s.⁸⁸ In 1668, a frontispiece drawn by the Jesuit artist Johann Christoph Storer (SJ, 1620–1671) even shows thirty “Tablets of Law” arranged below Mount Sinai, two of them engraved with the doctrines that blood is not alive but hair is.⁸⁹ While virtually all Jesuits agreed that blood was part of the body, the question of whether blood and hair were alive remained controversial, even within the order.⁹⁰ This can be illustrated by a brief survey of selected major Jesuit works from the period.⁹¹

Even without taking a closer look at the individual texts, we may nonetheless conclude that either opinion on both questions was almost equally

defensible.⁹² In my opinion, it was for theological reasons, or at least because of theological needs, that the topic of blood in particular received so much attention.⁹³ Aquinas's doctrine of the incarnation and resurrection of Christ, together with the recent urgency of the Tridentine doctrine of concomitancy in the Eucharist, may have brought the issue of blood to prominence in theological contexts.⁹⁴ Admittedly, from a modern point of view, one could argue that all three cases concern the miraculous nature of Christ's body and therefore are strictly matters of faith. The Jesuits, however, like most medieval and early modern scholars, approached the issue from a different perspective. Since doctrine stipulated that Christ's nature was entirely human during his time on earth, it was the nature of the ordinary human body that was at stake. It was generally agreed and had been sanctioned in 1513 that true philosophical conclusions cannot contradict true theological doctrines; accordingly, it was the task of philosophy to determine the nature of the body.

Within the framework of Aristotelian philosophy, the human body "as body" was treated no differently from animal bodies in general.⁹⁵ Moreover, in the Galenic-Aristotelian tradition, a living body included fluid parts, namely the four humors, of which blood was one. Censorship may have been primarily intended to promote a pious notion of Christ's individual body/blood, but it incidentally also proclaimed a general account of the animal body and the four humors. Yet, in the Jesuit curriculum, these doctrines were taught in reverse order: natural philosophy investigated the animal body and the four humors; later, theology applied this natural knowledge to Christ's human body and blood. The implicit argument may be reduced to a simplified form as follows:

1. The four humors are a part of all animal bodies
2. Blood is a humor
3. Therefore, blood is a part of the animal body (1+2)
4. All men are animals
5. Therefore, blood is a part of all human bodies (3+4)
6. Christ had a human body
7. Therefore, the four humors are a part of Christ's body (5+6)
8. Therefore, blood is a part of Christ's body (2+7)

While the natural philosopher, following Aristotle, starts at (1–4), the theologian is particularly interested in (8) and believes in (6) as the miracle of the incarnation. Hence, if the theologian is intent on making a valid

deduction, he will want to control the doctrines of natural philosophy (1, 2, 4). Therefore, (1) is prescribed verbatim as (d) in the DB, and (2, 4) were undisputed anyway. As a side effect of this argument, it is no wonder, that, for example, Tomas Compton Carleton (SJ)—*mutatis mutandis*—not only considered hair and fingernails alive, but also hooves, feathers, and fish scales.⁹⁶ As the exception that proves the rule, Richard Lynch (SJ) argued that only human blood is animated, not the blood of beasts—according to the hypothesis that the souls of beasts are divisible.⁹⁷ And for most of the authors mentioned above, not only Christ's blood was united with the Logos, but also his black and yellow bile and phlegm.

Although one might not have expected it, the Jesuits investigated the nature of the animal body in some detail as part of their philosophical and theological education. Also outside the Jesuit realm, not only was the physio-theological investigation in the nature of Christ's blood taken up in strictly theological works, such as Franciscus Collius's 912-page book *De sanguine Christi* (1617), but the topic of blood also received considerable interest in the context of *Physica sacra*, that is, the attempt to base knowledge about the natural world on biblical sources.⁹⁸ For example, in his *De sacra philosophia* (1587), Franciscus Vallesius discusses the question of whether blood is part of the animal body at length, as does Vicentius Moles in his *Philosophia naturalis sacrosancti corporis Iesu Christi* (1639).⁹⁹ This evidence and the scholastic arguments of the Jesuits discussed above demonstrate that some scholarly views on the scope of the Catholic research program should be formulated in a more balanced manner. This is true, for instance, in the case of Eckhard Kessler's claim that "as a consequence of the Pomponazzi affair, we can observe not only a divorce of natural philosophy from Christian philosophy, but also a rebirth of Christian philosophy in its own right."¹⁰⁰ If there was a divorce, then there also was a second marriage. Finally, medical works, such as the first monograph on hair (1609) by the French physician Jean Tardin and William Harvey's entire project on blood, appear in a different light when viewed against this theological background. Tardin himself discusses the opinions of Aquinas and other scholastics on whether hair is alive.¹⁰¹ In sketching the scholarly background of Harvey's blood-centrism, Roger French states that "many [of Harvey's contemporaries] denied that the blood was part of the body at all."¹⁰² I do not want to question precisely how "many," but virtually no Catholic denied this. In his *Exercitationes de generatione animalium* (1651), Harvey subsequently quotes both the passage of Aristotle's *Historia animalium* and the verse from Leviticus 17 to promote his view that life consists in blood

itself.¹⁰³ However, in contrast to some of his Jesuit colleagues, he did not realize that his translation of Aristotle was erroneous and that the true meaning of the passage from Moses was potentially blurred by his “smattering of Hebrew.”¹⁰⁴

Van Helmont's Fantastic Blood

Already the fictitious trial against Pomponazzi, like the actual investigation against Perera's teaching, and the posthumous expurgation of Cajetan's works clearly attest how earnestly especially Catholic theologians had tried to reconcile the notions of the animal body and soul in natural philosophy and in Christian belief. It was the Flemish physician Jan Baptist Van Helmont, however, who would experience the dark side of this Catholic preoccupation.

Van Helmont had dealt with the magnetic healing of wounds in a treatise directed primarily against the Jesuit theologian Jean Roberti (SJ, 1569–1651), who had condemned this miraculous cure as superstitious and demonic.¹⁰⁵ The so-called “weapon salve” promised no less than to heal a wound by applying the patient's blood merely to the weapon that had inflicted the wound, while the wound itself was dressed but not treated with medicine. Van Helmont understood this cure as a natural, magnetic process, because animal and human blood is endowed with imagination.¹⁰⁶ This property allows blood to “communicate,” so to speak, with the body in which it originated, even when the blood had been shed and was outside the veins. Moreover, Van Helmont underpins his quasi-vitalist account of blood with biblical support, citing the Old Testament prohibition of consuming animals with blood in their bodies, for the very reason that the soul (*anima*) is in the blood.¹⁰⁷

Although Van Helmont's treatise had been published in 1621 without his knowledge—as he claimed—and although it contained a statement that placed the entire work under Catholic authority, it resulted in a lengthy inquisitional trial against him, involving at least three interrogations, four days in prison, and a long period under house arrest.¹⁰⁸ When in 1623 the Spanish Inquisition collected twenty-seven heretical propositions from Van Helmont's work and local theologians in the southern Netherlands opened an investigation against the physician, his account of living blood was among the statements singled out for condemnation.¹⁰⁹ For these Flemish theologians, the very idea that any life or imaginative faculty remained in extravenous blood amounted to a heresy condemned

1,200 years before, a ridiculous belief of country bumpkins, and moreover something contrary to common experience.¹¹⁰ In his first interrogation (1627), Van Helmont still dares to defend his views on blood, informing the jury about its biblical proofs.¹¹¹ Already in his second interrogation (1630), under threat of punishment, he admits to falsely attributing a soul to blood (*animam male attributam esse sanguini*) and states that he will submit his answer to the judgment of the theologians (*responsionem suam submittere iudicio theologorum*).¹¹² However, as he explains in his third interrogation (1634), it was common sense among physicians that even extravenous blood was still endowed with a vital spirit (*consensu medicorum inhabitare spiritum vitalem sanguini etiam extravenato*). He thereby simply avoids the concept of *anima* by expressing the argument in purely medical terminology.¹¹³

His enemies, however, were especially concerned about the Christological consequences of Van Helmont's notion of blood. They repeatedly emphasize how Van Helmont's quasi-medical tenets result in indisputably heretical statements when applied to Christ's bodily nature or his blood.¹¹⁴ Although I could not find any explicit criticism of Van Helmont in his enemies' theological works, they discuss both the question of the living nature of blood, as usual, in the context of the incarnation and the question as to whether Christ's soul informed all parts of his body, including his blood. For example, in his commentary on the *Summa* (1631), Johannes Wiggers (1571–1639), a catholic theologian and a participant in Van Helmont's trial, argues that even if one supposed that blood was not informed by the soul, it still would not follow that blood is not an integral part of the animal body (*quia esto quod sanguis non informetur anima, poterit tamen dici pars animalis*).¹¹⁵ He cites both the medical and scriptural account that the soul (i.e., life) is said to be in the blood, because it is necessary for life (*nam anima, id est vita non tantum secundum medicos, verum etiam secundum Scripturam, dicitur esse in sanguine*).¹¹⁶ Even though the question of whether blood is informed by the soul remained open for discussion even among Catholics, Van Helmont's claim that extravenous blood was endowed with *phantasia* or a sensitive faculty clearly went beyond any *opinio probabilis*. This was not even considered a matter for scholastic discussion.

Van Helmont, however, had learned his lesson, and whenever he revisited the question of whether blood was informed by the soul in his later writings, he did so in an almost submissive manner.¹¹⁷ He not only openly denies that blood is informed by the soul in at least three later works, he even explicitly describes his encounter with the adamant accusations of the theologians:¹¹⁸

Finally, neither [venous] blood nor even arterial blood is endowed with animal sense and touch, although they [i.e., the two types of blood] sense by sympathy, even when extra-venous. . . . In this respect I was asked by theologians whether blood is informed by the soul. I hold, subject to correction by better judgment, that nothing is informed by the soul of an animated being that does not participate in the sensitive soul. . . . Therefore, for something to be informed by the soul, it is necessary that it is alive and senses in the same manner as the subject of its own life.¹¹⁹

As already at his final interrogation, Van Helmont shrewdly gives himself considerable leeway—and perhaps merely pays lip service—by explicitly admitting the quasi-pious position the theologians had dictated to him, while, at the same time, still maintaining that blood is endowed with a sympathetic type of sensation.¹²⁰ On at least a superficial level, both Van Helmont's and Wiggers's accounts of blood attempt to harmonize medical and theological approaches, yet their arguments emerge from two very different contexts. While Wiggers addresses the question in a commentary on Aquinas's *Summa* dealing with the incarnation, Van Helmont tackles the question in a discussion of human and animal physiology.

Admittedly, Van Helmont's trial was motivated by many more ideological and confessional reasons than simply his account of blood.¹²¹ However, his notion of "fantastic blood" afforded his enemies an opportunity to attack him on theological grounds. The prosecution and eventual condemnation of precisely this point was premised, as I have argued in the course of this paper, on a specific mind-set that developed during the sixteenth century. According to this mind-set, questions of natural philosophy and medicine regarding the ordinary animal body had to meet the theological demands of Christian doctrine, such as the incarnation, the resurrection, and the sacraments.

42. Nifo, *Expositio subtilissima de anima*, 867.
43. Aristotle, *De memoria et reminiscencia*, II, 453a6–14. Nifo comments on this passage in Agostino Nifo, *Parva Naturalia Augustini Niphi Medicis Philosophi Suessani* (Venice: Scotum, 1550), 83va.
44. Aristotle, *De memoria*, II, 453a6–14.
45. Aristotle, *De memoria*, II, 453a15–31.
46. Nifo, *Parva Naturalia*, 84va.
47. Nifo, *Parva Naturalia*, 83va. Here Nifo refers to the aforementioned passage of Aristotle's *Historia animalium*, VII (VIII), 12 (see above, notes 16 and 36).
48. Agostino Nifo, *Augustini Niphi medicis philosophi Suessani expositiones in omnes Aristotelis libros De Historia animalium, De Partibus animalium et eorum Causis ac de Generatione Animalium* (Venice: Scotum, 1546), 220.
49. Nifo, *Expositio subtilissima de anima*, 328.
50. Nifo, *Expositio subtilissima de anima*, 328.

CHAPTER 3. FOR CHRIST'S SAKE

I would like to thank Martin Klein, Sven K. Knebel, Christoph Lüthy, Leen Spruit, and the editors of this volume for their comments on earlier versions of this article, and Jo Hedesan for her comments on the epilogue on Van Helmont. I thank Anna Siebold and John Noël Dillon for their linguistic revision of the article.

1. See Traiano Boccalini, *Ragguagli di parnaso e scritti minori*, ed. Luigi Firpo, vol. 3, *Scrittori d'Italia 199* (Bari: Laterza, 1948), 340.
2. A good outline is given in Eric A. Constant, "A Reinterpretation of the Fifth Lateran Council Decree *Apostolici Regiminis* (1513)," *Sixteenth Century Journal* 33, no. 2 (2002): 353–79.
3. For Pomponazzi and some of his precursors, see Martin L. Pine, "Pomponazzi and the Problem of 'Double Truth,'" *Journal of the History of Ideas* 29, no. 2 (1968): 163–76.
4. For an overview, see Paul Richard Blum, "The Immortality of the Soul," in *The Cambridge Companion to Renaissance Philosophy*, ed. James Hankins (Cambridge: Cambridge University Press, 2007), 211–33.
5. See Theodor W. Köhler, *Homo animal nobilissimum: Konturen des spezifisch Menschlichen in der naturphilosophischen Aristoteleskommentierung des dreizehnten Jahrhunderts*, vol. 1, *Studien und Texte zur Geistesgeschichte des Mittelalters* 94 (Leiden: Brill, 2008), 235.
6. See, e.g., Martin L. Pine, *Pietro Pomponazzi: Radical Philosopher of the Renaissance*, *Saggi e testi* 21 (Padua: Antenore, 1986), 68–75. With regard to Jesuit authors, some information can be gleaned from Salvador Castellote Cubells, *Die Anthropologie des Suarez: Beiträge zur spanischen Anthropologie des XVI. und XVII. Jahrhunderts* (Freiburg: K. Alber, 1962), 43–47, 95–96. Mário Santiago de Carvalho, "Intellect et Imagination: La 'scientia de anima' selon les 'Commentaires du Collège des Jésuites de Coimbra,'" in *Intellect et imagination dans la philosophie médiévale. Actes du XIe Congrès international de philosophie médiévale de la Société internationale pour l'étude de la philosophie médiévale, S.I.E.P.M., Porto, du 26 au 31 août 2002*, vol. 1, *Rencontres de philosophie médiévale* 11, ed. Maria Cândida da Costa Reis Monteiro Pacheco and José Francisco Meirinhos (Turnhout: Brepols, 2006), 119–58, here 131–35.
7. A good example of explicit condemnation of the view that brute animals possess reason (*rationis capaces esse*) may be found in the very influential catalogue of heresies by Alfonso de Castro (OFM). See Alfonso de Castro, *Adversus omnes haereses libri XIII* (Paris: Jean Foucher, 1543), 52v.
8. See, e.g., Thomas Aquinas, *Summae Theologiae*, *Sancti Thomae Aquinatis Opera omnia* (Leonina) 5–12 (Rome: Typographia Polyglotta S. C. de Propaganda Fide, 1889–1906), Ia, q. 79, art. 8, s.c.; henceforth quoted as ST.

9. See Theodor Schneider, *Die Einheit des Menschen: Die anthropologische Formel “anima forma corporis” im sogenannten Korrektorienstreit und bei Petrus Johannis Oliui. Ein Beitrag zur Vorgeschichte des Konzils von Vienne*, Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters 8 (Münster: Aschendorff, 1973). Of course, the Council of Vienne attempted to establish a much more sophisticated notion of the unity of man. I merely wish to show that Aristotelian terminology was closely intertwined with dogmatic Christian vocabulary.

10. See Charles H. Lohr, “Jesuit Aristotelianism and Sixteenth-Century Metaphysics,” in *Paradosis: Studies in Memory of Edwin A. Quain*, ed. Harry George Fletcher III and Mary Beatrice Schulte (New York: Fordham University Press, 1976), 203–20, here 205. See also Andreas Inauen, “Stellung der Gesellschaft Jesu zur Lehre des Aristoteles und des Hl. Thomas vor 1583,” *Zeitschrift für Katholische Theologie* 40 (1916): 201–37. Ulrich Gottfried Leinsle, “*Delectus opinionum*: Traditionsbildung durch Auswahl in der frühen Jesuitentheologie,” in *Im Spannungsfeld von Tradition und Innovation: Festschrift für Joseph Kardinal Ratzinger*, ed. Georg Schmuttermayr, Wolfgang Beinert, and Heinrich Petri (Regensburg: Pustet, 1997), 159–75. Dennis A. Bartlett, “The Evolution of the Philosophical and Theological Elements of the Jesuit Ratio Studiorum: An Historical Study, 1540–1599,” Ph.D., diss., University of San Francisco, 1988. I am well aware that many claims and conclusions of this article are also valid for other religious orders of the time.

11. I rely on László Lukács, ed., *Monumenta paedagogica Societatis Iesu*, 7 vols., *Monumenta historica Societatis Iesu* (Rome: Institutum historicum Societatis Iesu, 1965–1992), henceforth quoted as MPSI followed by the volume number and pages. See here MPSI V, 101, 283, 397. I also rely on Cecilio Gómez Rodeles, Mariano Lecina, Frederico Cervos, Vincentio Agusti, and Aloisio Ortiz, eds., *Monumenta paedagogica Societatis Iesu, quae primam Rationem studiorum anno 1586 editam praecessere*, *Monumenta Historica Societatis Iesu* (Madrid: A. Avrial, 1901), abbreviated MPSI* followed by the page number.

12. On Catholics and the immortality debate, see Sascha Salatowsky, *De Anima: Die Rezeption der aristotelischen Psychologie im 16. und 17. Jahrhundert*, Bochumer Studien zur Philosophie 43 (Amsterdam: B.R. Grüner, 2006), 246–57. Mário Santiago de Carvalho, “Filosofar na época de Palestrina: Uma introdução à psicologia filosófica dos ‘Comentarios a Aristóteles’ do Colégio das Artes de Coimbra,” *Revista filosófica de Coimbra* 22 (2002): 389–419. Henrik Wels, *Die Disputatio de anima rationali secundum substantiam des Nicolaus Baldelli S. J. nach dem Pariser Codex B.N. lat. 16627: Eine Studie zur Ablehnung des Averroismus und Alexandrismus am Collegium Romanum zu Anfang des 17. Jahrhunderts* (Amsterdam: John Benjamins Pub. Co., 2000).

13. See Jos V. M. Welie, “Ignatius of Loyola on Medical Education: Or, Should Today’s Jesuits Continue to Run Health Sciences Schools?” *Early Science and Medicine* 8, no. 1 (2003): 26–43. See also Christoph Sander, “Medical Topics in the De Anima Commentary of Coimbra (1598) and the Jesuits’ Attitude towards Medicine in Education and Natural Philosophy,” *Early Science and Medicine* 19, no. 1 (2014): 76–101.

14. See Paul Richard Blum, “Der Standardkurs der katholischen Schulphilosophie im 17. Jahrhundert,” in *Aristotelismus und Renaissance: In memoriam Charles B. Schmitt*, ed. Eckhard Kessler, Charles H. Lohr, and Walter Sparn, *Wolfenbütteler Forschungen* 40 (Wiesbaden: Harrassowitz, 1988), 127–48.

15. See Ugo Baldini, “The Development of Jesuit Physics in Italy, 1550–1700: A Structural Approach,” in *Philosophy in the Sixteenth and Seventeenth Centuries: Conversations with Aristotle*, ed. Constance Blackwell and Sachiko Kusakawa (Aldershot: Ashgate, 1999), 248–79, 251.

16. A good example may be found in Benito Perera’s (SJ, 1535–1610) study program, which explicitly highlights the importance of physical fitness to successful study. See

MPSI II, 672–74. See also Hubertus Lutterbach, “‘Auf die Kräfte des Leibes achten!’ Die Bedeutung der Gesundheit im Leben und Wirken des Ignatius von Loyola,” *Theologie und Philosophie* 69 (1994): 556–69. Barea Fermín Sánchez, “The Practical Application of Psychobiological Theory of the Four Humors in the Jesuit Colleges of the Modern Age: A Model of Guidance for Allocating Government Positions,” *Procedia—Social and Behavioral Sciences* 30 (2011): 2335–40. Paulo José Carvalho da Silva, “Psicologia organizacional e exercício do desejo na Antiga Companhia de Jesus,” *Revista de Estudos da Religião—REVER* 6, no. 4 (2006): http://www.pucsp.br/rever/rv4_2006/t_silva.htm (accessed 18 October 2014). Cristiano Casalini, “Umori, troppi umori: Temperamenti e malattie dell’anima nella formazione dei primi gesuiti,” *Rassegna di pedagogia* 3–4 (2013): 331–50.

17. See Michael Edwards, “Digressing with Aristotle: Hieronymus Dandinus’ *De Corpore Animato* (1610) and the Expansion of Late Aristotelian Philosophy,” *Early Science and Medicine* 13, no. 2 (2008): 127–70.

18. See MPSI III, 382–85. Some information can be gleaned from Leinsle, “*Delectus opinionum*,” 161. Rivka Feldhay, *Galileo and the Church: Political Inquisition or Critical Dialogue?* (Cambridge: Cambridge University Press, 1995), 133–45. In the critical edition, the DB lists only sixteen propositions; however, the seventeenth proposition appears as a variant in ARSI, Fondo Ges. 656/A, see MPSI III, 385 (apparatus). It seems reasonable to follow this manuscript, since early Jesuits (like Ledesma or Bellarmine) counted seventeen propositions and hence obviously relied on this source, see MPSI* 567; MPSI VI, 5. See also below, note 20.

19. The reading of the edition in MPSI III, 384 differs slightly, omitting “nec in bruto sensitiva et vegetative,” but this addition appears in the critical apparatus in MPSI II, 501 and in MPSI* 550.

20. On Ledesma’s engagement in pedagogy, see Bartlett, *Evolution*, 55–93. Christoph Sander, “In dubio pro fide: The Fifth Council of the Lateran Decree Apostolici Regiminis (1513) and Its Impact on Early Jesuit Education and Pedagogy,” *Educazione. Giornale di pedagogia critica* 3, no. 1 (2014): 39–62.

21. MPSI II, 474–78.

22. See Paul Richard Blum, *Studies on Early Modern Aristotelianism*, History of Science and Medicine Library 30/7 (Leiden: Brill, 2012), 141–47. Christoph Sander, “The War of the Roses: The Debate between Diego de Ledesma and Benet Perera about the Philosophy Course at the Jesuit College in Rome,” *Quaestio* 13 (2013): 31–50.

23. See MPSI II, 502–3.

24. See MPSI II, 496–502.

25. This has been suggested by other scholars as well; see MPSI III, 384n2.

26. Perera wrote several commentaries on *De anima*, but they have not yet been edited. In a document instructing students for the study of philosophy (*Documenta quaedam perutilia iis qui in studiis philosophiae cum fructu et sine ullo errore versari student*, Cod. Ambros. D496 inf., ff. 25r–31v), Perera remarks that some crucial Christian doctrines cannot be demonstrated by reason alone. One of his examples is Christ’s resurrection, i.e., one of the topics addressed by Ledesma. See fol. 25r: “Licet in ijs quae docet fides christiana perspicuum sit quaedam esse quae non possunt lumine naturae scientifice comprehendere, aut demonstratione probari, cuiusmodi sunt ea quae traduntur . . . de resurrectione mortuorum.” An edition of this treatise will appear in a forthcoming article by Cristiano Casalini and myself to be published in *History of Universities*.

27. See MPSI II, 503.

28. See MPSI II, 497 and 501.

29. See MPSI II, 498 and 502.

30. See MPSI II, 503.

31. The commentary is edited only in MPSI* 548–69. It is not dated but bears a strong resemblance to a letter Ledesma wrote in 1574, see MPSI IV, 196.

32. See MPSI* 553.

33. See Norman P. Tanner, ed., *Decrees of the Ecumenical Councils*, 2 vols. (London: Sheed & Ward, 1990), 1:175. For the Latin text, see also Heinrich Denzinger and Clemens Bannwart, eds., *Enchiridion symbolorum, definitionum et declarationum de rebus fidei et morum* (Freiburg: Herder, 1911), 156 (§ 338).

34. MPSI* 553. See below, note 65.

35. MPSI* 554.

36. MPSI* 554: “quia illa anima sensitiva, cum informet corpus, faceret cum materia unum per se, non rationale, sed irrationale; atque adeo homo esset compositus ex illo bruto et anima rationali; sicut si quis diceret ex capra et anima rationali componi hominem.”

37. As a starting point for medieval discussions about the unity of the soul, see Dominik Perler, “How Many Souls Do I Have? Late Aristotelian Debates on the Plurality of Faculties,” in *Medieval Perspectives on Aristotle's De Anima*, *Philosophes Médiévaux* 58, ed. Russell L. Friedman and Jean-Michel Counet (Louvain: Peeters, 2013), 277–96. Thomas M. Ward, “Animals, Animal Parts, and Hylomorphism: John Duns Scotus's Pluralism about Substantial Form,” *Journal of the History of Philosophy* 50, no. 4 (2012): 531–57.

38. See MPSI* 555: “Haec nona et decima, ut alibi dixi, si facienda sit aliqua in melius mutatio, addendo etiam alia, nunc possent omitti; non quod non sint verae et tenendae, sed quod non videantur, ut inter alias debeant collocari.” I have no idea to what other work “alibi” refers. When the DB was reviewed at the Roman College again in 1582, a majority of the professors voted to dismiss propositions (a) and (d), and all agreed to omit (b) and (c). See MPSI VI, 5.

39. See MPSI* 555.

40. See MPSI* 555: “in Sacramento corpus Christi sub specie vini, et sanguinem sub specie panis, animamque sub utraque, vi naturali, ait, illius connexionis et concomitantiae, qua partes Christi, qui iam ex mortuis resurrexit, non amplius moriturus, inter se copulantur.” English translation adapted from Tanner, *Decrees*, 2:695. Official Latin text also in Denzinger and Bannwart, *Enchiridion*, 286 (§ 876).

41. For the historical and theological background, see Stephen E. Lahey, “Late Medieval Eucharistic Theology,” in *A Companion to the Eucharist in the Middle Ages*, Brill's Companions to the Christian Tradition 26, ed. Ian Christopher Levy, Gary Macy, and Kristen Van Ausdall (Leiden: Brill, 2012), 499–539. Caroline Walker Bynum, *Wonderful Blood: Theology and Practice in Late Medieval Northern Germany and Beyond* (Philadelphia: University of Pennsylvania Press, 2007), 92–96. Robert J. Daly, “The Council of Trent,” in *A Companion to the Eucharist in the Reformation*, Brill's Companions to the Christian Tradition 46, ed. Lee Palmer Wandel (Leiden: Brill, 2013), 159–82.

42. See Denzinger and Bannwart, *Enchiridion*, 53 (§ 117) and MPSI* 555.

43. On the *Unigenitus*, see Denzinger and Bannwart, *Enchiridion*, 220 (§ 550). The Barcelona affair is outlined in Bynum, *Wonderful Blood*, 113–16. Ledesma refers to Mazzolini, Silvestro. *Aurea rosa* (Venice: J. Leoncinus, 1573), 605 (tr. 3, q. 31).

44. See PA II, 2; HA III, 2 and 19; ST IIIa, q. 54, art. 2.

45. See MPSI* 556. He refers to PA II, 10 (656b21).

46. He refers to ST Ia, q. 119, art. 1, ad 3.

47. A case study is available in David Satran, “Fingernails and Hair: Anatomy and Exegesis in Tertullian,” *Journal of Theological Studies* 40, no. 1 (1989): 116–20. For an

overview, see Caroline Walker Bynum, *The Resurrection of the Body in Western Christianity, 200–1336*, *Lectures on the History of Religions* 15 (New York: Columbia University Press, 1995). Philip Lyndon Reynolds, *Food and Body: Some Peculiar Questions in High Medieval Theology*, *Studien und Texte zur Geistesgeschichte des Mittelalters* 69 (Leiden: Brill, 1999). Examples given below are taken from there. For a medieval and early modern account of bodily resurrection and its justification in Aristotelian philosophy, see Bernd Roling, “Die Rose des Paracelsus: Die Idee der Palingenesie und die Debatte um die natürliche Auferstehung zwischen Mittelalter und Neuzeit,” in *Natural History and the Arts*, ed. Paul Smith and Karl Enenkel (Leiden: Brill, 2014), 263–97, here 272–74.

48. Reynolds, *Food and Body*, 15.

49. See ST IIIa, q. 54, art. 2, co.

50. See Bynum, *Wonderful Blood*, 85–131.

51. See MPSI II, 268 (document from 1572). See also Bartlett, *Evolution*, 75.

52. See Gabriel Biel, *Sacri canonis Missae lucidiss. Expositio* (Brescia: Thomas Bozzola, 1576), 472 (lc. 53, K). Alfonso Tostado Ribera, *Commentaria in Matthaum: In Sextam Partem, Opera omnia* 18 (Venice: Sessa, 1596), 113v (c. 22, q. 244).

53. A comprehensive doxography is given in Antonius Rubio, *Commentarii in libros Aristotelis Stagiritae philosophorum principis De anima: Una cum dubiis & quaestionibus hac tempestate in scholis agitari solitis* (Cologne: J. Crithius, 1613), 207–10 (lib. 2, c. 3, q. 8). For brevity’s sake I omit further references.

54. See Mazzolini, *Aurea rosa*, 593–613 (tr. 3, q. 30–34).

55. On the enmity between Cajetan and Prierias and the Pomponazzi affair, see Michael M. Tavuzzi, *Prierias: The Life and Works of Silvestro Mazzolini Da Prierio, 1456–1527* (Durham: Duke University Press, 1997), 91–104.

56. See Constant, “A Reinterpretation,” 374–75. Jared Wicks, *Cajetan Responds: A Reader in Reformation Controversy* (Washington, DC: Catholic University of America Press, 1978), 5–11.

57. See Thomas Cajetan, *Commentaria in libros Aristotelis de anima* (Venice: Arrivabene, 1514), 14rb (lib. 2, c. 1). Cajetan’s commentary on the *Summa* is available in the *Editio Leonina*, see ST (vol. 11), 512 (ad IIIam, q. 54, art. 2): “Haec responsio est apud me ambigua: quia non video necessitatem ponendi sanguinem et alios humores esse partes in actu animalis. Compositio siquidem animalis ex humoribus sufficienter salvari videtur si sit compositio ex humoribus ut materia transeunte. . . . Quia tamen non oportet sapere nisi ad sobrietatem, indubie credendum est, sanctae matris Ecclesiae doctrinam sequendo, sanguinem vere esse in Christi corpore post resurrectionem, quamvis ratio naturalis de hoc non appareat certa.” For a short discussion of the passage, see Marcel Nieden, *Organum deitatis: Die Christologie des Thomas de Vio Cajetan*, *Studies in Medieval and Reformation Thought* 62 (Leiden: Brill, 1997), 218–19.

58. For a general account of blood in Aristotle’s biology, see Alberto Jori, “Aristotele sul ruolo del sangue nei processi della vita,” *Medicina nei secoli. Arte e scienza, N. S.* 17, no. 3 (2005): 603–25. Cajetan relies on PA II, 3.

59. See ACDF S.O. *Censura librorum* I, fol. 447r, written by Stephan de Ast (OP). For a transcription, see Claus Arnold, *Die römische Zensur der Werke Cajetans und Contarinis (1558–1601): Grenzen der theologischen Konfessionalisierung, Römische Inquisition und Indexkongregation* 10 (Paderborn: Schöningh, 2008), 112. Other than Arnold (112n303) claims, Nieden (*Organum*, 218n148) is right that a part of the crucial paragraphs (see above, note 57) was not taken into the *Editio Piana*, see Thomas Cajetan and Thomas Aquinas, *Tertia Pars Summae Theologiae, Opera omnia* (Piana) 12 (Rome: Accoltus, 1570), 174r (q. 54, a. 2).

60. See John W. O'Malley, *The First Jesuits* (Cambridge: Harvard University Press, 1993), 146. Cajetan's account of the Trinity is rejected in MPSI* 557. See also below, note 75. For Cajetan's role in Jesuit commentaries on the *Summa*, see MPSI II, 778.

61. On Toletus, see L. Gómez Hellín, "Toledo: Lector de filosofía y teología en el Colegio Romano," *Archivo Teológico Granadino* 3 (1940): 1–18. Ricardo García Villoslada, *Storia del Collegio Romano dal suo inizio (1551) alla soppressione della Compagnia di Gesù (1773)*, *Analecta Gregoriana* 66 (Rome: Universitas Gregoriana, 1954), ad indicem. Mario Scaduto, *L'Opera di Francesco Borgia (1565–1572)*, *Storia della Compagnia di Gesù in Italia* 5 (Rome: Edizioni "La Civiltà Cattolica" 1992), ad indicem. Toletus lectured on *De anima* in 1560/61.

62. Ledesma had already died at the date of its publication. See Franciscus Toletus, *Commentaria una cum quaestionibus in tres libros Aristotelis de anima* (Venice: Iunta, 1575), 183v.

63. See Hieronymus Nadal, *Epistolae P. Hieronymi Nadal ab anno 1546 ad 1577*, vol. 2, *Monumenta historica Societatis Jesu* 15 (Madrid: A. Avrial, 1899), 442. Gómez Hellín, "Toledo," 18. The commentary on the *Summa* I refer to is published from manuscripts in Franciscus Toletus, *In Summam theologiae S. Thomae Aquinatis enarratio: Ex autographo in bibliotheca Collegii Romani asservato*, ed. Josephus Paria, vol. 3 (Rome: Marietti, 1869). Toletus frequently quoted from Ledesma's manuscripts: see Toletus, *In Summam theologiae*, 380, 385, 387, 450, 453, 454. One known work by Ledesma concerning the *Summa* is a table of contents; see Antonio Possevino, *Bibliotheca selecta de ratione studiorum: Ad disciplinas, & ad salutem omnium gentium procurandam*, vol. 1 (Venice: Salicatus, 1603), 129. Anton Michelitsch, *Kommentatoren zur Summa theologiae des hl. Thomas von Aquin*, *Thomistenschriften* 3 (Graz, Vienna: Styria, 1924), § 445. Ledesma's (incomplete) commentary on the *Summa* is partly preserved; see Rome, APUG, Curia, F.C., Ms. n. 126. Toletus's commentary is partly preserved together with parts of Perera's commentary on the *Summa*; see Rome, APUG, Curia, F.C., Ms. n. 1024A–B.

64. Toletus, *De anima*, 6v–8r, titled "Propositiones aliquot Fide tenendae, quibus vera debet esse Philosophia consentanea."

65. See Toletus, *De anima*, 61r and 63v (lib. 2, c. 3, q. 7).

66. See Toletus, *De anima*, 70r (lib. 2, c. 4, q. 9). For an explicit comparison of the Thomistic and Scotistic view, see Bernhard Sannig, *In libros de anima*, *Schola philosophica Scotistarum, seu cursus philosophicus completus* 3 (Prague: Hampel, 1685), 32 (disp. 2, q. 3).

67. Toletus, *De anima*, 52v (lib. 2, c. 2, q. 4).

68. See Toletus, *De anima*, 52v–53r. For an analysis, see Dennis Des Chene, *Life's Form: Late Aristotelian Conceptions of the Soul* (Ithaca: Cornell University Press, 2000), 191–98. For an outline with regard to Aristotle, see Jennifer Whiting, "Living Bodies," in Martha Nussbaum and Amélie Rorty (eds.), *Essays on Aristotle's De Anima* (Oxford: Oxford University Press, 1995), 75–91.

69. Toletus, *De anima*, 53v.

70. HA III, 19 (521a6–8). See below, note 83.

71. See Toletus, *De anima*, 53v. With regard to the interpretation of the passage in Toletus, I disagree with Des Chene, *Life's Form*, 197n13.

72. See Toletus, *De anima*, 53v.

73. See Toletus, *In Summam theologiae*, 140 (IIIa, q. 5, art. 1).

74. See Toletus, *In Summam theologiae*, 140.

75. See Toletus, *In Summam theologiae*, 141. Toletus criticizes Cajetan on several points; see Friedrich Stegmüller, "Tolet et Cajétan," *Revue Thomiste* 39 (1935): 358–70.

76. See Toletus, *In Summam theologiae*, 142. Surprisingly, Toletus considered fingernails to be united immediately.

77. See Domingo de Soto, *In quartum sententiarum*, vol. 2 (Salamanca: Terranova, 1562), 446a (dist. 44, q. 1, art. 2).

78. For an early Jesuit discussion of the physiology of baptism, see Gregorius de Valentia, *Completens materias tertiae partis ac supplementi D. Thomae*, *Commentarii theologici* 4 (Ingolstadt: Sartorius, 1597), 750 (disp. 4, q. 1, pu. 2).

79. See MPSI V, 61.

80. See ST Ia, q. 27, art. 2.

81. See DGC I, 4 (319b18). David Bostock, *Space, Time, Matter, and Form: Essays on Aristotle's Physics*, Oxford Aristotle Studies (Oxford: Oxford University Press, 2006), 23, points out that this passage does not even represent Aristotle's own account of the generation of blood.

82. See Collegium Conimbricense, *In duos libros De generatione et corruptione* (Coimbra: Anton a Mariz, 1597), 165–81 (lib. I, c. 4, q. 23–25), followed by further questions on animal generation in particular.

83. See Collegium Conimbricense, *De generatione*, 175. Already noted in Francisco Suárez, *Commentariorum ac disputationum in tertiam partem Diui Thomae*, vol. 1 (Alcalá: P. Madrigal, 1590), 287a (disp. 15, q. 5, art. 4, s. 6). See Aristotle, *Aristotelis de historia animalium, libri IX*. . . ., trans. Theodorus Gaza (Basel: Cratander, 1534), 44; and above, note 70. For a likely reason for Gaza's emendation, see the note in Aristotle, *Aristoteles Thierkunde*, ed. Hermann Aubert and Friedrich Wimmer (Leipzig: Wilhelm Engelmann, 1868), 357.

84. See Cornelius a Lapide, *Commentaria in Pentateuchum Mosis* (Antwerp: Nutius & Meursius, 1616), 703–4 (Lev. 17, 11, and 14).

85. See Collegium Conimbricense, *De generatione*, 168.

86. See Collegium Conimbricense, *De generatione*, 166.

87. See Antonius Rubio, *Commentarii in libros Aristotelis Stagiritae philosophorum principis De anima: Una cum dubiis & quaestionibus hac tempestate in scholis agitari solitis* (Cologne: J. Crithius, 1613), 207–21 (lib. 2, c. 3, q. 8–9). Girolamo Dandino, *De corpore animato lib. VII. Luculentus in Aristotelis tres de anima libros commentarius peripateticus* (Paris: Chappeletus, 1610), 122–25, 267–69, 310–12 (lib. 2 [De humoribus], c. 14; lib. 4 [De partibus heterogeneis], c. 31 and c. 54).

88. On this literary genre with regard to *De anima*, see Bernhard Jansen, “Die scholastische Psychologie vom 16. bis 18. Jahrhundert,” *Scholastik* 26 (1951): 342–63. Some examples in note 91 below.

89. Reproduced in Sibylle Appuhn-Radtke, *Visuelle Medien im Dienst der Gesellschaft Jesu: Johann Christoph Storer (1620–1671) als Maler der katholischen Reform*, *Jesuitica* 3 (Regensburg: Schnell & Steiner, 2000), 316.

90. See also Ulrich Gottfried Leinsle, *Dilinganae Disputationes: Der Lehrinhalt der gedruckten Disputationen an der Philosophischen Fakultät der Universität Dillingen 1555–1648*, *Jesuitica* 11 (Regensburg: Schnell & Steiner, 2006), 367–68.

91. Most authors give a clear verdict on these two questions; however, it often remains a matter of what is “more probable” and, of course, depends on the author's particular notion of “being alive.” These are inevitable problems in all statistical accounts *ex post*. For biographical and bibliographical information, see Carlos Sommervogel, Pierre Bliard, and Augustin de Backer, *Bibliothèque de la Compagnie de Jésus: Nouvelle édition*, 11 vols. (Brussels–Paris: Oscar Schepens and Alphonse Picard, 1890–1932), ad indicem. I rely on the following references: Suárez, *In tertiam partem*, 289–91 (disp. 15, q. 5, art. 4, s. 6–7); Suárez, *Commentaria una cum quaestionibus in libros Aristotelis De anima*, ed. Salvador Castellote, trans. Carlos Baciero and Luis Baciero, vol. 2, *Ediciones críticas de obras filosóficas* 1 (Madrid: Sociedad de Estudios y Publicaciones, 1981), 170, 254 (disp. 4, q. 2, s. 7; q. 8, s. 6). Collegium Conimbricense, *De generatione*, 169, 172 (lib. I, c. 4, q. 23, art. 2; q. 24, art. 3). Gregorius de Valentia, *Tertiae partis*, 4:239, 744 (disp. I, q. 5, pu. 2;

disp. 4, q. 1, pu. 2). Alfonsus Salmeron, *De resurrectione, et ascensione Domini*, *Commentarii in evangelicam historiam et in Acta Apostolorum* 11 (Cologne: Hierat, 1604), 34 (tr. 5). Dandino, *De corpore animato*, 122 (lib. 2, c. 14). Rubio, *De anima*, 212, 219 (lib. 2, c. 3, q. 8; q. 9). Cornelius a Lapide, *In Pentateuchum*, 703–4 (Lev. 17, 11). Gabriel Vázquez, *Commentaria ac disputationes in tertiam partem Sancti Thomae*, vol. 1 (Antwerp: Belleros, 1621), 314 (disp. 36, c. 7). Pedro Hurtado de Mendoza, *Universa philosophia* (Lyon: L. Prost, 1624), 480–81 (DA, disp. 1, s. 6). Rodrigo de Arriaga, *Cursus philosophicus* (Antwerp: Moretus, 1632), 627–28 (DA, disp. 1, s. 9, subsect. 2–3). Rodrigo de Arriaga, *Disputationes theologicae in tertiam partem D. Thomae*, *Universi cursus theologicus* 7 (Antwerp: Moretus, 1643), 388 (disp. 35, s. 1). Francisco de Oviedo, *Complectens libros De anima et Metaphysicam*, *Cursus philosophicus* 2 (Lyon: Philippi Borde, Laurentii Arnaud, Petri Borde & Guilielmi Barbier, 1663), 12–13 (DA, contr.1, pu. 4). Tomas Compton Carleton, *Cursus philosophicus universus: Additis indicibus necessariis* (Antwerp: Henricus & Cornelius Verdussen, 1697), 470–71 (DA, disp. 2, s. 3; disp. 3, s. 1). Richard Lynch, *Physica sive scientia de corpore naturali*, *Universa philosophia scholastica* 2 (Lyon: P. Borde, L. Arnaud & C. Rigaud, 1654), 358; 361 (lib. 10, tr. 2, c. 1).

92. Arraiga's opinion, e.g., is by no means an "exception," as Des Chene, *Life's Form*, 197, claims.

93. The problem of hair is more complicated, but it also appears in theological questions. I must omit this here and refer the reader to note 78.

94. The importance of the *Tridentinum* is documented by the fact that freshly inaugurated Jesuit theologians received three books: the *Summa* of Aquinas, the Bible, and the Acts of the Tridentine Council. See MPSI V, 377, for the *Ratio studiorum* of 1599.

95. The same holds true for the lower faculties of the soul. See above, note 6.

96. See Compton Carleton, *Cursus*, 469 (DA, disp. 2, s. 3).

97. See Lynch, *Physica*, 360 (lib. 10, tr. 2, c. 1).

98. See Francesco Collio, *De sanguine Christi Libri quinque* (Milan: Collegium Ambrosianum, 1617), especially the first book. On *Physica sacra*, see Bernd Roling, *Physica sacra: Wunder, Naturwissenschaft und historischer Schriftsinn zwischen Mittelalter und Früher Neuzeit*, *Mittellateinische Studien und Texte* 45 (Leiden: Brill, 2013).

99. See Franciscus Vallesius, *De iis, quae scripta sunt physice in libris sacris, sive de sacra philosophia, liber singularis* (Turin: N. Bevilacqua, 1587), 94–99 (c. 5). Vicentius Moles, *Philosophia naturalis sacrosancti corporis Iesu Christi* (Antwerps: H. Aertssens, 1639), 154 (c. 9, dub. 4).

100. Eckhard Kessler, "The Intellective Soul," in *The Cambridge History of Renaissance Philosophy*, ed. Charles Schmitt, Quentin Skinner, and Jill Kraye (Cambridge: Cambridge University Press, 1988), 485–534, here 507.

101. See Joannes Tardius, *Disquisitio physiologica de pilis* (Tours: G. Linocerus, 1609), 161–67. I could not find any biographical information on the author, except that he was enrolled at Montpellier in 1595; see Marcel Gouron, ed., *Matricule de l'Université de médecine de Montpellier, 1503–1599*, *Travaux d'humanisme et Renaissance* 25 (Geneva: Droz, 1957), 203. For the earliest literature on hair, see Burkard Eble, *Die Lehre von den Haaren in der gesamten organischen Natur*, vol. 2 (Vienna: Heubner, 1831), 416–21.

102. Roger K. French, *William Harvey's Natural Philosophy* (Cambridge: Cambridge University Press, 1994), 298.

103. See William Harvey, *Exercitationes de generatione animalium quibus accedunt quædam de partu, de membranis ac humoribus uteri & de conceptione* (London: Du-Gardianis, 1651), 151 and 154 (exerc. 51 and 70).

104. Thomas Wright, *William Harvey: A Life in Circulation* (Oxford: Oxford University Press, 2013), 9.

105. See as a starting point Ziller C. Camenietzki, “Jesuits and Alchemy in the Early Seventeenth Century: Father Johannes Roberti and the Weapon-Slave Controversy,” *Ambix* 48, no. 2 (2001): 83–101. Mark A. Waddell, “The Perversion of Nature: Johannes Baptista Van Helmont, the Society of Jesus, and the Magnetic Cure of Wounds,” *Canadian Journal of History* 38, no. 2 (2003): 179–98. The controversy is a very complicated affair, involving many more religious, political, and philosophical aspects than those mentioned here. For brevity’s sake I shall focus on a superficial analysis of the question of blood in this debate, in order to illustrate how scholastic theological discussion influenced medical censorship.

106. On Van Helmont’s complex notion of blood and its imagination, see Walter Pagel, *Joan Baptista van Helmont: Reformer of Science and Medicine*, Cambridge Monographs on the History of Medicine (Cambridge: Cambridge University Press, 1982), 120. Georgiana D. Hedesan, “Paracelsian Medicine and Theory of Generation in ‘Exterior Homo,’ a Manuscript Probably Authored by Jan Baptist Van Helmont (1579–1644),” *Medical History* 58, no. 3 (2014): 375–96, 392–93. See Jan Baptista van Helmont, *Ortus medicinae, id est, Initia physicae inaudita: progressus medicinae novus, in morborum ultionem ad vitam longam* (Amsterdam: L. Elsevier, 1652), 617, § 163: “Igitur in sanguine sua est phantasia, quae quia potentius ibidem viget, quam in rebus caeteris, ideo scriptura alto elogio [see *ibid.* 613, § 130], sanguinem adhuc coctum et edi promptum animatum vocat.”

107. When Van Helmont’s prosecutors asked him where he got his biblical references from, he replied “Genesis” (i.e., 9:4) and “Deuteronomium” (i.e., 12:16). See Corneille Broeckx, “Interrogatoires du Docteur J. B. van Helmont sur le magnétisme animal, publiés pour la première fois,” *Annales de l’Académie d’archéologie de Belgique* 13 (1856): 306–50, 318 (ad §13). In Van Helmont’s reading, the Bible also attributes life to blood after it has left the body. On the biblical prohibition of drinking animal blood or consuming bloody meat, see David Biale, *Blood and Belief: The Circulation of a Symbol between Jews and Christians* (Berkeley: University of California Press, 2007), 17–28.

108. On this process, see Robert Halleux, “Le procès d’inquisition du chimiste Jean-Baptiste van Helmont (1578–1644): Les enjeux et les arguments,” *Comptes-rendus des séances de l’Académie des Inscriptions et Belles-Lettres* 148, no. 2 (2004): 1059–86.

109. See Corneille Broeckx, “Notice sur le manuscrit causa J. B. Helmontii, déposé aux Archives Archiépiscopales de Malines,” *Annales de l’Académie d’archéologie de Belgique* 9 (1852): 277–327, here 316–17 (ad §13–14). Although the affair originated from a conflict with the Jesuit Roberti, Jesuit theologians admittedly did not dominate the investigation itself. See above, note 10.

110. Van Helmont should renounce his views as follows: “Damno ut rusticos priscorum haereticorum errores, omnem creaturam vivere et sentire in sanguine extravenato esse phantasiam.” See Broeckx, “Notice sur le manuscrit causa J. B. Helmontii,” 306. In the *censura* of 1630 it is said: “Posterior de inexistencia animae in sanguine extravenato et per ignem cocto et per fotum plane putrido est in philosophia haeresis et delirium contra experientiam commentum.” See *ibid.*, 299 (ad §13). And in 1634: “Nonne haec propositio haereseos damnata est ante 1200 annos a S. Hieronymo, lib. I. Comment, in Cap. 8. Matth. ubi ait: Error est Haereticorum, omnia putare animantia.” See *ibid.*, 316 (ad §9).

111. See Broeckx, “Interrogatoires,” 317 (ad § 11) and 318 (ad § 13).

112. See Broeckx, “Interrogatoires,” 325 (ad § 11 and § 14).

113. See Broeckx, “Interrogatoires,” 344.

114. See Broeckx, “Interrogatoires,” 319 (ad § 17) and 343. See Broeckx, “Notice,” 302 (ad § 22). It is beyond the scope of this epilogue to dwell on these implications in

more detail. It must be admitted, however, that Van Helmont also discussed Christ's blood in some of the condemned passages.

115. See Johannes Wiggers, *In tertiam partem Diui Thomae Aquinatis commentaria: A quaestione I usque ad quaestionem XXVI* (Leuven: Ioannes Oliverius & Cornelius Coenestenius, 1631), 56, § 12 (q. 5, art. 2, dub. 1). Wiggers's own opinion remains ambiguous, but surely only with regard to blood within the body. He concludes that Christ's blood was united with the Logos and hence is an integral part of the human body, even assuming that it was not informed by the soul.

116. See Wiggers, *In tertiam partem*, 56.

117. Pagel, *Van Helmont*, 120, fails to acknowledge this "turn."

118. See *Blas humanum*, *Potestas medicaminum*, and *De lithiasi*, in Van Helmont, *Ortus*, 146, § 22; 385, § 57. Jan Baptista van Helmont, *Opuscula Medica Inaudita: I. De Lithiasi. II. De Febribus. III. De Humoribus Galeni. IV. De Peste* (Cologne: Kalcoven, 1644), 209, § 93. See also *De febribus* (van Helmont, *Opuscula Medica Inaudita*, 18, § 22).

119. Van Helmont, *Opuscula Medica Inaudita*, 209, § 93 (*De lithiasi*): "Denique nec cruor, nec ipse sanguis arteriarum, sensu, tactuque animali pollut, licet synpatheticæ sentiant, etiam extravasati. . . . Quæsitum ergo hactenus a Theologis, an cruor ab anima informetur? Putem ego, sub correctione melioris iudicii, nil informari ab anima animantis, quod non participet de anima sensitiva. . . . Ut ergo aliquid sit ab anima informatum, necesse est, ut vivat, et sentiat, tanquam vitæ ipsius subjectum." The last sentence, as I understand it, makes clear that, for Van Helmont, in order to conceive of any animal part as "being informed by the soul," that part must live and sense in the same way as the animal of which it is a part lives and senses. It seems that Van Helmont's distinction between "cruor" and "sanguis" not only represents the distinction between "venous" and "arterial blood," but also between "nutritive" and "vitalizing blood"; see Van Helmont, *Ortus*, 146, § 21. Guido Giglioni, *Immaginazione e malattia: Saggio su Jan Baptiste van Helmont* (Milan: Angeli, 2000), 50. This distinction, however, closely resembles the distinction Cajetan had read into Aristotle's PA; see above notes 57 and 58.

120. On the "sympathy of blood," see Brooke Holmes, "Sympathy between Hippocrates and Galen: The Case of Galen's Commentary on Epidemics II," in *Epidemics in Context: Greek Commentaries on Hippocrates in the Arabic Tradition*, Scientia Graeco-Arabica 9, ed. Peter E Pormann (Berlin–Boston: De Gruyter, 2012), 49–70.

121. See Robert Halleux, "Le procès d'inquisition du chimiste Jean-Baptiste van Helmont."

CHAPTER 4. RENAISSANCE PSYCHOLOGY

1. See, for instance, the case of Renaissance disputes on the disciplinary status of psychology. About this, see: Paul J. J. M. Bakker, "Natural Philosophy, Metaphysics or Something in Between? Agostino Nifo, Pietro Pomponazzi, and Marcantonio Genua on the Nature and Place of the Science of the Soul," in *Mind, Cognition and Representation. The Tradition of Commentaries on Aristotle's De anima*, ed. Paul J. J. M. Bakker and Hans J. M. M. Thijssen (Aldershot, 2007), 151–77.

2. For an analysis of new questions and elements of novelties in Renaissance psychology see: Fernando Vidal, *Les sciences de l'âme: XVIe–XVIIIe siècle* (Paris, 2006); Marco Lamanna, "On the Early History of the Psychology," *Revista Filosófica de Coimbra* 38 (2010): 291–314; Davide Cellamare, "Anatomy and the Body in Renaissance Protestant Psychology," *Early Science and Medicine* 19.4 (2014): 341–64; Davide Cellamare, "Psychology in the Age of Confessionalisation: A Case Study on the Interaction between Psychology and Theology c. 1517–c. 1640," Ph.D. diss., Radboud University, Nijmegen, 2015.

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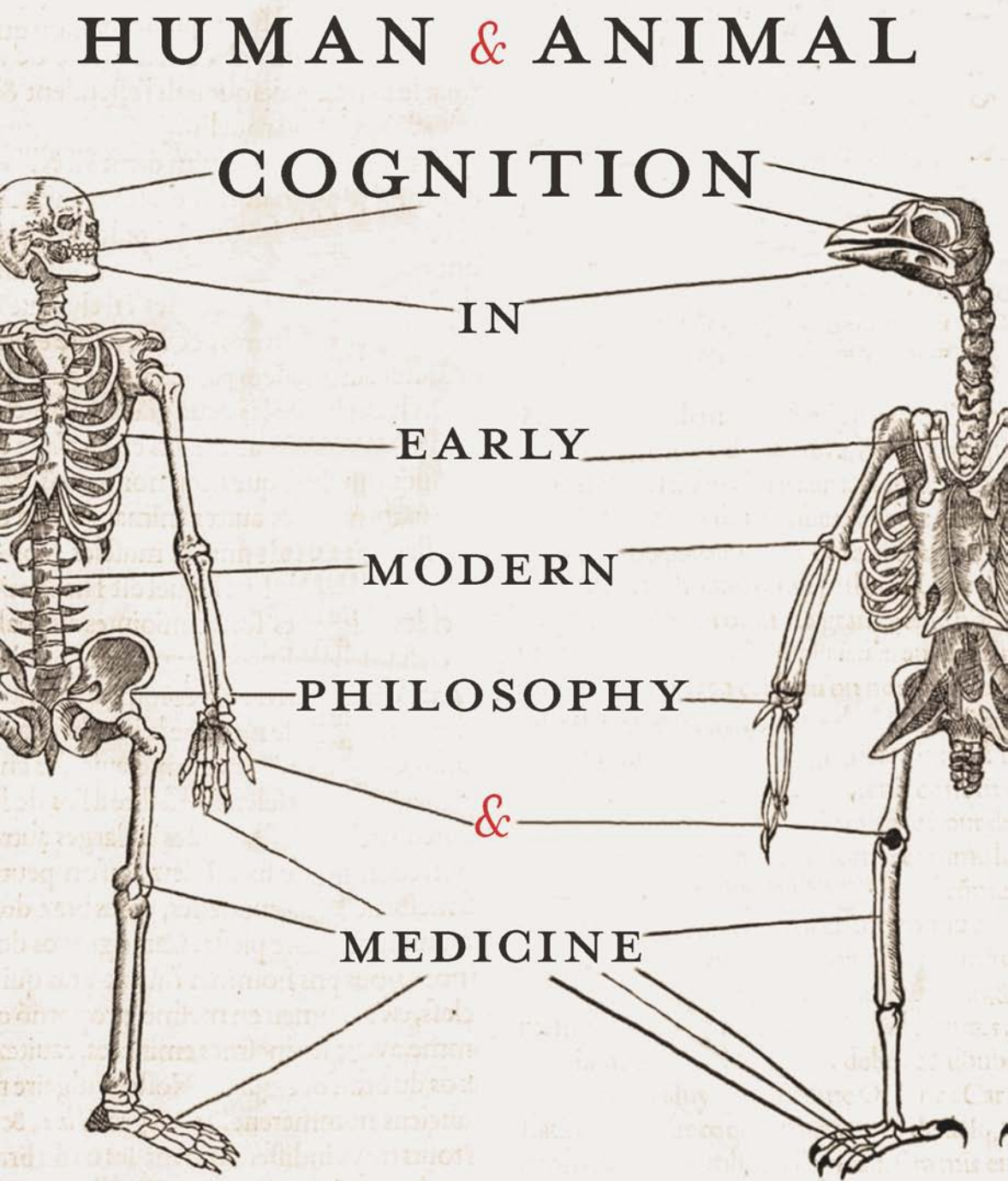
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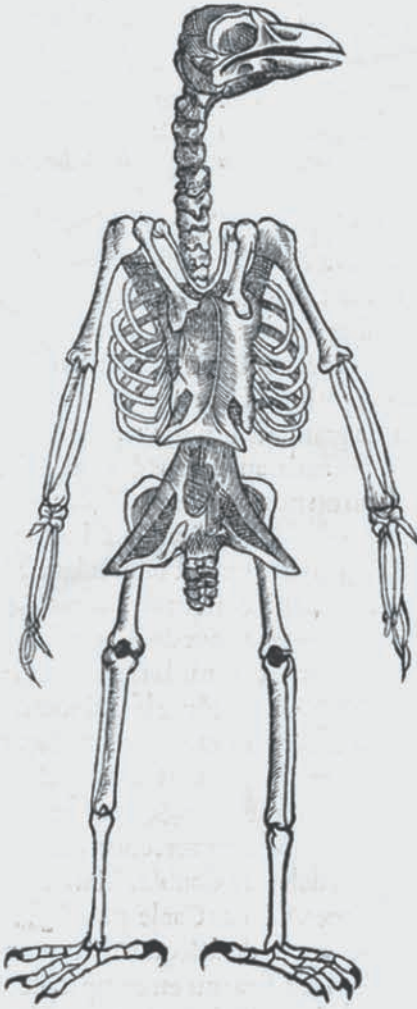
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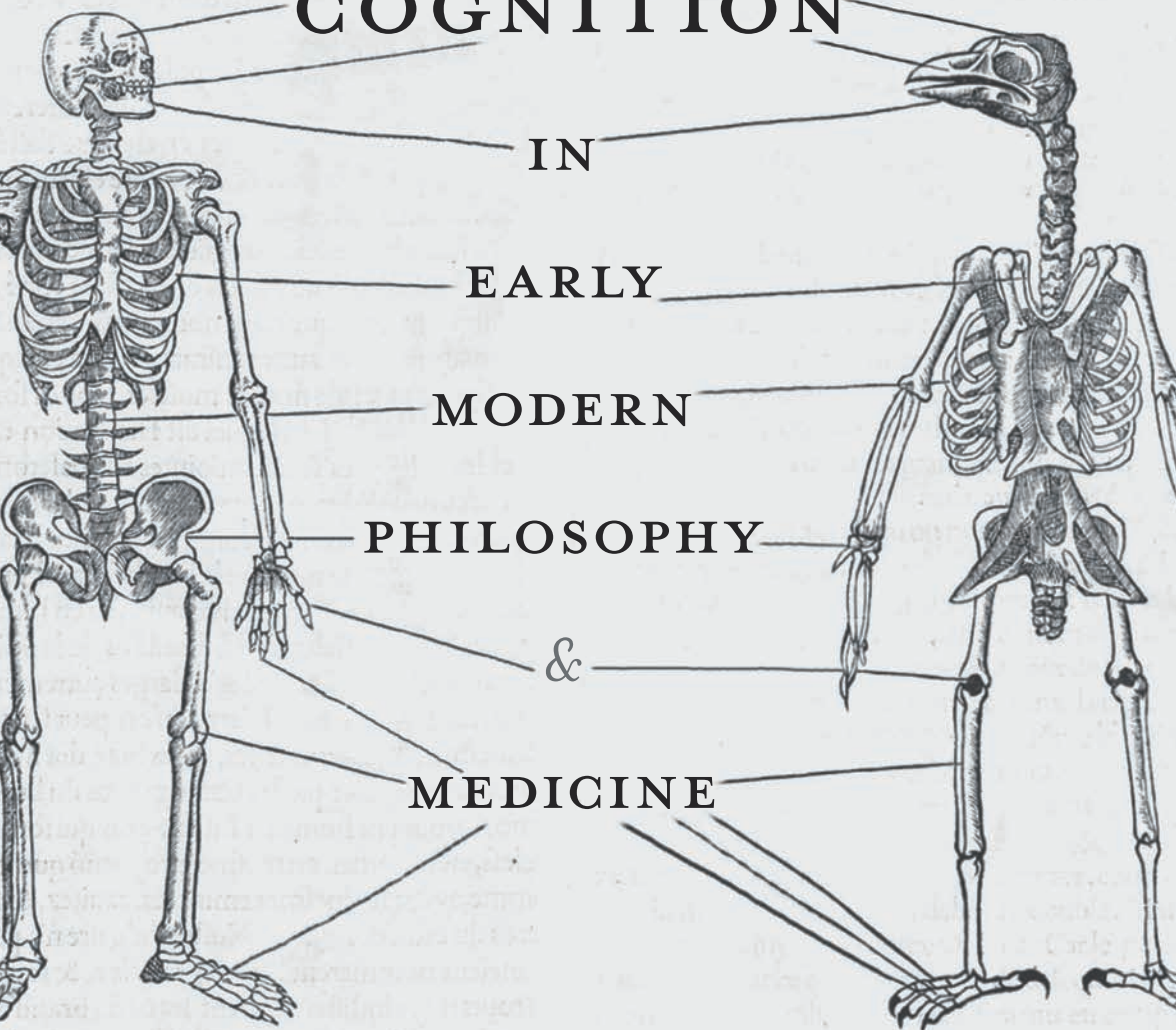
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