

Litterati pituitae et atrae bili obnoxii sunt.

Cap. III.

Non solum vero membra illa viresque et spiritus homines litterarum cupidi curare diligentissime debent, verum etiam pituitam semper et atram bilem, non aliter quam navigantes Scyllam atque Charybdim, cautissime devitare iubentur. Quantum enim relicto corpore otiosi sunt, tantum cerebro ac mente negotiosi. Inde pituitam, quod Graeci phlegma, hinc atram bilem, quam iidem melancholiam vocant, gignere compelluntur. Illa quidem ingenium saepe obtundit et suffocat, haec vero, si nimium abundaverit flagrantique, assidua cura crebrisque deliramentis vexat animum iudiciumque perturbat, ut non immerito dici possit, litteratos fore et praecipue sanos, nisi cum pituita molesta est, et lactissimos sapientissimosque omnium, nisi bilis atrae vitio vel maerere saepe vel interdum desipere compellantur.

Quot sint causae quibus litterati melancholici sint vel fiant.

Cap. IV.

Ut autem litterati sint melancholici, tres potissimum causarum species faciunt: prima coelestis, secunda naturalis, tertia est humana. Coelestis quoniam Mercurius, qui ut doctrinas investigemus invitatur, et Saturnus qui efficit ut in doctrinis investigandis perseveremus inventasque servemus, frigidum quodammodo siccique ab astronomis esse dicuntur — vel si forte Mercurius non sit frigidus, fit tamen saepe Solis propinquitate siccissimus — qualis est natura apud medicos melancholica; eandemque naturam Mercurius ipse Saturnusque litterarum studiosis eorum sectoribus impartunt ab initio ac servant augentque quotidie.

Naturalis autem causa esse videtur, quod ad scientias praesertim difficiles consequendas necesse est animum ab externis ad interna tanquam a circumferentia quadam ad centrum sese recipere, atque dum speculatur in ipso (ut ita dixerim) hominis centro stabilissime permanere. Ad centrum vero a circumferentia se colligere figique in centro maxime terrae ipsius est proprium, cui quidem atra bilis persimilis est. Igitur atra bilis animum, ut se et colli-

Quod litterati ... obnoxii sint y; Litteratos ... esse z 4 evitare z enim] vero D 6 idem G
9 et om. z 10 cum om. z esset z 11 incore z compelluntur D; cogerecentur z
Cap. III. z 5-6 vel si—siccissimus desunt in e 8 et Saturnus z

Learned People Are Subject to Phlegm and Black Bile.

Chap. III

Not only should learned people take very diligent care of those members and of the powers and of the spirits, but also they are told always scrupulously to avoid phlegm and black bile, even as sailors do Scylla and Charybdis. For just as they are inactive in the rest of the body, so they are busy in the brain and the mind. From the former circumstance they are compelled to secrete pituita, which the Greeks call phlegm, and from the latter, black bile, which they call melancholy. Phlegm dulls and suffocates the intelligence, while melancholy, if it is too abundant or vehement, vexes the mind with continual care and frequent absurdities and unsettles the judgment. Hence it can justly be said that learned people would even be unusually healthy, were they not burdened by phlegm, and the happiest and wisest of mortals, were they not driven by the bad effects of black bile to depression and even sometimes to folly.¹

How Many Things Cause Learned People Either To Be Melancholy or To Eventually Become So.

Chap. IV

In the main, three kinds of causes make learned people melancholics. The first is celestial, the second natural, and the third human. The celestial: because both Mercury, who invites us to investigate doctrines, and Saturn, who makes us persevere in investigating doctrines and retain them when discovered, are said by astronomers to be somewhat cold and dry (or if it should happen to be true that Mercury is not cold, he is nonetheless often very dry by virtue of his nearness to the Sun), just like the melancholic nature, according to physicians. And this same nature Mercury and Saturn impart from birth to their followers, learned people, and preserve and augment it day by day.¹

The natural cause seems to be that for the pursuit of the sciences, especially the difficult ones, the soul must draw in upon itself from external things to internal as from the circumference to the center, and while it speculates, it must stay immovably at the very center (as I might say) of man. Now to collect oneself from the circumference to the center, and to be fixed in the center, is above all the property of the Earth itself, to which black bile is analogous.

gat in unum et sistat in uno contempleturque, assidue provocat. Atque ipsa mundi centro similis ad centrum rerum singularum cogit investigandum, evenitque ad altissima quaeque comprehendenda, quandoquidem cum Saturno maxime congruit altissimo planetarum. Contemplatio quoque ipsa vicissim assidua quadam collectione et quasi compressione naturam atrae bili persimilem contrahit. 20

Humana vero, id est ex nobis, causa est: quoniam frequens agitatio mentis cerebrum vehementer exsiccat, igitur humore magna ex parte consumpto, quod caloris naturalis pabulum est, calor quoque plurimum solet extingui, unde natura cerebri sicca frigidaque evadit, quae quidem terrestris et melancholica qualitas nominatur. Praeterea ob frequentissimum inquisitionis motum spiritus quoque moti continue resolvuntur. Resolutos autem spiritus ex subtiliori sanguine instaurari necessarium est. Quapropter subtilioribus clarioribusque sanguinis partibus saepe consumptis, reliquus sanguis necessario densus redditur et siccus et ater. Accedit ad haec quod natura, in contemplatione cerebro prorsus cordique intenta, stomachum heparque destituit. 30

Quare alimentis praesertim vel uberioribus vel durioribus male concoctis, sanguis inde frigidus crassusque et niger efficitur. Postremo nimio membrorum otio neque superflua excernuntur, neque crassi fuscique vapores exhalant. Haec omnia melancholicum spiritum maestumque et pavidum animum efficere solent, siquidem interiores tenebrae multo magis quam exteriores maerore occupant animum atque terrent. Maxime vero litteratorum omnium hi atra bile premuntur, qui sedulo philosophiae studio dediti mentem a corpore rebusque corporeis sevocant, incorporeisque coniungunt, tum quia difficilius admodum opus maiori quoque indiget mentis intentione, tum quia quatenus mentem incorporeae veritati coniungunt, eatenus a corpore disiungere compelluntur. Hinc corpus eorum nonnunquam quasi semianimum reditur atque melancholicum. Quod quidem Plato noster in *Timaeo* significat, dicens animum divina saepissime et intentissime contemplantem alimentis eiusmodi adeo adolescere potentemque evadere, ut corpus suum supra quam natura corporis patiatur exsuperet, ipsumque vehementioribus agitationibus suis aliquando vel effugiat quodammodo, vel nonnunquam quasi dissolvere videatur. 45

Therefore black bile continually incites the soul both to collect itself together into one and to dwell on itself and to contemplate itself. And being analogous to the world's center, it forces the investigation to the center of individual subjects, and it carries one to the contemplation of whatever is highest, since, indeed, it is most congruent with Saturn, the highest of planets. Contemplation itself, in its turn, by a continual recollection and compression, as it were, brings on a nature similar to black bile.

The human cause, that which comes from ourselves, is as follows: Because frequent agitation of the mind greatly dries up the brain, therefore, when the moisture has been mostly consumed—moisture being the support of the natural heat—the heat also is usually extinguished; and from this chain of events, the nature of the brain becomes dry and cold, which is known as the earthy and melancholic quality. Moreover, on account of the repeated movements of inquiry, the spirits continually move and get dispersed. But when the spirits are dispersed, they have to be restored out of the more subtle blood. And hence, when the more subtle and clear parts of the blood frequently get used up, the rest of the blood is necessarily rendered dense, dry and black. On top of this, nature in contemplation is directed wholly to the brain and heart and deserts the stomach and liver. For this reason foods, especially the more fatty or harsh foods, are poorly digested, and as a result the blood is rendered cold, thick, and black. Finally, with too little physical exercise, superfluities are not carried off and the thick, dense, clinging, dusky vapors do not exhale. All these things characteristically make the spirit melancholy and the soul sad and fearful—since, indeed, interior darkness much more than exterior overcomes the soul with sadness and terrifies it. But of all learned people, those especially are oppressed by black bile, who, being sedulously devoted to the study of philosophy, recall their mind from the body and corporeal things and apply it to incorporeal things. The cause is, first, that the more difficult the work, the greater concentration of mind it requires; and second, that the more they apply their mind to incorporeal truth, the more they are compelled to disjoin it from the body. Hence their body is often rendered as if it were half-alive and often melancholic. My author Plato signified this in the *Timaeus*; he said that the soul contemplating divine things assiduously and intently grows up so much on food of this kind and becomes so powerful, that it overreaches its body above what the corporeal nature can endure;² and sometimes in its too vehement agitation, it either in a way flies out of it or sometimes seems as if to disintegrate it.³

22 id est] ea z agitato] Sagittario z 28 subtiliore y; subtilione z subtilibus z 33 Postremo] Demum z 34 crassi] glutinosi tenaces z 37 terent z 42 non unquam L 47 non unquam L

Cur melancholici ingeniosi sint et quales melancholici

sint eiusmodi, quales contra.

Cap. V.

Nactenus quam ob causam Musarum sacerdotes melancholici vel sint ab initio vel studio fiant, rationibus primo coelestibus, secundo naturalibus, tertio humanis ostendisse sufficiat. Quod quidem confirmat in libro *Problematum* Aristoteles, omnes enim inquit viros in quavis facultate praestantes melancholicos extitisse. Qua in re Platonium illud quod in libro *De scientia* scribitur confirmavit, ingeniosos videlicet plurimum concitatos furiososque esse solere. Democritus quoque nullos inquit viros ingenio magnos, praeter illos qui furore quodam perciti sunt, esse unquam posse. Quod quidem Plato noster in *Phaedro* probare videtur, dicens poeticas fores frustra absque furore pulsari. Etsi divinum furorem hic forte intelligi vult, tamen neque furor eiusmodi apud physicos aliis unquam ullis praeterquam melancholicis incitatur.

Deinceps vero assignandae a nobis rationes sunt, quare Democritus et Plato et Aristoteles asserant melancholicos nonnullos interdum adeo ingenio cunctos excellere, ut non humani sed divini potius videantur. Asseverant id Democritus et Plato et Aristoteles absque dubio, rationem vero tantae rei haud satis explicare videntur. Audendum tamen monstrante Deo causas indagare. Melancholia, id est atra bilis, est duplex: altera quidem naturalis a medicis appellatur, altera vero adustione contingit. Naturalis illa nihil est aliud quam densior quaedam sicciorque pars sanguinis. Adusta vero in speciet quattuor distribuitur: aut enim naturalis melancholiae aut sanguinis purioris aut bilis aut salsae pituitae combustione concipitur. Quaecunque adustione nascitur iudicio et sapientiae nocet. Nempe dum humor ille accenditur atque ardet, concitatos furentesque facere solet, quam Graeci maniam nuncupant, nos vero furorem. At quando iam extinguitur, subtilioribus clarioribusque partibus resolutis solaque restante fuligine tetra, stolidos reddit et stupidos. Quem habitum melancholiam proprie et amentiam vecordiamque appellant.

Sola igitur atra bilis illa quam diximus naturalem ad iudicium nobis sapientiamque conducit, neque tamen semper. Sane si sola sit, atra nimium densaque mole obfuscat spiritus, terret animum, obtundit ingenium. Si vero pituitae simplici misceatur, cum frigidus obstitit circum praecordia sanguis,

Cur melancholici ... quales melancholici ... quales contra] melancholia ... qui horum ... aut secus z
3 sufficiat] sit satis z 6 post videlicet add. ut e 9 fore x frustra om. D 13-17 Deinceps vero —
indagare desunt in B 24 nos] nostri B

Why Melancholics Are Intelligent, and Which Melancholics

Are So and Which Are Not.

Chap. V

So far, let it suffice that we have shown why the priests of the Muses either are from the beginning or are made by study into melancholics, owing to causes first celestial, second natural, and third human. This Aristotle confirms in his book of *Problems*, saying that all those who are renowned in whatever faculty you please have been melancholics.¹ In this he has confirmed that Platonic notion expressed in the book *De scientia*, that most intelligent people are prone to excitability and madness.² Democritus too says no one can ever be intellectually outstanding except those who are deeply excited by some sort of madness.³ My author Plato in the *Phaedrus* seems to approve this, saying that without madness one knocks at the doors of poetry in vain.⁴ Even if he perhaps intends divine madness to be understood here,⁵ nevertheless, according to the physicians, madness of this kind is never incited in anyone else but melancholics.⁶

After this, reasons must be assigned why Democritus, Plato and Aristotle assert that not a few melancholics sometimes so excel everyone in intelligence that they seem to be not human but rather divine. Democritus, Plato, and Aristotle affirm it unhesitatingly, but they do not seem to give a sufficient explanation for so important a fact.⁷ One must have the courage, however, God showing the way, to search out causes.⁸ Melancholy or black bile is of two kinds: the one is called natural by doctors, the other comes about by adustion. The natural is nothing but a more dense and dry part of the blood. The adust, however, is divided into four kinds: it originates from the combustion either of natural melancholy, or of the purer blood [as opposed to "the more dense . . . part of the blood"], or of bile [meaning yellow or red bile, better known as choler], or of salty phlegm.⁹ Any melancholy which arises from adustion, harms the wisdom and the judgment,¹⁰ because when that humor is kindled and burns, it characteristically makes people excited and frenzied, which melancholy the Greeks call mania and we madness. But as soon as it is extinguished, when the more subtle and clearer parts have been dispersed and only a foul black soot remains, it makes people stolid and stupid; they properly call this disposition melancholy and also being out of one's wits and senselessness.¹¹

Only that black bile which we call natural, therefore, leads us to judgment and wisdom — but not always. If it is alone, it beclouds the spirit with a mass that is black and dense, terrifies the soul, and dulls the intelligence. Moreover if it is mixed simply with phlegm, when "cold blood" stands in the way "around the heart" [*Georg.* 2.484; *Aen.* 10.452] it brings on sluggishness and torpor by

crassa quam frigiditate segnitiam adducit atque torporem; atque ut densissimaque materiae natura est, quando eiusmodi melancholia frigescit, ad summum frigiditatis intenditur. Quo in statu nihil speratur, timentur omnia, taedet coeli convexa tueri. Si bilis atra vel simplex vel mixta putrescit, quartanam gignit febrem, lienis tumores et multa generis eiusdem. Ubi nimis exuberat, sive sola sit sive coniuncta pituitae, spiritus crassiores facit atque frigidiore, continuo animum afficit taedio, mentis aciem hebetat, neque salit Arcadico circum praecordia sanguis. Oportet autem atram bilem neque tam paucam esse, ut sanguis, bilis, spiritus quasi freno careant, unde instabile ingenium labilemque memoriam esse contingat; neque tam multam, ut nimio pondere praegravati dormitare atque egere calcaribus videamur. Proinde necessarium est omnino eam esse, quoad eius natura patitur, subtilissimam. Si enim tenuata pro natura sua maxime fuerit, poterit forsitan absque noxa etiam esse multa, atque etiam tanta ut aequare bilem saltem pondere videatur.

Abundet igitur atra bilis, sed tenuissima. Non careat humore subtilioris pituitae circumfuso, ne arescat prorsus durissimaque evadat. Non tamen misceatur omnino pituitae, praesertim vel frigidiori vel multae, ne frigescat. Sed bili sanguinique adeo misceatur, ut corpus unum conficiatur ex tribus, dupla sanguinis ad reliqua duo proportione compositum; ubi octo sanguinis partes, duae bilis, duae iterum atrae bilis portiones existant. Accendatur aliquantum a duobus illis atra bilis, accensaque fulgeat, non uratur, ne quemadmodum solet materia durior, dum fervet nimium, vehementius urat et concitet; dum vero refrigescit, similiter frigescat ad summum. Bilis enim atra ferri instar, quando multum ad frigus intenditur, friget ad summum; quando contra ad calidum valde declinat, calet ad summum. Neque mirum videri debet atram bilem accendi posse facile atque accensam vehementius urere, siquidem videmus calcem illi similem aqua perfusam fervere statim atque exurere. Tantam ad utrunque extremum melancholia vim habet unitate quadam stabilis fixaeque naturae. Quae quidem extremitas ceteris humoribus non contingit. Summe quidem calens summam praestat audaciam, immo ferocitatem; extremo vero frigus timorem ignaviamque extremam. Mediis vero inter frigus caloremque gradibus affecta varie, affectus producit varios, non aliter quam merum praecipue potens bibentibus ad ebrietatem vel etiam paulo liberius affectum inferre varios solet.

Igitur opportune temperata sit atra bilis oportet. Quae cum ita moderata est, ut diximus, et bili sanguinique permixta, quia et natura sicca est et con-

its heavy frigidity; and as is the nature of any very dense material, when melancholy of this kind gets cold, it gets cold in the extreme. When we are in this state, we hope for nothing, we fear everything, and "it is weariness to look at the dome of the sky" [Aen. 4.451]. If black bile—either simple or mixed—putrefies, it produces quartan fever, swellings of the spleen, and many infirmities of the same kind. When it is too abundant, whether alone or joined with phlegm, it makes the spirits heavier and colder, afflicts the mind continually with weariness, dulls the sharpness of the intellect, and keeps the blood from leaping "around the Arcadian's heart" [Aen. 10.452]. But the black bile should not be so small in quantity, that blood, bile, and spirit, as it were, lack a rein, from which will arise an unstable wit and a short memory; it should not be so great in quantity that, burdened with too much weight, we seem to sleep and to need spurs. Therefore it must be every bit as subtle as its nature allows; for if it were rarefied very greatly, to the extent of its nature, perhaps there could even be much of it without harm, and even so much that it should seem to equal the [yellow] bile, at least in weight.

Therefore let black bile abound, but very rarefied; make sure it has the moisture of the more subtle phlegm surrounding it, so that it doesn't become hard and completely dried up. But let it not be mixed only with phlegm, especially the more frigid sort, or much of it, lest it get cold. But let it be so mixed with bile and with blood, that one body is made of the three humors, compounded in a double proportion of blood to the [sum of the] two others; where there are eight parts blood let there be two portions bile and two again of black bile.¹² Let the black bile be kindled a bit from these two others, and having been kindled let it shine, but not burn, lest, as harder material characteristically does, when it boils too strongly, it should burn too intensely and become agitated, but when it cools off, it similarly should become cold in the extreme. For black bile is like iron; when it starts to get cold, it gets hot in the extreme; and on the contrary, once it tends towards hot, it gets cold in the extreme. Nor should it seem surprising that black bile can be kindled easily and when kindled burn with great intensity, for we see something similar in lime, in that when sprinkled with water it begins at once to boil and burn. Melancholy has a similarly great tendency towards either extreme, in the unity of its fixed and stable nature. This extremism does not occur in the other humors. Extremely hot, it produces the extreme boldness, even to ferocity; extremely cold, however, fear and extreme cowardice. Various imbuement with the intermediate grades between cold and heat, however, it produces various dispositions, just as wine, especially strong wine, characteristically induces various dispositions in those who have imbibed to the point of drunkenness, or even just a little too freely.¹³

Therefore it behooves you to temper black bile in an appropriate manner. When it is moderated as we specified and mixed with bile and blood, because

36 et om. z 38 nec z 40 post bilis add. et z 41 multa L 51 sanguinis¹ sanguis G
52 aliquantulum z 59 Tanta C 60 melancollam D 62 summam] summa D
ferocitati z 63 Medii DR 64 infecta z 65 bibenti ex bibentis corr. G etiam] eam z
66 solet z

ditione quantum ipsius natura patitur tenuissima, facile ab illis accenditur; quia solida est atque tenacissima, accensa semel diutissime flagrat; quia tenacissima siccitatis unitate potentissima est, vehementius incalescit. Quemadmodum lignum paleis si utraque accendantur, magis diutiusque calet et luceat. Atqui a diuturno vehementique calore fulgor ingens motusque vehemens et diuturnus proficiscuntur. Huc tendit illud Heracliti: "Lux sicca, anima sapientissima."⁷²

Quo pacto atra bilis conducatur ingenio.

Cap. VI.

Quaeret forte quispiam, quale sit corpus illud humoris eiusmodi ex tribus illis humoribus ea qua diximus proportionem conflatum. Tale est ferme colore quale aurum esse videmus, sed aliquantum vergit ad purpuram. Et quando tam naturali calore quam vel corporis vel animi motu accenditur, ferre non aliter quam ignitum rubensque aurum purpureo mixtum calet et luceat, atque velut Iris trahit varios flagrante corde colores.

Quaeret aliquis iterum, quoniam pacto humor eiusmodi conducatur ingenio. Nempe spiritus ex hoc humore creati primo quidem subtiles sunt, non aliter quam aqua illa quam et vitae seu vitis aquam nominant et ardentem, quotiens ex crassiori mero quadam ad ignem destillatione, ut fieri solet, exprimitur. Spiritus enim sub angustioribus atrae bilis eiusmodi compressi meatibus vehementiore ob unitatem calore maxime tenuantur, perque arctiores meatus expressi subtiliores erumpunt; deinde calidiores similiter atque eadem ratione lucidiores; tertio motu agiles, actione vehementissimi; quarto solido stabilique humore iugiter emanantes actioni diutissime serviunt. Tali autem animus noster obsequio fretus indagat vehementer, perseverat investigando diutius. Facilius quaecunque investigaverit, invenit, clare perspicit, sincere diiudicat, ac diu retinet iudicata.

Adde quod, quemadmodum in superioribus significavimus, animus instrumento sive incitamento eiusmodi quod centro mundi quodammodo congruit, atque (ut ita dixerim) in suum centrum animum colligit, semper rerum omnium et centra petit, et penetralia penetrat. Congruit insuper cum Mercurio atque Saturno, quorum alter, altissimus omnium planetarum, investigantem evehit ad altissima. Hinc philosophi singulares evadunt, praesertim cum ani-

⁷² *post lignum add. in z* calent *z* lucent *z* 74 sicca] sic *x*
conducatur ingenio] ingeniosos efficiat *z* 1 ex] ea *x* 2 ca] ex *x* ferme ante est
transp. z 4 acceditur *z* 5 ignotum *DR* 9 seu vitis *om. e* 14 quanto *B* 18 diu *om. z*
 23 alter] alter (autem *D*) investigationem praestat alter *ABDR* altissimus *post* planetarum *transp. z*

it is dry by nature and in a condition rarefied insofar as its nature admits, it is easily kindled by them; because it is solid and tenacious, once kindled, it burns longer; because it is very powerful in the concentration of its very tenacious dryness, it burns vehemently. Like wood in straw when both are kindled, it burns and shines more and longer. But certainly by means of long-lasting and vehement heat, there arises huge radiance and vehement and long-lasting motion. This is what Heraclitus meant when he said, "A dry light, a soul most wise."⁷²

How Black Bile Makes People Intelligent.

Chap. VI

One might perhaps ask what it is like—that humoral body composed out of those three humors in the aforementioned proportion. In color, it has much the appearance of gold, but somewhat inclining towards purple. And when it is heated, as much by natural heat as by motion of the body or of the mind, it burns and shines much like red-hot gold tinged with purple; and it takes on in the burning heart various colors like a rainbow [*Aen.* 4.700–701].

One might ask, again, how a humor of this kind conduces to intelligence. Well, in the first place, the spirits born of this humor have the subtlety of that water which is called *aqua vitae* or *vitis* and *aqua ardens*, when this liquor is extracted by the usual process from thicker wine by distillation at the fire. For the spirits of this kind of black bile are in the highest degree rarefied under pressure in the narrower passages by the heat that is intenser because of its concentration; and having been squeezed through these narrower passages, when they emerge they are more subtle. Second, they are correspondingly hotter and by the same token brighter; third, being quick in motion they are most vigorous in action; fourth, pouring forth continually from a solid and stable humor they can support an action for a very long time. Supported by such compliance, our mind explores eagerly and perseveres in the investigation longer. Whatever it is tracking, it easily finds it, perceives it clearly, soundly judges it, and retains the judgment long.

Add to this that, as we said above [1.5], the soul with an instrument or incitement of this kind—which is congruent in a way with the center of the cosmos, and, as I might say, collects the soul into its own center—always seeks the center of all subjects and penetrates to their innermost core. It is congruent, moreover, with Mercury and Saturn, of whom the second, the highest of planets, carries the investigator to the highest subjects. From this come origi-

mus sic ab externis motibus atque corpore proprio sevocatus, et quam proximis divinis et divinorum instrumentum efficiatur. Unde divinis influxibus oraculisque ex alto repletus, nova quaedam inusitataque semper excogitat et futura praedicit. Quod non solum Democritus atque Plato affirmant, sed etiam Aristoteles in *Problematum* libro et Avicenna in libro *Divinorum* et in libro *De anima* confitentur.

Quorsum haec de atrae bilis humore tam multa? Ut meminimus quantum atra bilis, immo candida bilis eiusmodi, quaerenda et nutrienda est tantam optima, tantum illam quae contra se habet (ut diximus) tantam pessimam esse vitandam. Adeo enim dira res est, ut a malo daemone eius impetus instigari Serapio dixerit, et Avicenna sapiens non negaverit.

Quinque sunt praecipui studiosorum hostes: pituita, atra bilis, coitus, satietas, matutinus somnus.

Cap. VII.

Ut autem redeamus illuc inde iam longius digressi sumus, longissima via est quae ad veritatem sapientiamque perducit, gravibus terraeque marisque plena laboribus. Quicumque igitur hoc iter aggrediuntur, ut poeta quispiam diceret, saepe terra marique periclitantur. Sive enim mare navigent continue inter fluctus, id est humores duos, pituitam scilicet et noxiam illam melancholiam, quasi inter Scyllam Charybdiqum iactantur. Sive terra (ut ita dixerim) iter agant, tria monstra protinus sese illis obiciunt. Primum terrena Venus Priapusque nutrit, secundum Bacchus et Ceres, tertium nocturna Hecate frequenter opponit. Ergo et Apollo ab aethere et Neptunus ab aequore et a terra Hercules saepe vocandus, ut monstra eiusmodi Palladis imica iaculis Apollo transfigat, Neptunus tridente domet, clava Hercules condandat et laceret.

Primum quidem monstrum est Veneris coitus, praesertim si vel paulum vires excesserit; subito namque exhaurit spiritus praesertim subtiliores, cerebrumque debilitat, labefactat stomachum atque praecordia. Quo malo nihil ingenio adversius esse potest. Cur nam Hippocrates coitum comitiali morbo similem iudicavit, nisi quia mentem, quae sacra est, percutit; tantumque obest, ut Avicenna in libro *De animalibus* dixerit: "Si quid spermatis, supra quam na-

25 montibus x proprie BD 26 et om. z 27 inusita D; invisitataque x 28 affirmat x 35 negavit A

Quinque sunt praecipui! Quod quinque sint praecipui y; Quinque praecipue z 2 marisque ex maris corr. L⁴ 8 Priapusque nutrit om. z 10 et om. B 10-11 post inimica add. et DR 11 tridenti e 17 percellit z

nal philosophers, especially when their soul, hereby called away from external movements and from its own body, is made in the highest degree both a neighbor to the divine and an instrument of the divine. As a result, it is filled from above with divine influences and oracles, and it always invents new and unaccustomed things and predicts the future. Not only Democritus¹ and Plato² affirm this but also Aristotle confesses it in his book of *Problems*,³ and Avicenna in his *Liber divinorum*⁴ and in his *De anima*.⁵

What is the purpose of so much information about the humor black bile? That we may remember that just as much as black bile—or rather, I should call bile of this kind white—is to be sought and nourished as the best, just so that which is contrary to it, as we said, is to be avoided as the worst. For it is so pernicious a thing that Serapion says its onset is instigated by a bad daemon,⁶ and the wise Avicenna does not deny it.⁷

The Special Enemies of Scholars Are Five: Phlegm, Black Bile, Sexual Intercourse, Gluttony, and Sleeping in the Morning.

Chap. VII

But to return from where we have been digressing now for quite a while, the road is very long which leads to truth and wisdom, full of heavy labors on land and sea. Hence people who undertake this journey are often at danger, as some poet might say, on land and sea. For if they sail on the sea, they are constantly tossed among the waves, that is, the two humors, namely phlegm and that noxious form of melancholy, as if between Scylla and Charybdis. Or if they journey on land, so to speak, three monsters immediately oppose them. The first monster is nourished by the earthly Venus and Priapus; the second, by Bacchus and Ceres; and the third, nocturnal Hecate often positions against us. Therefore Apollo must often be summoned from the heavens, Neptune from the sea, and Hercules from the land in order that Apollo may pierce such monsters, enemies of Pallas, with his shafts, Neptune may subdue them with his trident, and Hercules may crush and mangle them with his club.

The first monster is sexual intercourse, especially if it proceeds even a little beyond one's strength; for indeed it suddenly drains the spirits, especially the more subtle ones, it weakens the brain, and it ruins the stomach and the heart—no evil can be worse for one's intelligence. For why did Hippocrates judge sexual intercourse to be like epilepsy, if not because it strikes the mind, which is sacred,¹ and it is so harmful that Avicenna has said in his book *De animalibus*: "If any sperm should flow away through intercourse beyond that which

tura toleret, coitu profluat, obesse magis quam si quadragies tantundem sanguinis emanarit," ut non iniuria prisci Musas atque Minervam virgines esse voluerint. Huc Platonium illud spectat: cum Venus Musis mimitaretur, nisi sacra Venerea colerent, se contra illas suum filium armaturam, responderunt Musae: "Martī, O Venus, Marti talia mimitare; tuus enim inter nos Cupido non volat." Denique natura nullum sensum longius quam tactum ab intelligentia segregavit.

Secundum monstrum est vini cibique satietae. Quippe si vinum vel nimium vel nimis calidum vehemens fuerit, caput ipsum humoribus pessimisque fumis implebit. Mitto quod insanos facit ebrietas. Cibis vero nimius primum quidem ad stomachum in ipso coquendo omnem naturae vim revocat; quo fit ut capiti simul speculationique intendere nequeat. Deinde inepte coctus multis et crassis vaporibus humoribusque aciem mentis obtundit. Quinetiam si satis coquatur, tamen, ut Galienus ait: "animus adipe et sanguine suffocatus coeleste aliquid pervidere non potest."

Tertium denique monstrum est ad multam noctem, praesertim post coenam, frequentius vigilare, unde etiam post ortum solis dormire cogaris. Quoniam vero in hoc errant fallunturque studiosi permulti, idcirco quantum ingenio noceat, latius explicabo, atque rationes septem praecipuas afferam: primam ab ipso coelo, secundam ab elementis, tertiam ab humoribus, quartam ab ordine rerum, quintam a natura stomachi, sextam a spiritibus, septimam a phantasia deductam.

Principio tres planetae, quemadmodum in superioribus dicebamus, contemplationi et eloquentiae maxime favent: Sol, Venus atque Mercurius. Hi vero paribus ferme passibus concurrentes adventante nocte nos fugiunt, die vero vel propinquante vel iam surgente resurgunt nosque revisunt. Post vero Solis ortum in plagam coeli duodecimam, quae carceri tenebrisque ab astronomis assignatur, repente triduntur. Ergo non qui vel nocte, quando nos fugiunt, vel die post Solis ortum, quando carceris tenebrarumque domum intrant, sed qui vel propemodum petentibus ortum, vel iam surgentibus ad contemplandum scribendumque ipsi quoque consurgunt, ii soli acutissime speculantur, et eloquentissime inventa sua scribunt atque componunt.

Ratio secunda, scilicet ab elementis, est talis: oriente sole movetur aer tenuaturque et claret, occidente vero contra. Sanguis autem et spiritus motum qualitatemque aeris circumfusi naturaque similis sequi necessario compelluntur.

Tertia ratio, quae ab humoribus ducitur, est eiusmodi: in aurora movetur sanguis et regnat motuque tenuatur et calescit et claret; spiritus vero sanguinem sequi imitarique solent. Verum accedente nocte melancholia illa crassior

19 tolleret z 23 nos om. D 35 etiam] et G 39 ab] ad x 41 deductas z 43 paribus] partibus
x 44 surgente] fugiente G 46 traduntur L^{ac}Bw^{ac}z 50 component z 57 post nocte add. vel z

nature tolerates, it is more harmful than if forty times as much blood should pour forth.² So it was with good reason that the ancients held the Muses and Minerva to be virgins. That Platonian saying has relevance here: When Venus threatened the Muses that, unless they celebrated the rites of love, she would send her son armed against them, "the Muses answered, 'O Venus, threaten Mars with such things, your Cupid does not fly among us.'"³ Finally, nature has placed no sense farther from intelligence than touch.

The second monster is satiety in wine and food. For if wine is excessive or too hot and strong, it will fill the head with humors and very bad fumes. I pass over the fact that drunkenness makes men insane. And excessive food recalls all the power of nature first of all to the stomach to digest it. This renders nature unable to exert itself at the same time in the head and for reflection. In the next place, food badly digested dulls the sharpness of the mind with many dense vapors and with humors. But even if the food is sufficiently digested, nevertheless, as Galen says, "the mind that is choked up with fat and blood cannot perceive anything heavenly."⁴

Finally, the third monster is to stay awake too often for much of the night, especially after dinner, with the result that you are forced to sleep even after sunrise. Since many scholars err in this and are deceived, therefore I will explain further how much it hurts the intelligence and I will give seven main reasons. The first reason is drawn from the heavens themselves, the second from the elements, the third from the humors, the fourth from the order of things, the fifth from the nature of the stomach, the sixth from the spirits, and the seventh from the phantasy.

First of all, three planets, as we said above [1.1], especially favor reflection and eloquence: the Sun, Venus, and Mercury. Since they run almost in step together, at the approach of night these planets flee from us, but with day approaching or now rising they arise again and revisit us. But after sunrise, they are immediately thrust into the twelfth house of heaven, which is assigned by astronomers to prison and darkness.⁵ Therefore it is not people who rise either at night, when they flee from us, or during the day after sunrise, when they enter the house of prison and darkness, who explore things most acutely and write and compose their findings most eloquently, but those people alone who, when they are either about to rise or now rising, themselves rise up with them to reflect and write.

The second reason, which is from the elements, is this: at sunrise the air is stirred, rarefied, and clear; but just the opposite happens at sunset. The blood and the spirits are compelled by necessity to imitate the motion and quality of the air because it surrounds them and is similar in nature.⁶

The third reason, which is drawn from the humors, is this: at dawn the blood moves and rules; it is rarefied by motion and grows warm and clear; and the spirits characteristically imitate and follow the blood. But at the approach of

et frigidior atque pituita dominantur, quae spiritus ad speculandum ineptissimos proculdubio reddunt.

Quarta ratio, quae trahitur ab ordine rerum, haec erit: dies vigiliae, nox somno tributa est, quoniam cum Sol vel ad hemisphaerium nostrum accedit vel super ipsum incedit, radiis suis meatus corporis aperit, atque a centro ad circumferentiam humores spiritusque dilatat, quod quidem ad vigiliam actionesque excitat atque conducit. Contra vero, quando recedit, omnia coarctantur, quod naturali quodam ordine invitatur ad somnum, maxime post tertiam aut quartam noctis partem. Quisquis igitur mane quidem dormitat, quando Sol mundusque excitat, ad multam vero noctem vigilat, quando natura dormire iam et a laboribus quiescere iubet, hic absque dubio cum ordini universi tum sibi ipsi repugnat, dum contrariis simul motibus perturbatur atque distrahitur. Sane dum ab universo movetur ad extrema, ipse sese movet ad intima; atque contra, dum ab universo ad intima trahitur, ipse se interim retrahit ad externa. Ergo perverso ordine motibusque contrariis tum corpus totum, tum spiritus ingeniumque prorsus labefactatur.

Quinto loco a natura stomachi in hunc modum argumentamur: stomachus diuturna diurni aeris actione apertis poris admodum dilatat, evolantibusque spiritibus tandem valde debilitatur. Igitur subeunte nocte novam spirituum copiam exigit, qua foveatur. Quapropter quicumque eo tempore contemplationes longas et difficiles incohat, ipsos ad caput spiritus retrahere nititur. Hi vero distracti neque stomacho satis neque capiti faciunt. Maxime vero nocet, si post coenam lucubrantes diu eiusmodi studiis attentius incumbamus, pluribus enim tunc ad concoquendum cibum spiritibus multoque calore stomachus indiget. Haec vero duo lucubratione studioque tali divertuntur ad caput; quo fit ut neque cerebro neque stomacho suppetant. Adde quod caput ob eiusmodi motum crassioribus cibi repletur vaporibus, atque cibus in stomacho a calore et spiritu destitutus crudescit et putret, unde rursus caput opplet et laedit. Denique matutinis horis quando surgendum est, ut excrementis omnibus somno retentis singula membra purgentur, tunc, id quod pessimum est, qui nocte lucubrando concoctionem penitus interruperat, idem dormiendo mane excrementorum expulsionem diutius impedire compellitur. Quod quidem tam ingenio quam corpori medici omnes obesse quam plurimum arbitrantur. Merito ergo qui nocte contra naturam pro die, atque converso die rursus pro nocte utuntur tanquam noctuae, ii etiam in hoc vel in-

60 traditur x 63 vigiliis G 68 a add. L² conquiescere ABDR 69 repugnant Lw 70 externa A ipsa D 72 extrema Lw^{ac}, extrema x 73 tum om. BDR 75 diurni] diurni A, om. DR 81 coquendum A^{ac}B 85 et¹ om. DR 86 et] atque z 87 purgantur D 88 interrumpat B

night, that more dense and cold type of melancholy dominates, and phlegm, both of which without doubt render the spirits totally unfit for reflection.

The fourth reason, which is drawn from the order of things, will be this: day is assigned to wakefulness, night to sleep, since, when the sun either approaches our hemisphere or advances over it, it opens with its rays the passages of the body and spreads the humors and spirits from the center to the circumference, a thing which excites and leads to wakefulness and actions. But on the contrary, when the sun sets, all things are contracted, which by a certain natural order of things induces sleep, especially after the third or fourth part of the night. Therefore he who sleeps in the morning, when the sun and the world get up, and who is awake much of the night, when nature now commands us to sleep and to rest from labors — this man without doubt fights both with the order of the universe and especially with himself, while he is disturbed and distracted by contrary motions at the same time. Indeed, while there is movement on the part of the universe to the outer limits, he moves himself to the innermost. And, on the contrary, while there is attraction on the part of the universe to the most inward parts, he, meanwhile, draws himself back to externals. Such perverse order and contrary motions make both the entire body and the spirits and intelligence very unsteady.

In the fifth place, we argue from the nature of the stomach in this way: the stomach by the long action of daily air is quite dilated through open pores; when the spirits fly forth, it becomes at last exceedingly weak. Therefore, at the approach of night, it demands a new supply of spirits to sustain itself. This is why a person who begins long and difficult reflections at this time, has to strain to draw those spirits back to the head. When so divided, however, these spirits are not sufficient for either the stomach or the head. Indeed it is especially harmful, if, working at night after dinner, we concentrate too attentively for a long time on studies of this sort. For then the stomach needs many spirits for digesting food, as well as much heat. But these two by such work and study are diverted to the head; it happens as a result that they are sufficient for neither the brain nor the stomach. Add the fact that because of motion of this sort the head is filled with too-dense vapors coming from food; and food in the stomach without heat and spirit accumulates undigested and grows rotten, which again blocks up and injures the head. Finally, in the morning hours you must rise in order that each of your bodily parts may be purged of all the excrement retained during sleep. Then, worst of all, the person who had utterly interrupted his digestion by studying at night and likewise by sleeping in the morning is compelled to hinder the expulsion of excrement for a longer time — which, indeed, all physicians think is most harmful for the intelligence as well as the body. Rightly, therefore, those who against nature use night as day and, conversely again, day as night, like owls — these people also unwillingly imitate owls in this: that, just as the eyes of the owls grow weak

viti noctuas imitantur, ut quemadmodum illis sub solis lumine caligant oculi, ita et iis mentis acies sub veritatis splendore caliget.

Sexto loco a spiritus idem ita probatur: spiritibus fatigatione diurna praesertim subtilissimi quique denique resolvuntur. Nocte igitur pauci crassique supersunt litterarum studiis ineptissimi, ut non aliter mancis horum fretum alis ingenium volare possit quam vespertilioes atque bubones. Contra vero post somnum mane spiritibus recreatis membrisque adeo corroboratis, ut minimo spirituum adminiculo egeant, multi subtilesque spiritus adsunt, qui cerebro serviant, atque expeditius obsequi possunt, in membris fovendis regendisque parum admodum occupati.

Postremo septima ratio sic a phantasiae natura deductur: phantasia sive imaginatio sive cogitatio seu quovis alio nomine nuncupanda videtur, multis, longis, contrariis invigilando imaginibus, cogitationibus curisque distrahitur atque turbatur. Quae quidem distractio perturbatioque sequenti contemplationi tranquillam serenamque mentem penitus postulantium nimium contraria est. Sola vero nocturna quiete agitatio illa sedatur tandem atque pacatur. Igitur accedente quidem nocte semper turbata mente, recedente vero ut plurimum mente tranquilla ad studia nos conferimus. Quicumque vero mente nimium agitata res ipsas iudicare conantur, ii non aliter quam illi qui vertiginem patiuntur, omnia verti putant (ut Plato inquit), cum ipsi vertantur. Quamobrem scite Aristoteles in *Oeconomicis* iubet ante lucem surgere, asseritque id et ad corporis sanitatem et ad philosophiae studia prodesse quam plurimum. Sed hoc ita accipiendum est, ut cita et modica coena matutinam crudelitatem diligentissime devitemus. Denique sacer ille vates David, omnipotentis tuba Dei, nunquam dicit vespere, sed mane semper atque diluculo in Deum suum canendum se cithara psalmisque surgere. Surgere quidem mente ea hora omnino debemus, mox etiam corpore, si modo id commode fieri possit.

*Quae sit hora incohanda studiis opportunior,
quaeve continuandi modus.*

Cap. VIII.

Ex iis quae in superioribus disputata sunt, ferme iam satis constat opportune nostra nos studia exordiri vel statim oriente sole, vel hora una saltem vel duabus ad summum ante solis exortum. Sed antequam e lecto surgas,

93 ur] vel B 94 ii z 97 fretum] fletus L 99 nimio D 101 fovendis] faciendis D 104 nuncupata B 113 scire L 118 sex x 119 potest D
1 post. iis add. autem G

under the light of the sun, so too the mental sharpness of these people grows weak beneath the splendor of truth.⁷

In the sixth place, the same thing is proved from the spirits as follows: the spirits, especially all the most subtle ones, are eventually dispersed by daily fatigue. At night, therefore, few spirits are left, and they are dense and most unsuitable for literary studies, so that the intelligence, relying on these crippled wings, can fly only as do bats and owls. But, on the contrary, in the morning after sleep, with the spirits refreshed and with the bodily parts thus strengthened, so that they need the least help from the spirits, many subtle spirits are present; they serve the brain, and they are able to comply with it, since they are very little occupied with fostering and ruling the bodily parts.

Finally, the seventh reason is drawn from the nature of the phantasy as follows: Phantasy or imagination or apprehension ("cogitatio") or whatever other name it seems it ought to be called, is distracted and upset by many long and contrary imaginations, cogitations, and cares while it is awake. This distraction and confusion are too contrary to someone pursuing contemplation and requiring a completely tranquil and serene mind. Only during the quiet of night is that agitation finally calmed and put to rest. Therefore, at the approach of night we study with the mind always disturbed, but when night withdraws for the most part we give ourselves to study with a tranquil mind. A person who tries to judge truth with the mind too upset, is just like those people who suffer from dizziness and think everything is turning, as Plato said, when they themselves are turning.⁸ This is why Aristotle in his *Economics* sensibly commands us to rise before dawn and asserts that it is most useful both for the health of the body and for the study of philosophy.⁹ But this precept must be taken in such a way that we carefully avoid early morning indigestion by taking a quick and moderate dinner. Finally, that holy prophet David, the trumpet of the almighty God, never says that he rises to sing to his God with lyre and psalms in the evening, but always in the morning and at dawn.¹⁰ Indeed we certainly ought to arise at that hour with our mind, and soon after also with our body, provided it can conveniently be done.

*What Hour Is the Better Time to Begin Our Studies
and How We Should Continue Them.
Chap. VIII*

From what has been argued above, it is now almost sufficiently certain that the better time to begin our studies is either right at sunrise, or at least one hour, and at most two hours, before sunrise. But before you get out of