

Attributed to Paracelsus

Nine Books on the Nature of Things

*A fresh translation from the early Latin text with annotations and
study apparatus*

Diotimos Editions

2026

A complete Latin and English edition with original marginal notes and Diotimos
study features

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Edition Statement

This Diotimos edition presents the complete Nine Books on the Nature of Things, traditionally attributed to Paracelsus, in a fresh English translation of the Latin text printed at Frankfurt in 1605. Latin appears above English in aligned reading passages. The historical title, dedication, all nine books, their internal headings and original marginal notes are included. The dedication bears a date of 1537; that date is reproduced as part of the transmitted text, not adopted as the demonstrated date of the complete compilation.

The governing text occupies printed pages 198–271 of the sixth volume of the Palthenian collected works, in the copy held by the Niedersächsische Staats- und Universitätsbibliothek Göttingen. The earlier textual tradition is German. The English here is therefore a new translation of an early Latin witness, rather than a claim to recover Paracelsus's original German wording. John French's 1650 English rendering is a historical comparison witness; its sentences have not been used as the reading text for this edition.

The translation and editorial material were prepared with AI assistance for Diotimos Editions in 2026. The historical words are distinguished from modern commentary throughout. The introduction, essays, glossary, contextual lexicon, relations, reading routes, discussion guide, bibliography and index belong to the present edition. The volume is a historical work of natural philosophy, chymistry and the interpretation of signs. Its descriptions of medical effects, artificial generation and character inferred from appearance remain historical claims, and are not presented as established present-day knowledge.

Introduction

A Work about the Transformation of Things

The Nine Books asks what a natural thing can become. It begins with generation and ends with signs: between those points it considers growth, preservation, life, death, resuscitation, transmutation and separation. Its subjects include living bodies, plants, metals, minerals and the products of ordinary crafts. A piece of wood becoming charcoal and a claim that a metal can receive a tincture belong to the same broad inquiry into changes of form and power. They do not have the same evidential standing merely because the work places them together.

The sequence is useful to a reader because it makes transformation more than a single mysterious event. A thing must arise, increase and retain its condition; it can lose its earlier powers, receive another condition, or be divided into constituents. The book repeatedly asks what is preserved through a change and what has actually been destroyed. Its vocabulary therefore needs to be read through particular examples. Life in the account of metals, death in the account of preparation, and resurrection in the account of renewed natural things cannot simply be transferred without explanation into their everyday modern meanings.

The last book changes the question. Instead of asking only how a thing is made or altered, it asks how an inward condition becomes legible through an outward mark. It begins with human signs, such as marks and seals, before turning to the Archæus and the stars. These ordinary examples help reveal the argument's ambition, but they do not prove its subsequent claims about bodies, personalities or portents. The reader can follow how the work reasons while assessing each kind of assertion separately.

Paracelsus and the Transmitted Work

Paracelsus is the name associated with the physician and natural philosopher Theophrastus von Hohenheim. It also became an authority under which writings circulated after his death. A first-person statement in a work bearing that name is consequently a textual voice that requires examination, rather than an automatically secure biographical statement. This matters especially for the dedication: its intimate address and assurances of experience are important to the work's presentation of itself, but cannot settle who wrote every subsequent book.

Urs Leo Gantenbein's research describes *De natura rerum* as a composite work involving at least three authors. His public abstract identifies a manuscript of 1571 as the earliest source in his investigation,

distinguishes spurious from uncertain material, and regards the books on death, resuscitation and signatures as most likely genuine Paracelsian writings. These are Books V, VI and IX here. The present edition uses the cautious attribution on that basis; it does not assign every sentence to a named contributor or turn a scholarly probability into certainty.

Composite authorship does not make the historical nine-book arrangement irrelevant. Readers encountered, translated and interpreted this assembled work. The purpose here is to give that transmitted whole a readable English form while retaining the questions raised by its making. The editorial apparatus distinguishes a claim internal to the book from a conclusion about its historical author.

From Seven Books to Nine

The printed tradition did not begin with an identical nine-book Latin volume. Seven books appeared in German in 1572, edited by Adam von Bodenstein. Georg Forberger's Latin version, printed by Pietro Perna at Basel in 1573, likewise contains seven. Lucas Bathodius edited a nine-book German printing at Strasbourg in 1584. The distinction is substantial: a modern volume described as the Nine Books must include the later books on separation and signatures, rather than quietly end at transmutation.

The complete Latin witness selected here is the sixth volume of the Palthenian collected works, printed at Frankfurt in 1605. Its title describes the volume as newly made Latin. The larger collection is associated with Zacharias Palthenius and is catalogued as a Latin version based on Johannes Huser's German edition. The individual translator of the particular text used here is not identified in this edition. Forberger's explicit credit in the different printing of 1573 is not transferred to 1605 without evidence.

Selected stages in the transmission

Year	Witness or event	Relation to this edition
1537	Date borne by the dedication	A claim inside the transmitted letter
1571	Manuscript identified in Gantenbein's research	Documentary chronology rather than an autograph claim
1572	Bodenstein German printing	Seven books
1573	Forberger Latin printing	Seven books

Year	Witness or event	Relation to this edition
1584	Bathodius German printing	Nine books
1605	Palthenian Latin collection	Governing complete nine-book witness
1650	John French English translation	Later historical comparison witness

Sources: the scholarly bibliographies and holding-library records identified in the bibliography. The 1537 and 1571 entries describe different kinds of evidence.

Reading the Work in Its Own Terms

Read the first seven books in sequence before treating the famous homunculus passage as an independent key to the whole. That passage is part of a larger argument about generation through nature and art. The accounts of preservation and death then complicate the apparent opposition between what is living and what is useful: the work sometimes values the prepared product precisely because an earlier condition has ended. Book VIII broadens the account of separation through natural and crafted examples. Book IX should then be read as a sustained, varied attempt to make internal states readable.

The marginal notes are particularly helpful, provided they remain identifiable. They name topics, announce definitions and guide attention; occasionally their concise formulation is stronger or simpler than the adjacent prose. Here each is preserved as a labelled historical marginal note, rather than silently turned into a new editorial heading. This lets the reader compare what the margin promises with what the body actually says.

The short glossary gives quick orientation. The contextual lexicon develops selected terms through complete quoted sentences from this translation and links them back to their passages. The essays and reading routes offer ways through the book without replacing its order. Stable passage identifiers remain the same in PDF, Word, Markdown and EPUB, so that a reference survives changes in screen size and pagination.

Note on the Text and Translation

The Governing Witness

The Latin copytext is *De Natura Rerum Libri Novem*, printed pages 198–271 in *Operum Medico-Chimicorum sive Paradoxorum*, Tomus Genuinus Sextus, Frankfurt, Collegium Musarum Palthenianarum, 1605. The governing copy is SUB Göttingen, 4 MED INST 44/75:2 (2) RARA, digitised as PPN578052199, VD17 7:698931L. Historical scans 182–255 form the complete continuous source sequence used for the work. A modern library cover in a generated PDF is not counted as a historical page.

The work begins partway down printed page 198, after the close of a different text, and ends partway through page 271, before another treatise. Those neighbouring works are outside this volume. Where two books share a source page, each passage's locator identifies the actual printed page and digital scan; the boundary is determined by the text and its heading. Source acquisition alone has not been treated as proof of completeness: transcription, translation, marginal notes and closing material are accounted for through the reading passages.

Latin Presentation and English

The Latin is a readable normalised transcription. Long s is rendered as s; ligatures are expanded; u and v are regularised; ordinary abbreviations are expanded where the reading is secure; words divided only by a printed line ending are joined. Punctuation and paragraph divisions are lightly clarified to make the two languages usable together. Meaningful technical signs are retained. Significant doubtful readings, consequential errors or interpretive choices are discussed in local notes rather than silently repaired.

Running heads, catchwords, gathering signatures and ornamental initials are printing furniture. The original marginal notes are substantive and are retained as separately labelled Latin–English passages. Their location is linked to the surrounding source pages. A marginal summary and its neighbouring argument are both historical text, even where they do not say quite the same thing.

The English was made from this Latin witness. It aims to preserve distinctions in agency, condition, sequence and degree, rather than replace difficult processes with present-day recipes or chemical identifications. Names such as *Archaeus*, *arcanum*, *mummia* and *tincture* require contextual explanations. Mercury, sulphur and salt can designate principles as well as named substances; their uses are not reduced to one modern meaning across the entire work. English additions that explain a reading belong to the annotations.

Comparison and Editorial Responsibility

John French's 1650 translation provides a later English comparison. The separate *Nature* title and the entire dedication preserved in the Text Creation Partnership transcription matter to that comparison: the familiar Gutenberg presentation omits those preliminaries. Original 1650 page numbering also jumps from 104 to 107; a later transcription's renumbering is not evidence of lost text in the Latin witness. This edition does not claim an exhaustive collation of every German, Latin or English printing.

Claims about disease, bodily generation, poison, the effects of preparations and character inferred from appearance are translated as historical assertions. An explanatory note that identifies their historical setting does not certify the asserted effect. In particular, Book IX's physiognomic and predictive judgements are not adopted as reliable means of evaluating people. The modern apparatus examines how an argument works and what its words mean, while keeping its voice distinct from the source.

Original Preliminaries

The Historical Title

De Natura Rerum Libri Novem

Latin witness: Frankfurt 1605, printed p. 198, SUB Göttingen PPN578052199. Source facsimile: <https://gdz.sub.uni-goettingen.de/id/PPN578052199?tify=%7B%22pages%22%3A%5B182%5D%7D>

NTR-TITLE-P001 1605 p. 198 · GOT-182

Latin De Natura Rerum Libri Novem Philippi Theophrasti Hohenhemii, dicti Paracelsi.

English Nine Books on the Nature of Things by Philipp Theophrastus of Hohenheim, called Paracelsus.¹

¹. This is the historical title printed within the 1605 collection, at page 198. Its attribution is reproduced as part of the source. The modern edition's cover and introduction distinguish the composite work attributed to Paracelsus from a text securely established as entirely his.

Dedication to Johann Winckelsteiner

Honesto ac prudenti viro Ioanni Winckelsteiner Friburgensi

Latin witness: Frankfurt 1605, printed pp. 198–199, SUB Göttingen PPN578052199.

Source facsimile: [https://gdz.sub.uni-goettingen.de/id/PPN578052199?](https://gdz.sub.uni-goettingen.de/id/PPN578052199?tify=%7B%22pages%22%3A%5B182%5D%7D)

[tify=%7B%22pages%22%3A%5B182%5D%7D](https://gdz.sub.uni-goettingen.de/id/PPN578052199?tify=%7B%22pages%22%3A%5B182%5D%7D)

NTR-DED-P001 1605 p. 198 · GOT-182

Latin Honesto ac prudenti viro Ioanni Winckelsteiner Friburgensi, amico suo intimo ac fratri carissimo, Theophrastus Paracelsus salutem.

English Theophrastus Paracelsus sends greetings to the honourable and discerning Johann Winckelsteiner of Fribourg, his intimate friend and dearest brother.²

NTR-DED-P002 1605 pp. 198–199 · GOT-182, GOT-183

Latin Aequum est, amice intime et carissime frater, ut amicis ac assiduis precibus ac petitionibus tuis, quibus me crebris literis tuis aggressus es, satisfaciam: et quoniam in postremis literis tuis summopere et humanissime rogas, ut adhuc semel ad te veniam si modo mihi sit commodum, non possum te profecto celare, quod per multa impedimenta id fieri nequeat. Sed quod ad alteram petitionem tuam, quam a me petisti, ut tibi debitam bonam et claram instructionem dem, non volo, neque possum tibi repugnare, sed tibi in eo gratificari cogor. Optime enim animum tuum bonum novi: scio etiam, quod libenter aliquid novi et mirabilis in hac arte audis et vides: scio quoque quod in vita tua multum in artes insumpseris, et maximam partem tui curriculi in illis consumpseris, etc. Quoniam igitur mihi non solum benevolentiam, sed et fraternam fidelitatem praestitisti, merito huius fidei et beneficiorum oblivisci non possum, sed gratus esse cogor, et tibi, si fortassis te in persona mea non amplius videam, fraternum vale relinquere, tibi et tuis in mei monumentum. Nam hic tibi non solum ad illa puncta, de quibus me consulisti, et ut frater rogasti, respondebo, et te clare instituum: sed tibi propter illa puncta peculiarem librum dedicabo, quem nominabo, De Natura Rerum, et illum in novem libellos dividam. In hoc libro omnibus petitionibus tuis satisfit, et amplius quam a me petisti.

English My intimate friend and dearest brother, it is right that I should answer the friendly and persistent requests with which you have approached me in your frequent letters. In your latest letter you ask most earnestly and courteously that I visit you once more, if I can conveniently do so. I cannot conceal from you that many obstacles prevent this. As for your other request, that I give you the good and clear instruction you are owed, I neither wish nor am able to refuse you; I am bound to oblige you in this. I know your good disposition very well. I also know that you gladly hear and see anything new and remarkable in this art, that you have spent much of your substance on the arts, and that you have devoted the greater part of your life's course to them, and so on. Since you have shown me both goodwill and a

². Friburgensi is rendered Fribourg because the earlier German dedication specifies "Freyburg in Vchtland" (1584, sig. A5v), the Swiss city. This is the transmitted letter's designation; it does not independently verify the recipient's identity or the friendship claimed in the letter. See [the German printing of 1584](#).

brother's fidelity, I cannot rightly forget your loyalty and kindness. I am bound to be grateful and, if perhaps I never see you again in person, to leave a brother's farewell to you and yours as a remembrance of me. Here I shall not only answer the questions on which you consulted me and sought my help as a brother, giving you clear instruction; I shall also dedicate to you a separate book concerning them. I shall call it *On the Nature of Things* and divide it into nine short books. In this book all your requests are answered, and more than you asked of me.³

NTR-DED-P003 1605 p. 199 · GOT-183

Latin Quanquam summopere de hoc miraberis, et fortasse multum dubitabis, an haec omnia se sic habeant, sicut hic describo. Sed id ne facias, imo credas non esse speculationes et theorias, sed praxin et procedere ab experientia. Et quamvis non omnia ipsemet expertus sim, tamen ab aliis et per alios habeo et probavi, et novi ea experientia, et ex luce naturae.

English You will nevertheless be greatly astonished at this, and perhaps seriously doubt whether everything is as I describe it here. Do not do so. Believe instead that these are practical matters arising from experience, rather than speculations and theories. Although I have not tried everything myself, I have received and tested these things from others and through others, and I know them by experience and by the light of nature.⁴

Original marginal note NTR-DED-M001 1605 p. 199 · GOT-183

Latin Omnia probata hic scribuntur.

English Everything written here has been tested.

NTR-DED-P004 1605 p. 199 · GOT-183

Latin Si autem in quibusdam locis non satis quid dicam intelligas, et in uno vel pluribus processibus ampliorem a me requiras explicationem, scribe ad me secreto, et clarius tibi rem proponam, et sufficientem instructionem et intellectum dabo. Quanquam credam non opus futurum, et te alias bene intellecturum, cum sciam te a Deo artibus et bono sensu tam egregie dotatum. Praeterea nosti animum et sensum meum. Quare me cito et facile intelliges. Omnino autem spero, nec dubito, te praesens opus respecturum, et ut decet commendatum tibi habiturum, et prorsus non evulgaturum, sed solummodo pro te et tuis in magno secreto retenturum, sicut profecto occultus et magnus thesaurus, et nobilis gemma, et res preciosa est, quae non obicienda est subus, hoc est Sophistis, et contemtoribus omnium bonarum naturalium artium et secretorum, qui neque digni sunt ut legant, multo minus ut habeant, sciant et intelligant. Et quanquam iste libellus valde parvus sit, et pauca et brevia verba habeat, plenus tamen est multis magnis Arcanis. Nam hic non scribam ex speculatione vel theoria, sed practice, ex luce naturae et experientia ipsa, nec te onerabo, et taediosum reddam multis verbis, etc.

³. Fraternal vale literally means a brotherly farewell. The letter presents the book as a lasting remembrance for its recipient and family. Its first-person claims belong to the transmitted dedication; they are not independent evidence of authorship.

⁴. The source distinguishes personal trial from knowledge obtained through others. Its adjacent marginal summary says that everything written here has been tested. Both statements are preserved; the edition does not turn either into a modern guarantee that the described effects occur.

English If in some places you do not sufficiently understand what I mean, and want a fuller explanation of one or more procedures, write to me privately. I shall explain the matter more clearly and give you sufficient instruction and understanding. Yet I believe this will be unnecessary, and that you will understand well enough without it, since I know how richly God has endowed you with skill in the arts and good judgement. Besides, you know my disposition and meaning; you will therefore understand me readily and easily. I fully hope, and do not doubt, that you will value the present work and cherish what has been entrusted to you, as it deserves. You will not publish it at all, but keep it a close secret for yourself and your family. It is indeed a hidden and great treasure, a noble jewel and a precious thing, which must not be thrown before swine—that is, sophists and people who despise all good natural arts and secrets. Such people do not deserve even to read them, much less to possess, know and understand them. Though this little book is very small and contains few, brief words, it is full of many great arcana. I shall write here from practice, from the light of nature and experience itself, rather than from speculation or theory; I shall not burden or weary you with many words, and so on.⁵

NTR-DED-P005 1605 p. 199 · GOT-183

Latin Quapropter carissime amice et intime frater, quoniam tibi soli ex amore hunc libellum scripsi, et nulli alii praeterea, rogo te, velis eum, ut rem caram et secretam conservare, et usque ad mortem tuam a te non remove, et ante mortem tuam simili modo tuis liberis vel heredibus mandare, ut ipsi secreto hunc librum retineant, quod et ego singulariter ab ipsis peto, ut tantummodo in tua familia maneat, et nullo tempore tam vulgaris fiat, ut in Sophistarum et derisorum manus perveniat, qui omnia, quae ipsis non consonant, contemnunt, et ad summum calumniantur: quibus et tantum illud quod suum est, placet, sicut omnes stulti solent, quibus tantummodo sua clava, et sua tintinnabula placent, alterius autem non, qui et omnem sapientiam oderunt. Quapropter omnem sapientiam parvi aestimant, imo pro stultitia reputant, maiori quam sua est, in suo scilicet capite: quia nihil ipsis prodest, nec sciunt usum. Sicut unus opifex alterius instrumenta tractare nescit, ita stultus nullus armis melius uti potest, quam sua clava, nec ullus suavior sonus est auribus eius, tinnitu suarum campanarum.

English Therefore, dearest friend and intimate brother, since I have written this little book out of love for you alone and for nobody else, I ask you to preserve it as something precious and secret. Keep it with you until your death, and before you die entrust it in the same way to your children or heirs, so that they too retain the book in secret. I particularly ask this of them as well: let it remain only within your family. Never let it become so widely known that it falls into the hands of sophists and mockers, who despise and bitterly slander everything that does not agree with them. They are pleased only with what is their own, as fools always are: they like only their own club and their own

⁵. The comparison with casting precious things before swine recalls Matthew 7:6. Sophists is the letter's polemical description of its opponents. Arcana is retained as a technical plural for hidden powers or preparations, with its sense determined locally.

little bells, and nobody else's, and they hate all wisdom. In their own minds they therefore think little of all wisdom, regarding it as folly greater than their own, because it does them no good and they do not know how to use it. Just as one craftsperson does not know how to handle another's tools, no fool can wield any weapon better than his own club, nor is any sound sweeter to his ears than the ringing of his own bells.

Original marginal note NTR-DED-M002 1605 p. 199 · GOT-183

Latin Commendatio.

English Entrusting the book.

NTR-DED-P006 1605 p. 199 · GOT-183

Latin Quare charissime frater fideliter esto monitus, sicut te rogavi, et fac id, quod de te spero, ita facies recte et bene. Vale in tutela Dei. Datum Villaci, anno 1537.

English Dearest brother, then, take this faithful counsel as I have asked you, and do what I hope of you. In this way you will act rightly and well. Farewell in God's protection. Dated at Villach in the year 1537.⁶

⁶ The dedication bears the date 1537 at Villach. This is the date claimed by the transmitted letter, not the date of the governing 1605 printing and not independent proof that the entire nine-book compilation was written in 1537.

The Nine Books

Book 1 On the Generation of Natural Things

De natura rerum. Liber primus. De generationibus rerum naturalium.

Latin witness: Frankfurt 1605, printed pp. 200–206, SUB Göttingen PPN578052199.

Source facsimile: <https://gdz.sub.uni-goettingen.de/id/PPN578052199?tify=%7B%22pages%22%3A%5B184%5D%7D>

Original marginal note NTR-B01-M001 1605 p. 200 · GOT-184

Latin Nat. rerum generatio est duplex.

English The generation of natural things is twofold.

NTR-B01-P001 1605 p. 200 · GOT-184

Latin Generatio omnium rerum naturalium est duplex: una quae natura fit sine arte: altera quae fit arte, nempe per Alchymiam. Quanquam in genere dici posset, natura omnia ex terra generari auxilio putrefactionis. Nam putrefactio est supremus gradus & primum initium ad generationem. Putrefactio autem initium suum sumit ex humido calore. Nam perpetuus humidus calor parit putrefactionem & transmutat omnes res naturales a prima sua forma & essentia, similiter & viribus & efficacia, in aliud. Nam sicut putrefactio in ventriculo omnes cibos in stercus transmutat & redigit, ita etiam extra ventriculum putrefactio in vitro, omnes res transmutat ab una forma in aliam, ab una essentia in aliam, ab uno colore in alium, ab uno odore in alium, ab una virtute in aliam, ab una vi in aliam, ab una proprietate in aliam, & prorsus ab una qualitate in aliam. Nam evidens est & quotidiana experientia probatur, multas bonas res, quae sunt salubres & Medicinae, post putrefactionem malas, insalubres & merum venenum fieri. Ita contra multae sunt malae, insalubres, venenosae, & nocivae res, quae post putrefactionem suam fiunt bonae, perdunt omnem suam malitiam, & fiunt nobiles Medicinae. Quia putrefactio res magnas parit, sicut huius rei pulcrum exemplum in sacro Evangelio habemus, ubi Christus dicit: Nisi granum tritici in agrum proiciatur, & putrefiat, non potest centuplum fructum ferre. Ex hoc sciendum est, multas res in putrefactione multiplicari, ita ut nobilem fructum pariant. Putrefactio enim est mutatio & mors omnium rerum, & destructio primae essentiae omnium rerum naturalium, unde nobis prodit regeneratio & nova generatio millies melior, &c.

English All natural things have a twofold generation: one occurs naturally without art; the other occurs through art, namely alchemy. Yet in general it could be said that everything is generated naturally from the earth with the help of putrefaction. Putrefaction is the highest stage and the first beginning of generation. Putrefaction itself begins in moist heat. Continuous moist heat produces putrefaction and changes every natural thing from its first form and essence, and likewise from its powers and efficacy, into something else. Just as putrefaction in the stomach changes and reduces all food to dung, so putrefaction in glass outside the stomach changes everything from one form into another, from one essence into another, from one colour into another, from one smell into another, from one virtue into another, from one force into another, from one property into another, and altogether from one quality into another. It is evident, and confirmed by daily experience,

that many good things which are wholesome and medicinal become bad, unwholesome and sheer poison after putrefaction. Conversely, many bad, unwholesome, poisonous and harmful things become good after their putrefaction, lose all their harmfulness and become excellent medicines. Putrefaction brings forth great things. We have a fine example in the holy Gospel, where Christ says: Unless a grain of wheat is cast into the field and putrefies, it cannot bear a hundredfold fruit. From this we must understand that many things multiply in putrefaction so as to bear excellent fruit. Putrefaction is the change and death of all things and the destruction of the first essence of every natural thing; from it there emerges for us a regeneration and a new generation a thousand times better, and so forth.⁷

Original marginal note NTR-B01-M002 1605 p. 200 · GOT-184

Latin Putrefactione omnia nascuntur.

English All things are born through putrefaction.

Original marginal note NTR-B01-M003 1605 p. 200 · GOT-184

Latin Putrefactionis causa est calor humidus.

English The cause of putrefaction is moist heat.

Original marginal note NTR-B01-M004 1605 p. 200 · GOT-184

Latin Putrefactionis vis & natura quae.

English What the force and nature of putrefaction are.

Original marginal note NTR-B01-M005 1605 p. 200 · GOT-184

Latin Putrefactio quid sit.

English What putrefaction is.

Original marginal note NTR-B01-M006 1605 p. 200 · GOT-184

Latin Putrefactio est initium ad rerum generationem.

English Putrefaction is the beginning of the generation of things.

Original marginal note NTR-B01-M007 1605 p. 200 · GOT-184

Latin Putrefactio est multiplex.

English Putrefaction is of many kinds.

NTR-B01-P002 1605 pp. 200–201 · GOT-184, GOT-185

Latin Cum igitur putrefactio sit primus gradus & initium ad generationem; summe necessarium est, ut putrefactionem bene cognoscamus. Sunt autem multiplices putrefactiones, & una generationem suam aliter quam altera profert, una quoque citius quam altera. Diximus etiam humidum & calidum esse primum gradum, & initium ad putrefactionem, quae omnes res procreat, ut gallina sua ova. Quapropter per & in putrefactione omne mucilaginosum phlegma & materia viva fit, quidcunque tandem id sit. Exemplum videtis in ovis, in quibus est humiditas mucilaginosa, quae quolibet perpetuo calore putrefit & animatur in pullum vivum, non solum calore gallinae, sed quolibet tali calore. Nam in tali gradu ignis possunt ova in vitro & cineribus maturari, & viva avicula fieri: etiam quilibet homo sub sua axilla ovum maturare potest, & pullum procreare tam bene ac gallina.

⁷. The grain saying combines the dying grain of John 12:24 with the hundredfold harvest of Matthew 13:8,23 and parallels. This is the text's alchemical paraphrase, not a verbatim biblical quotation. Claims that putrefaction makes poisons medicinal are historical assertions, not modern medical guidance.

English Since putrefaction is the first stage and beginning of generation, it is absolutely necessary to know it well. There are many kinds of putrefaction: one brings forth its generation differently from another, and one sooner than another. We also said that moisture and heat are the first stage and beginning of putrefaction, which produces everything as a hen produces her eggs. Through and in putrefaction, therefore, every mucilaginous phlegm and material becomes alive, whatever it eventually may be. You see an example in eggs: they contain a mucilaginous moisture which putrefies under any continuous heat and is animated into a living chick, through the hen's heat or any heat of that kind. In such a degree of fire, eggs can mature in glass and ashes and become living birds. A person can even mature an egg under the armpit and produce a chick as well as a hen.

Original marginal note NTR-B01-M008 1605 p. 201 · GOT-185

Latin Pullorum gallinaceorum generatio artificialis.

English The artificial generation of chickens.

Original marginal note NTR-B01-M009 1605 p. 201 · GOT-185

Latin A cineribus. Ab artibus.

English From ashes, through the arts.⁸

NTR-B01-P003 1605 p. 201 · GOT-185

Latin Et hic notandum est aliquid maius, nempe, si ista avis viva in sigillata cucurbita in pulverem vel cinerem comburatur tertio gradu ignis, postea ita clausa putrificetur putrefactione summa Ventris Equini in phlegma mucilaginosum, tunc iterum illud phlegma maturari potest, atque ita renovata & restaurata avis fieri: nempe si illud phlegma rursum in priorem suam testam vel receptaculum includatur. Hoc est mortuos revivificare per regenerationem & clarificationem quod quidem magnum & profundum miraculum Naturae est. Hoc processu possunt omnes aves occidi, & iterum vivificari, renovari & restaurari, & hoc est summum & maximum miraculum & mysterium Dei, quod Deus mortali homini patefecit. Sciendum etiam est hoc modo posse generari homines sine naturali patre & matre, hoc est, non ex muliere naturali modo, sed per artem, & industriad periti Spagyrici potest homo nasci & crescere, sicut postea dicitur.

English Something greater must be noted here. If that living bird is burned to powder or ashes in a sealed cucurbit at the third degree of fire, and afterward, still enclosed, is putrefied by the utmost putrefaction of the horse's belly into a mucilaginous phlegm, that phlegm can then be matured again and thus become a renewed and restored bird: that is, if the phlegm is enclosed once more in its former shell or receptacle. This is to bring the dead to life again through regeneration and clarification, which is a great and profound miracle of nature. By this process all birds can be killed and then made alive, renewed and restored. This is the highest and greatest miracle and mystery of God which God has disclosed to mortal humanity. It must also be understood that humans can be generated in this way without a

⁸. The small marginal wording is compressed in the printing; it labels the ensuing alleged revival from a burned bird's ashes. The expansion of its abbreviations is uncertain and should be compared with the image.

natural father and mother: not naturally from a woman, but through the art and diligence of an expert spagyrist a human can be born and grow, as will be explained later.⁹

Original marginal note NTR-B01-M010 1605 p. 201 · GOT-185

Latin Resuscitatio mortuae avis.

English The revival of a dead bird.

Original marginal note NTR-B01-M011 1605 p. 201 · GOT-185

Latin Hominis generatio Spagyrica.

English The spagyric generation of a human.

Original marginal note NTR-B01-M012 1605 p. 201 · GOT-185

Latin Hominis generatio per bruta.

English The generation of a human through beasts.

NTR-B01-P004 1605 p. 201 · GOT-185

Latin Possibile etiam est naturae homines nasci ex animalibus, & hoc habet causas naturales, sed tamen sine impietate & haeresi id fieri nequit: nempe si homo commisceatur animali, & illud animal ut foemina sperma viri cum appetitu & libidine in suam matricem receperit, conceperit, & concluderit: tunc sperma necessario putrescit, & per continuum calorem corporis rursum homo & non animal inde nascitur. Nam semper quale est semen seminatum, talis etiam fructus inde nascitur, & nisi hoc fieret, contra naturalem lucem, & contra Philosophiam fieret. Quare quale semen est, talis herba nascitur inde. Ita ex semine cepae rursum gignitur cepa, non rosa, non nux, non lactuca, &c. Ita ex farre nascitur far, ex hordeo hordeum, ex avena avena. Ita fit & cum omnibus aliis fructibus, qui semen habent & seminantur, &c.

English It is also naturally possible for humans to be born from animals, and this has natural causes; yet it cannot occur without impiety and heresy. For if a man mates with an animal, and that animal, as a female, receives the man's sperm into its womb with appetite and desire, conceives and retains it, the sperm necessarily putrefies, and through the body's continuous heat a human, rather than an animal, is born from it. The fruit that arises always corresponds to the seed sown; if this did not happen it would be contrary to the light of nature and to philosophy. The plant that grows therefore corresponds to its seed. An onion grows again from onion seed, not a rose, a nut or a lettuce. Spelt grows from spelt, barley from barley and oats from oats. It is the same with every other fruit which has seed and is sown, and so forth.¹⁰

Original marginal note NTR-B01-M013 1605 p. 201 · GOT-185

Latin Semen quale, talis fructus.

English As the seed is, so is the fruit.

⁹. Venter equinus, literally "horse's belly," denotes the warm horse-dung environment used for digestion. The claimed resurrection of burned birds is part of this historical text's theory of regeneration; it is not an established biological process.

¹⁰. The assertion that a human can be conceived by another animal is biologically false. It is retained as the historical author's argument about seed, not endorsed as a fact.

Original marginal note NTR-B01-M014 1605 p. 201 · GOT-185

Latin Imaginatio muliebris quid possit.

English What a woman's imagination can do.

NTR-B01-P005 1605 pp. 201–202 · GOT-185, GOT-186

Latin Similiter etiam est possibile, & non contra naturam, ex muliere & viro nasci animal irrationale. Neque est hic de muliere iudicandum ut de viro, hoc est, non propterea debet haberi pro haeretica, quasi contra naturam egisset, sed imaginationi ipsius, id est tribuendum. Nam imaginatio ipsius est saepissime in causa. Et praegnantis mulieris imaginatio est tam efficax, ut in concipiendo semen in corpus suum, foetum variis viis transmutare possit: quoniam astra ipsius interiora tam fortiter diriguntur in foetum, ut pariant Impressionem & Influentiam. Quare infans in utero materno in formatione sua positus est in manu & voluntate matris suae, sicut argilla in manu figuli, qui inde format & facit quod vult, & ipsi libet: ita mulier praegrans format fructum in corpore suo iuxta suam imaginationem, prout astra ipsius sunt. Ergo saepe accidit, ut ex semine virili pecudes aut alia horrenda monstra gignantur, prout imaginatio matris fortiter in embrionem dirigitur, &c.

English Likewise it is possible, and not contrary to nature, for an irrational animal to be born from a woman and a man. Here the woman must not be judged as the man was: she must not on that account be held a heretic as though she had acted against nature. It is to be attributed to her imagination, for her imagination is very often the cause. A pregnant woman's imagination is so effective that, when she conceives seed within her body, she can transform the fetus in various ways, because her inner stars are directed so strongly toward it that they produce an impression and influence. During its formation the child in the mother's womb is thus placed in her hand and will, like clay in a potter's hand, which the potter forms and fashions as desired. So the pregnant woman forms the fruit within her body according to her imagination and the condition of her stars. Thus cattle or other dreadful monsters are often born from male seed, according to the force with which the mother's imagination is directed toward the embryo, and so forth.¹¹

NTR-B01-P006 1605 p. 202 · GOT-186

Latin Sicut autem iam audivistis per putrefactionem multas & varias res generari & vivificari, ita etiam sciendum est, quod ex multis herbis per putrefactionem varia nascantur animalia, quod harum rerum periti sciunt. Hic quoque sciendum est, quod talia animalia quae in & ex putrefactione nascuntur & fiunt, omnia aliquid veneni contineant, & venenosa sint, attamen unum longe plus & efficacius altero, & unum alia forma quam alterum, ut videtis in serpentibus, viperis, bufonibus, ranis, scorpionibus, basiliscis, araneis, apibus sylvestribus, formicis, multiplicibus vermibus, ut erucis, muscis, bruchis, &c. quae omnia in & ex putrefactione nascuntur. Nascuntur etiam multa monstra inter animalia. Sunt autem & monstra illa, quae non per se ex putrefactione nascuntur, sed per artem fiunt in vitro, ut dictum est, quia illae saepissime in valde mirabili specie & horrenda aspectu forma apparent, ut saepe cum multis capitibus, multis pedibus, multis caudis, multis coloribus, saepe vermes cum caudis piscium, vel pennis praediti, & alia insueta forma, ita ut similes visi non sint. Propterea non solum omnia animalia, quae

¹¹. Maternal imagination as an explanation of congenital differences belongs to the historical theory of impressions. It does not establish that a pregnant woman's thoughts cause the conditions described.

parentes non habent & ex sibi similibus non nascuntur monstra sunt, sed etiam quae ex aliis rebus nascuntur.

English As you have now heard that many different things are generated and brought to life through putrefaction, you must also understand that various animals arise from many plants through putrefaction, as those skilled in these matters know. Every animal born and made in and from putrefaction contains some poison and is poisonous, though one much more strongly and effectively than another, and one in a different form from another. You see this in serpents, vipers, toads, frogs, scorpions, basilisks, spiders, wild bees, ants and many worms, such as caterpillars, flies and grubs, and so forth: all these arise in and from putrefaction. Many monsters also arise among animals. There are also monsters which do not arise by themselves from putrefaction but are made through art in glass, as was said. They very often appear in an extraordinarily marvellous shape and a form dreadful to behold: with many heads, feet, tails or colours, or as worms with fish tails or feathers, or in some other unfamiliar form unlike anything seen before. Thus not only animals which have no parents and are not born from their like are monsters, but also those born from other things.

Original marginal note NTR-B01-M015 1605 p. 202 · GOT-186

Latin Animalia ex putrefactione orta omnia venenosa.

English All animals arising from putrefaction are poisonous.

Original marginal note NTR-B01-M016 1605 p. 202 · GOT-186

Latin Monstra quae & qualia sint.

English What monsters are and of what kinds.

Original marginal note NTR-B01-M017 1605 p. 202 · GOT-186

Latin Basilisci generatio artificialis.

English The artificial generation of the basilisk.

Original marginal note NTR-B01-M018 1605 p. 202 · GOT-186

Latin Basilisci venenum incertissimum.

English The basilisk's most uncertain poison.¹²

Original marginal note NTR-B01-M019 1605 p. 202 · GOT-186

Latin Mulieris menstruosae venenum quantum.

English How great the poison of a menstruating woman is.

NTR-B01-P007 1605 pp. 202–203 · GOT-186, GOT-187

Latin Ita vides de Basilisco, qui etiam est monstrum, & quidem monstrum super omnia monstra, & quo nullum est magis metuendum, propterea quod quemvis hominem solo aspectu & visu occidere possit: quia habet venenum super omnia venena, cui in toto mundo nihil comparari potest: & hoc venenum occultissimo modo gerit in suis oculis, & est imaginatum venenum, non valde absimile mulieri menstruosae, quae etiam occultum venenum gerit in oculis, ita ut solo aspectu ipsius speculum maculas acquirat & inficiatur. Ita etiam si vulnus vel ulcus inspicat, inficit illud simili modo, & curam eius prohibet: ita etiam suo afflatu, ut

¹² The margin prints *incertissimum*; the body asserts the poison's surpassing potency and hidden location in the eyes. The unusual marginal adjective is retained rather than silently replaced by a more expected reading.

visu, multas res inficit, corrumpit & invalidas reddit, & sic tactu. Nam videtis si tractet vinum tempore menstrui, quod illud cito mutetur & pendulum fiat: acetum quod tractat, perit & nihil valet: ita etiam vinum ardens suam vim amittit: similiter zibetha, ambra, muscus, & similia bene olentia ab ipsarum mulierum gestatione & attactu suum odorem amittunt: ita etiam aurum, & corallii suum colorem, etiam multae gemmae, ut specula, inde maculantur, &c. Ut autem ad propositum meum redeam scribendi de Basilisco, qua ratione & quo modo venenum in suo aspectu & oculis gerat, sciendum est, quod istam proprietatem & istud venenum habeat ab impuris mulieribus, ut supra dictum est. Basiliscus enim nascitur & crescit ex maxima impuritate muliebri, nempe ex menstruo, & ex sanguine spermatis, si illud in cucurbita vitrea ponatur, & in ventre equino putrefiat, in qua putrefactione basiliscus nascitur. Quis autem est tam alacer & audax, qui velit eum facere, vel eximere, & rursum interficere, qui non prius se speculis vestiat & munit? Nemini suaserim, imo omnes hic monitos velim ut sibi caveant.

English You see this in the basilisk, which is itself a monster—indeed, the monster above all monsters, and the most to be feared, because it can kill any person merely by its look and sight. Its poison surpasses all poisons and has no equal anywhere in the world. It carries that poison in its eyes in the most hidden way; it is an imagined poison, not very unlike a menstruating woman, who also carries a hidden poison in her eyes, so that her mere look stains and infects a mirror. If she looks at a wound or ulcer, she similarly infects it and prevents its cure; with her breath as with her sight she infects, corrupts and weakens many things, and likewise with her touch. You see that if she handles wine during menstruation, it soon changes and becomes ropy; vinegar she handles is spoiled and useless; ardent wine likewise loses its strength. Civet, ambergris, musk and similar fragrant substances lose their scent when carried or touched by such women; gold and coral lose their colour, and many gems, like mirrors, become stained, and so forth. But to return to my intended account of the basilisk and the reason and manner in which it carries poison in its look and eyes: it must be understood that it receives this property and poison from impure women, as stated above. The basilisk is born and grows from the greatest female impurity, namely menstrual matter and the blood of sperm, if it is placed in a glass cucurbit and putrefied in the horse's belly: in that putrefaction the basilisk is born. But who is so eager and bold as to make it, take it out and kill it again without first clothing and fortifying himself with mirrors? I would advise no one to do so; rather, I wish everyone warned to take care.¹³

Original marginal note NTR-B01-M020 1605 p. 203 · GOT-187

Latin Monstra non diu vivunt.

English Monsters do not live long.

¹³. The basilisk is a legendary creature. The assertions that menstruation poisons sight, breath, touch, food or materials are false historical beliefs; they are retained in the translation so that the text's argument remains visible. Imaginatum links this supposed poison to the preceding theory of imagination.

NTR-B01-P008 1605 p. 203 · GOT-187

Latin Sed ut in tractatione de monstris pergam, sciatis quod monstra inter animalia, quae ex aliis rebus & non ex sibi similibus nascuntur, raro diu vivant, praesertim si iuxta vel inter alia animalia vivere velint: quoniam ex ingenerata natura & divina ordinatione omnia monstra odiosa sunt sibi similibus recte natis animalibus, &c. Ita etiam monstra hominum, quae ex hominibus nascuntur, raro diu vivunt. Et quo sunt mirabiliora & honorabiliora, eo citius mors ea insequitur, ita ut fere nulli excedant 3. diem inter homines, nisi statim in loca secreta portentur, & ab omnibus hominibus segregentur. Porro sciendum est, Deum abhorrere ab eiusmodi monstris, & ipsi ea displicere, & quod nullum ex istis salvari possit, cum non gerant similitudinem Dei: unde nihil aliud coniici potest, nisi quod a Diabolo ita sint formata, & quod in Diaboli potius servitium, quam Dei sint nata, quoniam ex nullo unquam monstro opus bonum fluxit, imo potius omne malum, omne peccatum, omnes astutiae diabolicae. Nam sicut carnifex notat suos filios, eo quod ipsis abscindit aures, oculos expungit, buccas exurit, digitos, manus, & caput amputat: ita & diabolus suos notat filios per imaginationem matrum, quae ex malis cupiditatibus, libidinibus & cogitationibus in conceptione hauriunt. Propterea omnes homines fugiendi sunt, qui membro uno abundant, vel eo carent, aut alias duplum membrum aliquod habent. Est enim id praesagium Diaboli, & certissimum signum occultae nequitiae & astutiae, quae ex ipsis sequitur. Quare & raro absque carnifice vel saltem nota a carnifice, moriuntur.

English To continue the treatment of monsters: understand that monstrous animals born from other things rather than from their like seldom live long, especially if they try to live beside or among other animals. By innate nature and divine ordinance all monsters are hateful to properly born animals of their own kind, and so forth. Likewise human monsters born from humans seldom live long. The more extraordinary and remarkable they are, the sooner death overtakes them, so that hardly any survive beyond the third day among humans unless immediately carried to secret places and separated from all people. Furthermore, it must be understood that God recoils from such monsters and is displeased by them, and none can be saved, because they do not bear God's likeness. Nothing else can therefore be inferred except that they were formed thus by the Devil and born for the Devil's service rather than God's: no good work has ever flowed from a monster, but rather every evil, every sin and every diabolical cunning. As an executioner marks his sons by cutting off their ears, gouging out their eyes, burning their cheeks and amputating fingers, hands and head, so the Devil marks his sons through the imagination of mothers, who draw it in at conception from evil desires, lusts and thoughts. Everyone who has an extra limb, lacks a limb or otherwise has a doubled member must therefore be shunned. This is an omen of the Devil and a most certain sign of the hidden wickedness and cunning which follows from them. Thus they seldom die without the executioner, or at least a mark from the executioner.¹⁴

¹⁴. These hostile moral and theological claims about bodily differences are the historical speaker's assertions. They have no valid basis as judgments of a person's character, dignity or spiritual standing. The translation preserves them because suppressing them would conceal a significant part of the work's historical meaning. The Latin's *honorabiliora* is rendered "remarkable" in this context, not as an editorial endorsement.

Original marginal note NTR-B01-M021 1605 p. 203 · GOT-187

Latin Monstra ex Diabolo nascuntur.

English Monsters are born from the Devil.

Original marginal note NTR-B01-M022 1605 p. 203 · GOT-187

Latin Monstra fugienda.

English Monsters must be shunned.

Original marginal note NTR-B01-M023 1605 p. 203 · GOT-187

Latin Homunculi generatio artificialis.

English The artificial generation of the homunculus.

NTR-B01-P009 1605 pp. 203–204 · GOT-187, GOT-188

Latin Sed nec generationis Homunculorum ullo modo obliviscendum est. Est enim huius rei aliqua veritas, quanquam diu in magna occultatione & secreto hoc habitum sit, & non parva dubitatio & quaestio inter aliquos ex antiquis Philosophis fuerit, an naturae & arti possibile esset, hominem gigni extra corpus muliebri & matricem naturalem. Ad hoc respondeo, quod id arti Spagyricae & naturae nullo modo repugnet, imo bene possibile sit. Ut autem id fiat, hoc modo procedendum est: Sperma viri per se in cucurbita sigillata putrefiat summa putrefactione ventris equini per quadraginta dies, aut tandiu donec incipiat vivere & moveri ac agitari, quod facile videri potest. Post hoc tempus aliquo modo homini simile erit, attamen pellucidum & sine corpore. Si iam posthac quotidie Arcano sanguinis humani caute & prudenter nutriatur & pascatur, & per quadraginta septimanas in perpetuo & aequabili calore ventris equini conservetur, fit inde verus, & vivus infans, habens omnia membra infantis, qui ex muliere natus est, sed longe minor. Hunc nos Homunculum vocamus, & is postea eo modo quo alius infans summa diligentia & studio educandus est, donec adolescat & sapere & intelligere incipiat. Hoc iam est unum ex maximis secretis, quae Deus mortali & peccatis obnoxio homini patefecit. Est enim miraculum & magnale Dei, & arcanum super omnia arcana, & merito in secretis servari debet usque ad extrema tempora, quando nihil erit reconditi, sed omnia manifestabuntur, &c. Et quanquam hoc hactenus hominibus notum non fuerit, fuit tamen Sylvestribus & Nymphis & Gigantibus ante multa tempora cognitum, quia inde etiam orti sunt. Quoniam ex talibus Homunculis cum ad aetatem virilem perveniunt, fiunt gigantes, pygmaei, & alii homines magni, miraculosi, qui instrumenta sunt magnarum rerum, qui magnas victorias contra suos hostes obtinent, & omnia secreta & abscondita noverunt: quoniam arte acquirunt suam vitam: arte acquirunt corpus, carnem, ossa & sanguinem: arte nascuntur, quare etiam ars ipsis incorporatur & connascitur, & a nullo opus est ipsis discere, sed alii coguntur ab ipsis discere, quoniam ab arte orti sunt & existunt, ut rosa aut flos in horto, & vocantur Sylvestrium & Nympharum liberi, ob id quod vi & virtute sua non hominibus, sed spiritibus similes sint, &c.

English Nor must the generation of homunculi be forgotten. There is some truth in this, although it has long been kept deeply hidden and secret, and some ancient philosophers have debated and questioned at length whether nature and art could generate a human outside a woman's body and a natural womb. I answer that it conflicts in no way with spagyric art or nature, but is entirely possible. To accomplish it, proceed as follows: let a man's sperm putrefy by itself in a sealed cucurbit, in the utmost putrefaction of the horse's belly, for forty days, or until it begins to live, move and stir, which can readily be seen. After this time it will in some manner resemble a human, yet be transparent and without a body. If it is then carefully and prudently nourished and fed every day

with the arcanum of human blood and maintained for forty weeks in the continuous and even warmth of the horse's belly, a true living infant will result, with all the members of a child born of a woman, but much smaller. We call this a homunculus. It must afterward be brought up like any other child, with the greatest diligence and care, until it matures and begins to understand and think. This is one of the greatest secrets God has disclosed to mortal humanity subject to sin: a miracle and mighty work of God, an arcanum above all arcana, rightly to be kept secret until the last times, when nothing will be hidden but everything made manifest. Though this has hitherto been unknown to humans, it was known long ago to woodland beings, nymphs and giants, for they too originated from it. When such homunculi reach manhood they become giants, pygmies and other great, extraordinary humans, instruments of great things who win great victories over their enemies and know every secret and hidden thing. Through art they obtain their life; through art they obtain body, flesh, bones and blood; through art they are born. Art is therefore embodied and innate in them. They need learn from no one, while others are compelled to learn from them, since they have arisen and exist through art, like a rose or flower in a garden. They are called the children of woodland beings and nymphs because in their force and power they resemble spirits rather than humans, and so forth.¹⁵

Original marginal note NTR-B01-M024 1605 p. 204 · GOT-188

Latin Sylvestres, Nymphae, Gigantes, &c. ex Homunculis.

English Woodland beings, nymphs, giants and so forth arise from homunculi.

Original marginal note NTR-B01-M025 1605 p. 204 · GOT-188

Latin De tribus principiis. Mercurius Spiritus, Sulphur, Anima. Sal, Corpus.

English On the three principles: Mercury is spirit; Sulphur, soul; Salt, body.

NTR-B01-P010 1605 pp. 204–205 · GOT-188, GOT-189

Latin Hic quoque opus esset dicere de generatione metallorum, sed quoniam in libello de generatione metallorum satis de illis scripsimus, brevissime hic rem tractabimus, & tantum modo quae in dicto libello omisimus, hic breviter indicabimus. Hoc modo sciatis, quod omnia septem metalla nascantur ex triplici

materia, nempe ex ☿, Sulphure & Sale, attamen distinctis & peculiaribus coloribus.

Ob id Hermes non male dixit, ex tribus substantiis omnia septem metalla nasci & componi, similiter & tincturas & lapidem Philosophorum. Illas tres substantias nominat, spiritum, animam & corpus: sed non indicavit quomodo hoc intelligendum sit, aut quid per hoc velit, quanquam fortassis etiam tria principia potuit scivisse, sed non facit eorum mentionem. Quare non dico eum hic errasse, sed tantum reticuisse. Ut autem istae tres substantiae distincte & recte intelligantur, nempe spiritus, anima, corpus, sciendum est, quod nihil aliud significant, nisi tria principia, hoc est, Mercurium, Sulphur, salem, ex quibus omnia septem metalla generantur. Nam Mercurius est spiritus, sulphur est anima, sal est corpus, metallum

¹⁵ Homunculus means "little human." The text's forty-day and forty-week periods are distinct and retained exactly. This alleged artificial generation is not an established means of human reproduction. Sylvestres are woodland beings; translating them simply as human forest dwellers would lose the supernatural classification.

vero inter spiritum & corpus, de quo & Hermes dicit, est anima, quae quidem est sulphur, quod ista duo contraria corpus & spiritum unit & in unam essentiam mutat, &c.

English We should also speak here about the generation of metals. Since we have written enough about them in the little book *On the Generation of Metals*, however, we shall treat the matter very briefly here and indicate only what we omitted there. Understand that all seven metals arise from a threefold material, namely Mercury, Sulphur and Salt, yet in distinct and particular colours. Hermes therefore spoke well when he said that all seven metals are born and composed from three substances, and likewise tinctures and the philosophers' stone. He names those three substances spirit, soul and body, but did not explain how this is to be understood or what he meant. Perhaps he knew the three principles too, but he does not mention them. I therefore do not say he erred here, but merely kept silent. To understand those three substances—spirit, soul and body—clearly and correctly, know that they signify nothing but the three principles, Mercury, Sulphur and Salt, from which all seven metals are generated. Mercury is spirit, Sulphur soul and Salt body. What lies in the metal between spirit and body, of which Hermes also speaks, is soul, namely Sulphur, which unites those two contraries, body and spirit, and changes them into a single essence, and so forth.¹⁶

Original marginal note NTR-B01-M026 1605 p. 205 · GOT-189

Latin *Metalla an arte per ignem fieri queant.*

English Whether metals can be made by art through fire.

NTR-B01-P011 1605 p. 205 · GOT-189

Latin *Hoc autem non ita intelligendum est, quod ex quolibet ☿, quolibet sulphure, & quolibet sale septem metalla illa generentur, aut similiter tinctura aut lapis philosophorum per Alchymistae artem & industriam in igni, sed in montibus per Archaeum terrae oportet generari omnia septem metalla: Nam Alchymista facilius*

metalla transmutabit quam generabit aut faciet. Nihilominus ♀ vivus mater est omnium septem metallorum, & merito mater metallorum dicitur. Est enim metallum apertum, & sicut in se continet omnes colores, quos in igni ex se reddit, ita etiam occulte in se omnia metalla continet, quae extra ignem ex se non praebet, &c.

English This must not be understood to mean that the seven metals, or likewise a tincture or the philosophers' stone, can be generated from just any Mercury, any Sulphur and any Salt in fire by an alchemist's art and diligence. All seven metals must be generated in the mountains through the Archaeus of the earth. An alchemist will transmute metals more easily than generate or make them. Nevertheless, living Mercury is the mother of all seven metals and will rightly be called the mother of

¹⁶ The seven metals follow traditional planetary metallurgy. The printed phrase *metallum vero inter spiritum & corpus* is awkward; its ensuing relative clause identifies the mediating soul with Sulphur. No modern chemical equation is implied by the three principles.

metals. It is an open metal: just as it contains within itself all colours, which it brings forth in fire, so it secretly contains all metals, which it does not bring forth outside fire, and so forth.

Original marginal note NTR-B01-M027 1605 p. 205 · GOT-189

Latin Mercurius vivus metallorum mater.

English Living Mercury is the mother of metals.

Original marginal note NTR-B01-M028 1605 p. 205 · GOT-189

Latin Regeneratio metallorum in tincturas.

English The regeneration of metals into tinctures.

NTR-B01-P012 1605 p. 205 · GOT-189

Latin Sed regeneratio & renovatio metallorum fit ita: Sicut homo in matris suae uterum redire potest, hoc est in terram ex qua primus homo fuit, & ita denuo nasci

in ultimo die: ita etiam omnia metalla in ☿ vivum redire possunt & ☿ fieri, & per ignem regenerari & clarificari, si per 40. septimanas in perpetuo calore, ut infans in utero materno permaneant. Ita iam nascuntur, non communia metalla, sed tingentia metalla. Nam si ☽ ut dictum est, regeneretur, tinget postea omnia alia metalla in ☽, ita aurum reliqua metalla in ☼, & similiter de omnibus aliis metallis intelligendum est.

English The regeneration and renewal of metals occurs as follows. Just as a person can return to the mother's womb—that is, to the earth from which the first human came—and thus be born anew on the last day, so all metals can return to living Mercury, become Mercury, and be regenerated and clarified through fire if they remain for forty weeks in continuous warmth, like a child in the mother's womb. What are born then are tinging metals rather than common metals. If Silver is regenerated as described, it will afterward tinge all other metals into Silver; likewise Gold will tinge the remaining metals into Gold. The same must be understood of every other metal.¹⁷

Original marginal note NTR-B01-M029 1605 p. 205 · GOT-189

Latin Anima est medium quo spiritus corpori iungitur.

English Soul is the medium by which spirit is joined to body.

NTR-B01-P013 1605 p. 205 · GOT-189

Latin Quod autem Hermes dixit, quod sola anima sit illud medium, quod coniungat spiritum corpori, non inepte sensit. Cum enim sulphur sit illa anima, & sicut ignis, omnes res maturet & excoquat, poterit etiam spiritum ligare cum corpore & una incorporare & unire, ita ut inde valde nobile corpus gignatur. Quanquam non vulgare combustibile sulphur pro anima metallorum habendum est, sed anima est aliud quid quam corpus combustibile & corruptibile. Quare a nullo igni comburi potest, cum sit tota ignis: & revera nihil aliud est quam Quinta Essentia Sulphuris, quae ex reverberato sulphure per spiritum vini extrahitur, & coloris rubei & pellucida existit sicut rubinus: quod quidem magnum & praestans Arcanum est ad

¹⁷ The source uses ☿ for Mercury, ☽ for Silver and ☼ for Gold. The translation gives the metal names in these material contexts while preserving the signs in the facing Latin.

transmutandum metalla alba, & ad coagulandum ☿ vivum in fixum & probatum ☉:
hoc tibi pro thesauro ditescendi commendatum habeas, & merito hoc unico arcano
in transmutatione metallorum contentus esse debes.

English Hermes was right to say that soul alone is the medium which joins spirit to body. Since Sulphur is that soul and, like fire, matures and cooks all things, it can also bind spirit to body, embody and unite them together, so that a very excellent body is generated. Yet common combustible sulphur must not be taken as the soul of metals: that soul is something other than a combustible and corruptible body. It therefore cannot be consumed by any fire, since it is entirely fire. In truth it is nothing other than the quintessence of Sulphur, extracted from reverberated sulphur by spirit of wine, red in colour and transparent like a ruby. This is a great and outstanding arcanum for transmuting white metals and coagulating living Mercury into fixed and tested Gold. Regard it as a treasure commended to you for enrichment: you ought rightly to be content with this one arcanum in the transmutation of metals.

Original marginal note NTR-B01-M030 1605 p. 205 · GOT-189

Latin Anima metallorum quid sit.

English What the soul of metals is.

Original marginal note NTR-B01-M031 1605 p. 205 · GOT-189

Latin Metallorum generatio unde.

English Whence the generation of metals comes.

NTR-B01-P014 1605 p. 205 · GOT-189

Latin De generatione minerarum & semimetallorum nihil aliud sciatur, quam quod initio de metallis dictum est, nempe quod simili modo ex tribus illis principiis, nempe ☿, sulphure, & sale nascentur, quanquam non ut metalla ex perfectis, sed ex imperfectioribus & tenuioribus Mercurio, sulphure & sale, & tamen cum suis distinctis coloribus.

English Concerning the generation of mineral ores and semimetals, nothing further need be understood beyond what was said of metals at the beginning: they arise in the same way from those three principles, Mercury, Sulphur and Salt. Yet unlike metals, they arise from Mercury, Sulphur and Salt which are less perfect and more tenuous, rather than perfected, and still have their distinct colours.

Original marginal note NTR-B01-M032 1605 p. 206 · GOT-190

Latin Gemmarum generatio unde.

English Whence the generation of gems comes.

Original marginal note NTR-B01-M033 1605 p. 206 · GOT-190

Latin Lapidum generatio quae.

English What the generation of stones is.

NTR-B01-P015 1605 p. 206 · GOT-190

Latin Generatio gemmarum fit & fluit ex subtilitate terrae ex pellucido & Crystallino Mercurio, sulphure, & sale, etiam iuxta suos distinctos colores. Sed generatio vulgarium lapidum est ex subtilitate aquae, ex mucilaginosa Mercurio, sulphure, sale. Nam ex mucilagine aquae nascuntur omnes lapides, quin & calculi: & arenae inde in lapides coagulantur, quod oculis patet. Nam quivis lapis in aqua positus cito ad se mucilaginem trahit. Si iam ista mucilaginosa materia a talibus lapidibus accipiat, & in cucurbita coaguletur, fit inde lapis talis, qualis in ista aqua, sed longo tempore, per se nasceretur & coagularetur, &c.

English Gems are generated and flow from the subtlety of earth, from transparent and crystalline Mercury, Sulphur and Salt, each according to its distinct colours. Common stones, however, are generated from the subtlety of water, from mucilaginous Mercury, Sulphur and Salt. All stones, including pebbles, arise from the mucilage of water; sand too is coagulated from it into stones, as is evident to the eyes. Any stone placed in water soon attracts mucilage to itself. If that mucilaginous material is taken from such stones and coagulated in a cucurbit, a stone results such as would have arisen and coagulated by itself in that water, but over a long time, and so forth.

Original marginal note NTR-B01-M034 1605 p. 206 · GOT-190

Latin Lapidum generatio artificialis.

English The artificial generation of stones.

Book 2 On the Growth of Natural Things

Liber II. De crescentibus rerum naturalium.

Latin witness: Frankfurt 1605, printed pp. 206–208, SUB Göttingen PPN578052199.

Source facsimile: <https://gdz.sub.uni-goettingen.de/id/PPN578052199?tify=%7B%22pages%22%3A%5B190%5D%7D>

Original marginal note NTR-B02-M001 1605 p. 206 · GOT-190

Latin Calor & humiditas crescentium rerum causa.

English Heat and moisture are the cause of things' growth.

NTR-B02-P001 1605 pp. 206–207 · GOT-190, GOT-191

Latin Satis manifestum est, & cuilibet notum, quod per caliditatem & humiditatem omnes res naturales crescant & maturentur, quod satis demonstratur ex pluvia & sole consequente. Nemo enim negare potest pluviam terram foecundare, & fatendum est omnibus a sole omnes fructus maturari. Cum igitur iuxta ordinationem divinam hoc naturae postulatio sit, quis repugnabit vel non credet etiam hominem hoc posse per prudentem & solertem suam industriam artis Alchymisticae, ita ut infrugiferum frugiferum, immaturum maturum reddat, & omnia crescere & augeri faciat. Dicit enim scriptura, Deum homini omnia creata subiecisse, & tanquam rem propriam in manus eius tradidisse, ut illis ad suam necessitatem uteretur, ut dominaretur piscibus maris, volucris coeli & omnibus rebus in terris, nulla re excepta. Quare homo merito gaudere debet, quod Deus ipsum in luce Naturae adeo illustrarit & donarit, ut omnes creaturae Dei ipsi obedire & subditae esse cogantur, & praecipue tota terra, & omnia quae in ea & super ea nascuntur, vivunt & moventur. Quandoquidem igitur oculariter videmus, & quotidiana experientia docemur, quod quo saepius & copiosius pluvia terram humectat, & illam Sol suo calore & fervore iterum exsiccat, eo citius fructus terrae prodeant, & maturentur, etiam omnes fructus ita crescant & augeantur, quodcumque sit tempus anni: nemo deinceps miretur, quod Alchymista quoque multiplicibus imbibitionibus & distillationibus idem facere possit. Quid enim aliud est pluvia quam imbibitio terrae? & calor & aestus Solis, quid est aliud quam distillatio Solis, qui tales humiditates rursus attrahit? Propterea dico possibile esse per talem cooperationem in media hyeme pulcras virentes herbas, flores & alios fructus producere, per terram & aquam, ex semine & radice. Si iam hoc fit in herbis omnibus & floribus, fiet etiam in multis similibus rebus, nempe in omnibus mineris, quarum imperfecta metalla per aquam mineralem maturari possunt per Alchymistae solertis industriam & artem. Similiter possunt omnes Marcasitae, Granati, Zineta, Arsenica, Talka, Cachymiae, Bisemuta, Antimonia, &c. quae omnia

immaturum ☉ & ☽ secum vehunt, ita maturari, ut ditissimis auri & argenti venis aequari possint, tantum per talem cooperationem, &c. Ita etiam Elixir & Tincturae metallorum maturantur & perficiuntur.

English It is sufficiently evident and known to everyone that all natural things grow and mature through heat and moisture, as rain and the sunshine that follows it sufficiently demonstrate. No one can deny that rain makes the earth fertile, and everyone must acknowledge that the sun matures all fruits. Since this is nature's requirement according to divine ordinance, who will object or refuse to believe that a human can do it too through the prudent and skilful diligence of alchemical art: make the unfruitful fruitful, the immature mature, and cause everything to grow and increase? Scripture says that God subjected all created things to humanity and placed them in human hands as a

possession, to be used for human need, granting dominion over the fish of the sea, the birds of heaven and everything on earth without exception. A person should therefore rightly rejoice that God has so enlightened and endowed humanity in the light of nature that all God's creatures are compelled to obey and be subject to it, especially the entire earth and everything born, living and moving in and upon it. We see with our own eyes, and daily experience teaches us, that the more often and abundantly rain moistens the earth and the sun dries it again with its heat and fervour, the sooner the earth's fruits emerge and mature. All fruits thus grow and increase, whatever the season. Let no one henceforth be surprised that an alchemist can do the same through repeated imbibitions and distillations. What is rain but an imbibition of the earth? What are the sun's heat and warmth but the sun's distillation, by which it draws such moistures up again? I therefore say it is possible by such cooperation to produce beautiful green plants, flowers and other fruits in midwinter, through earth and water, from seed and root. If this happens in all plants and flowers, it will also happen in many similar things, namely all ores whose imperfect metals can be matured through mineral water by a skilful alchemist's diligence and art. Likewise all marcasites, garnets, zineta, arsenics, talcs, cachymiae, bismuths, antimonies and so forth, which all carry immature Gold and Silver within them, can be matured by such cooperation alone until they equal the richest veins of gold and silver. Elixir and the tinctures of metals are likewise matured and perfected.¹⁸

Original marginal note NTR-B02-M002 1605 p. 206 · GOT-190

Latin *Artificiosa rerum maturatio.*

English The artificial maturation of things.

Original marginal note NTR-B02-M003 1605 p. 206 · GOT-190

Latin *Homini a Deo omnia subiecta.*

English God has subjected all things to humanity.

Original marginal note NTR-B02-M004 1605 p. 206 · GOT-190

Latin *Generatio artificialis fructuum.*

English The artificial generation of fruits.

Original marginal note NTR-B02-M005 1605 p. 207 · GOT-191

Latin *Maturatio minerarum.*

English The maturation of ores.

Original marginal note NTR-B02-M006 1605 p. 207 · GOT-191

Latin *Barba & unguis nascuntur in mortuis.*

English Beard and nails grow in the dead.

NTR-B02-P002 1605 p. 207 · GOT-191

Latin *Cum igitur ut dictum est, humiditas & caliditas omnia maturent & crescere faciant, nemo miretur, quod homini malefico in patibulo aut rota post longum tempus, barba, capilli, & unguis nascantur, neque pro signo innocentiae ipsius habeatur, ut imperiti iudicant, hoc enim naturale est, & ex naturalibus causis fluit.*

¹⁸ The dominion passage paraphrases Genesis 1:26–28. The author extends a comparison with cultivation into a claim about maturing metals; that extension is part of the historical argument. Zineta and cachymiae are retained as period material categories, not assigned an unqualified modern chemical identity.

Nam dum humiditas in homine est, crescunt ipsi ungues, barba & capilli: & quod maius est, homini sepulto in terra ipsa nascuntur ungues, barba & capilli, usque ad secundum annum vel usque ad putrefactionem ipsius, &c.

English Since moisture and heat mature everything and make it grow, as stated, no one should be surprised that the beard, hair and nails of an evildoer on the gallows or wheel grow after a long time. Nor should it be held a sign of innocence, as the unskilled judge: it is natural and flows from natural causes. As long as moisture remains in a person, the nails, beard and hair grow. More than that, the nails, beard and hair of a person buried in the earth grow until the second year or until that person's putrefaction, and so forth.¹⁹

NTR-B02-P003 1605 p. 207 · GOT-191

Latin Sciendum etiam est multas res in perpetuum crescere & augeri in magnitudine, pondere & virtute, in aqua & terra, in quibus etiam bona & efficacia permanent, ut sunt metalla, marcasitae, cachymiae, talka, granati, antimonium, Bisemuta, gemmae, perlae, corallii, omnes lapides & argillae. Ita etiam effici potest, ut ☉ crescat & augeatur in pondere & corpore, si tantum modo in terra Orientem spectante sepeliatur, & semper recenti urina hominis & stercore columbino foecundetur.

English It must also be understood that many things continually grow and increase in size, weight and virtue in water and earth, where their qualities and efficacy are also preserved: metals, marcasites, cachymiae, talcs, garnets, antimony, bismuth, gems, pearls, coral, all stones and clays. Gold too can be made to grow and increase in weight and body if it is merely buried in earth facing east and continually fertilised with fresh human urine and pigeon dung.²⁰

Original marginal note NTR-B02-M007 1605 p. 207 · GOT-191

Latin ☉ Augmentatio.

English The augmentation of Gold.

Original marginal note NTR-B02-M008 1605 p. 207 · GOT-191

Latin Auri generatio in cucurbita ut fiat.

English How to bring about the generation of Gold in a cucurbit.

Original marginal note NTR-B02-M009 1605 p. 207 · GOT-191

Latin Quomodo fiat arbor philosophorum.

English How the philosophers' tree is made.

NTR-B02-P004 1605 p. 207 · GOT-191

Latin Possibile etiam est aurum per industriam & solertiam periti Alchymistae eo impelli, ut in cucurbita more arboris crescat, cum multis mirabilibus ramusculis & frondibus, quod quidem iucundum aspectu & valde admirabile est. Proceditur autem sic: Aurum calcinetur per aquam regis, ut fiat calx cretacea, quam impone in cucurbitam, & infunde bonam & recentem aquam regis, & aquam gradationis, ita ut quatuor digitos transversos supermineat, & iterum abstrahe in tertio gradu ignis, donec nihil amplius ascendat. Aquam distillatam, iterum superfunde, & iterum

¹⁹. The historical claim of continuing hair and nail growth after death is retained. Changes in the appearance of a corpse do not establish the prolonged growth asserted here.

²⁰. The source specifies burial in earth facing east. Its claim that gold grows through fertilisation is not a modern metallurgical finding.

distillando abstrahe ut antea. Hoc tandiu fac, donec videas ☉ surgere in vitro, & crescere in forma arboris habentis multos ramos & frondes: atque ita fit ex ☉ mirabilis & iucundus frutex, quem Alchymistae herbam auream & arborem philosophorum appellant. Ita etiam proceditur cum ☽ & aliis metallis, sic tamen ut calcinatio aliter fiat, & alia aqua fortis accipiat, quod quidem tuae experientiae relinquo. Si Alchymiae peritus es, recte te in his geres.

English Through an expert alchemist's diligence and skill, gold can also be induced to grow like a tree in a cucurbit, with many marvellous little branches and leaves, a delightful and most astonishing sight. Proceed as follows. Calcine gold through aqua regis so that it becomes a chalklike calx. Place this in a cucurbit and pour in good fresh aqua regis and water of gradation until they stand four transverse fingerbreadths above it. Draw them off again at the third degree of fire until nothing more rises. Pour the distilled water on again and draw it off by distillation as before. Continue until you see Gold rise in the glass and grow in the form of a tree with many branches and leaves. Thus a marvellous and delightful shrub is made from Gold, which alchemists call the golden plant and the philosophers' tree. Proceed likewise with Silver and other metals, but perform the calcination differently and take a different aqua fortis. I leave this to your experience: if you are skilled in alchemy, you will conduct yourself properly in these matters.²¹

Original marginal note NTR-B02-M010 1605 p. 208 · GOT-192

Latin *Formatio lapidis artificialis.*

English The artificial formation of a stone.

NTR-B02-P005 1605 pp. 207–208 · GOT-191, GOT-192

Latin Sciatis quoque quemlibet silicem sumptum ex aqua fluviali & positum in cucurbita, superfusa sua aqua fluviali, ut impleatur cucurbita, quae iterum inde distillando abstrahatur dum aliqua gutta ascendit usque dum lapis arefiat, & hac aqua cucurbita iterum impleatur, & rursum abstrahatur, & hoc tandiu fiat, donec cucurbita sit plena illo lapide, Alchymistice in paucis diebus valde magnum fieri posse, quod Archeus aquarum in multis annis vix faceret. Si postea vitrum in saxo frangas, habebis silicem in forma cucurbitae, quasi in vitrum fuisset infusus: & quanquam hoc tibi nil prosit, sit tibi tamen pro re mira.

English Know also that any flint taken from river water and placed in a cucurbit, with its own river water poured over it to fill the vessel, can be made very large alchemically in a few days—something the Archaeus of waters would scarcely do in many years. Distil the water off while any drop still rises, until the stone is dry; refill the cucurbit with that water and draw it off again. Continue until the cucurbit is full of that stone. If you then break the glass against a rock, you will have flint in the shape of the cucurbit, as though it had been poured into the glass. Although this benefits you nothing, nevertheless regard it as a marvel.

²¹. Aqua regis, aqua fortis and aqua gradationis are historical reagent names. They are retained without turning this passage into a modern laboratory recipe. The philosophers' tree here is a claimed visible metallic growth; the name need not imply that a living plant has been produced.

Book 3 On the Preservation of Natural Things

Liber III. De conservationibus rerum naturalium.

Latin witness: Frankfurt 1605, printed pp. 208–213, SUB Göttingen PPN578052199.

Source facsimile: <https://gdz.sub.uni-goettingen.de/id/PPN578052199?tfy=%7B%22pages%22%3A%5B192%5D%7D>

Original marginal note NTR-B03-M001 1605 p. 208 · GOT-192

Latin Hostes rerum cognoscendi.

English The enemies of things must be known.

NTR-B03-P001 1605 p. 208 · GOT-192

Latin Ut res conservari & a nocumento defendi possit, necesse est primum omnium bene ipsius hostem cognosci, ut ab illo praeservari possit, ne ab ipso laedatur & corrumpatur in sua substantia, virtute, vi, aut quomodocunque damnum illud nominari possit. Multum igitur in hoc situm est, ut hostis omnium rerum naturalium cognoscatur. Quis enim sibi a damno & adverso casu cavere possit, qui ignoret suum hostem & nocere. Quare necessarium est, ut is bene sit cognitus. Sunt enim multiplices hostes. Praeterea tam necessarium est nosse mala, quam nosse bona. Quis enim bonum absque cognitione mali cognoscere potest? nemo profecto. Ita nemo scire potest, quantus thesaurus sit sanitas, qui nunquam aegrotavit. Quis scit quid gaudium sit, qui nunquam moestus vel tristis fuit? Et quis recte sciret, quid Deus esset, qui nihil sciret de diabolo? Quare cum Deus nobis notum fecerit hostem animae nostrae, nempe Diabolum, etiam nobis significat hostem vitae nostrae, nempe mortem, quae est hostis nostri corporis, nostrae sanitatis, hostis medicinae & omnium rerum naturalium: inquam etiam nobis facit, quomodo & per quid fugari debeat. Nam sicut nullus morbus est, contra quem non etiam sit creata & inventa medicina, quae illum curet & expellat: ita etiam semper una res est contra aliam posita, una aqua contra alteram, unus lapis contra alterum, una minera contra alteram, unum venenum contra alterum, unum metallum contra alterum: ita in pluribus rebus, quas non opus est omnes hic recensere.

English For a thing to be preserved and defended from harm, its enemy must first be well known, so that it may be protected against it and not injured or corrupted in substance, virtue or force, or whatever name that damage may bear. Much therefore depends on knowing the enemy of every natural thing. Who can guard against damage and adversity without knowing the enemy and its capacity to harm? That enemy must be well known, for enemies are of many kinds. Moreover, knowing bad things is as necessary as knowing good. Who can know good without knowledge of evil? Surely no one. No one who has never been ill can know what a treasure health is. Who knows joy who has never been sorrowful or sad? And who could rightly know what God is without knowing anything of the Devil? Since God has made known to us the enemy of our soul, the Devil, he also shows us the enemy of our life: death, which is the enemy of our body and health, of medicine and of all natural things. Indeed, he also makes known how and by what means it should be driven away. Just as no disease exists for which a medicine has not also been created and found to cure and expel it, so one thing is always set against another: one water against another, one stone against another, one ore against another, one poison against

another, one metal against another. It is so in many things, all of which need not be listed here.²²

Original marginal note NTR-B03-M002 1605 p. 208 · GOT-192

Latin Mors rerum hostis.

English Death is the enemy of things.

Original marginal note NTR-B03-M003 1605 p. 208 · GOT-192

Latin Conservatio res inveniuntur in reb. omnibus.

English Preservatives are found among all things.²³

Original marginal note NTR-B03-M004 1605 p. 208 · GOT-192

Latin Conservatio rerum quibus fiat, & quomodo.

English By what means and how things are preserved.

NTR-B03-P002 1605 p. 208 · GOT-192

Latin Quomodo autem & per quid quaelibet res praeservetur, & a damno custodiatur, sciendum est, multas res in terra conservari oportere, & praecipue omnes radices in terra longo tempore efficaces & incorruptae permanent: similiter & herbae & flores & omnes fructus in aqua incorrupti & virides manent: ita etiam multi alii fructus & poma in aqua conservari possunt, & praeservari ab omni putredine, donec nova nascentur poma.

English As to how and by what means each thing is preserved and guarded from damage: many things must be preserved in earth, and especially all roots remain effective and uncorrupted in earth for a long time. Plants, flowers and all fruits likewise remain uncorrupted and green in water. Many other fruits and apples can also be kept in water and protected from all decay until new apples are born.

Original marginal note NTR-B03-M005 1605 p. 209 · GOT-193

Latin Conserv. carnis & sanguinis quibus fiat.

English By what means flesh and blood are preserved.

NTR-B03-P003 1605 p. 209 · GOT-193

Latin Ita etiam caro & sanguis, quae quidem citissime putrescunt & rancida fiunt in frigida fontana aqua conservari possunt, & non solum hoc, sed & cooptatione renovatae & recentis aquae fontanae in Quintam Essentiam transmutari, atque in perpetuum a putredine & malo odore sine omni Balsamo conservari. Non solum autem ista carnem & sanguinem conservat, sed & alias carnes & sanguines (ut ita dicam) conservat, & praeterea corpus hominis ab omni putredine & multis morbis, qui ex putredine oriuntur, melius quam vulgaris Mummia. Ut autem sanguis per se a putredine & odore gravi conservetur, & non ut Quinta Essentia, & ita ut & alium sanguinem sicut iam dictum, conservet, hoc processu utaris: Separetur sanguis a suo phlegmate, quod per se movetur, & in superiorem partem expellitur. Hanc aquam subtili inclinatione vasis abstrahe, & tantundem aquae salis sanguini adice, quam quidem aquam in nostra chirurgia docemus conficere: illa aqua statim miscetur sanguini, & ita conservat sanguinem, ut in perpetuum non putrescat vel rancescat, sed semper recens & egregie rubens maneat post multos annos tam bene ut prima die, quod quidem magnum miraculum est. Quod si aquam salis non scias conficere, vel non habeas promptu, tantundem optimi & praestantissimi balsami

²². The emphatic inquam, “I say”, resumes the preceding argument, with “known” understood from the earlier notum fecerit. The claim that every disease has an available remedy belongs to the historical author’s providential account, not present-day medical guidance.

²³. The marginal Latin is compressed and grammatically rough. It points to the preceding catalogue of opposed materials.

superfunde, qui idem praestat. Talis iam sanguis est Balsamus Balsamorum, & vocatur Arcanum Sanguinis, & est tam mirabilis & tantae virtutis, ut incredibile sit dictu: quare pro magno secreto in medicina occultabis.

English Flesh and blood, which putrefy and become rancid very quickly, can likewise be preserved in cold spring water. More than that, through the cooperation of renewed fresh spring water they can be changed into a quintessence and preserved forever from decay and bad smell without any balsam. This not only preserves flesh and blood but also preserves other flesh and blood, so to speak, and furthermore protects the human body from all putrefaction and many diseases arising from putrefaction, better than common mummia. To preserve blood by itself from putrefaction and offensive smell, rather than as a quintessence, and so that it may preserve other blood as just described, use this process. Separate the blood from its phlegm, which moves of itself and is expelled to the upper part. Draw this water off by gently tilting the vessel, and add an equal quantity of salt water to the blood: we teach how to prepare that water in our Surgery. It immediately mixes with the blood and preserves it so that it never putrefies or becomes rancid, but remains fresh and beautifully red for many years, as on its first day. This is a great miracle. If you do not know how to prepare the salt water, or do not have it ready, pour on the same quantity of the best and most excellent balsam, which accomplishes the same thing. Such blood is now the balsam of balsams and is called the arcanum of blood. It is so marvellous and so powerful as to be incredible to tell; therefore conceal it as a great secret in medicine.²⁴

Original marginal note NTR-B03-M006 1605 p. 209 · GOT-193

Latin Arcanum sanguinis humani, ut paretur.

English How the arcanum of human blood is prepared.

Original marginal note NTR-B03-M007 1605 p. 209 · GOT-193

Latin Conserv. metallorum quibus fiat.

English By what means metals are preserved.

Original marginal note NTR-B03-M008 1605 p. 209 · GOT-193

Latin Metallorum hostes qui.

English What the enemies of metals are.

NTR-B03-P004 1605 p. 209 · GOT-193

Latin In conservatione metallorum primum cognoscendi sunt hostes ipsorum, ut eo melius a damno conservari possint. Sunt igitur praecipui hostes metallorum, omnes aquae fortes, omnes aquae regis, omnia corrosiva, omnia salia, sulphur crudum, antimonium & mercurius. Ut autem specialiter sciamus, quomodo ista omnia suam inimicitiam exerceant, dico, quod aquae fortes, aquae regis, corrosiva, & salia suam inimicitiam ostendant in eo, quod omnia metalla mortificant, dissolvant, calcinent, corrumpant & in nihilum redigant. Sulphur crudum suam inimicitiam ostendit suo fumo: nam suo fumo adimit Veneri suum colorem & rubedinem, & albam reddit. Metallis albis ut Lunae, Iovi, Saturno & Marti aufert suam albedinem & rubefacit ea, vel colorem rufum ipsis inducit. Auro detrahit pulcrum & amabilem suam

²⁴ Mummia here denotes a historical preservative or medicinal bodily substance, not simply a wrapped museum mummy. The unspecified aqua salis is referred to another work; replacing it with an assumed modern saline formulation would falsely complete the source's directions. None of these preservation or medicinal claims has been validated by this edition.

flavedinem & aureum colorem, & nigrum reddit, & plane deforme, ut deformius esse non possit.

English In preserving metals their enemies must first be known, so that they can better be guarded against harm. The chief enemies of metals are all aquae fortes, all aquae regis, all corrosives, all salts, crude sulphur, antimony and mercury. To understand specifically how all these exercise their hostility, I say that aquae fortes, aquae regis, corrosives and salts show it by mortifying, dissolving, calcining, corrupting and reducing all metals to nothing. Crude sulphur shows its hostility through its fumes: they take away Venus's colour and redness and make it white. From white metals such as Luna, Jupiter, Saturn and Mars they remove whiteness and make them red, or impart a reddish colour. From Gold they strip its beautiful, pleasing yellowness and golden colour, making it black and utterly disfigured, as disfigured as can be.²⁵

Original marginal note NTR-B03-M009 1605 p. 209 · GOT-193

Latin Sulphuris fumus ut metalla afficiat.

English How sulphur fumes affect metals.

Original marginal note NTR-B03-M010 1605 p. 209 · GOT-193

Latin Antimonium.

English Antimony.

NTR-B03-P005 1605 p. 209 · GOT-193

Latin Antimonium suam inimicitiam in hoc ostendit, quod omnia metalla, cum quibus in igne liquescit, & cum quibus miscetur, spoliat, aufert & praedatur, & praeterea non absimiliter sulphuri, suo fumo metallis genuinum & naturalem colorem furatur & alium substituit.

English Antimony shows its hostility by stripping, taking away and plundering all metals with which it melts in fire and mixes. Moreover, like sulphur, its fumes steal the metals' native natural colour and substitute another.

Original marginal note NTR-B03-M011 1605 p. 210 · GOT-194

Latin Argentum vivum.

English Quicksilver.

NTR-B03-P006 1605 p. 210 · GOT-194

Latin Argentum vivum vero suam hostilem vim erga metalla in eo exercet, quod metalla cum quibus coniungitur, invadit & solvit, ita ut malagma ex illis faciat: praeterea fumus ipsius, quem nos mercurium vulgi nominamus, omnia metalla immalleabilia, fragilia reddit & calcinat, & omnia rubra aurei coloris metalla albat.

Ferri autem & chalybis summus hostis est. Nam si ☿ vulgi perticam ferream attingat, vel illa oleo Mercuriali ungatur, illa pertica postea ut vitrum frangetur & decurtabitur, quod quidem magnum secretum, & valde occultandum est. Similiter & magnes a ♀ custodiri debet & servari: nam cum eo similiter ut cum ♂ inimicitiam

²⁵ The planetary names here stand for traditional metals: Venus/Copper, Luna/Silver, Jupiter/Tin, Saturn/Lead and Mars/Iron. "Mortification" and "death" in metallic operations must be read within this work's broader account of transformation.

exercet. Nam quilibet magnes, quem ☿ vulgi attingit, aut qui oleo Mercuriali ungitur, aut solum modo in Mercurio ponitur, postea nullum ferrum attrahit in perpetuum. De hoc nemo miretur. Habent enim hae res causas naturales, nempe tales, quod Mercurius extrahat spiritum ferri, quem magnes in se latentem continet:

quare & spiritus ferri in magnete corpus ♂ ad se trahit: & hoc non solum in magnete fit, sed in omnibus aliis rebus naturalibus, ita ut semper peregrinus spiritus, qui in alieno est corpore, quod non est naturae suae naturae, corpus attrahat: & hoc non solum de magnete sciendum est, sed & de omnibus rebus naturalibus, ut minerais, lapidibus, herbis, radicibus, hominibus & animalibus.

English Quicksilver exercises its hostile power against metals by attacking and dissolving those with which it joins, making an amalgam from them. Its fumes—what we call common mercury—also make all metals unmalleable and brittle and calcine them, and whiten every red or gold-coloured metal. It is the greatest enemy of iron and steel: if common Mercury touches an iron rod, or the rod is anointed with mercurial oil, it will afterward break and snap like glass. This is a great secret to be kept well hidden. A magnet must likewise be guarded and protected from Mercury, for it exercises the same hostility against it as against Iron. Any magnet touched by common Mercury, anointed with mercurial oil or merely placed in Mercury afterward attracts no iron forever. Let no one be surprised: these things have natural causes. Mercury draws out the spirit of iron which the magnet secretly contains. Thus it is the spirit of iron in the magnet which attracts the body of Iron. This occurs not only in the magnet but in every other natural thing: a foreign spirit in a body alien to it always attracts the body of its own nature. This must be understood not only of the magnet, but of all natural things, such as ores, stones, plants, roots, humans and animals.²⁶

Original marginal note NTR-B03-M012 1605 p. 210 · GOT-194

Latin Magnes ut perdatur.

English How a magnet is destroyed.

Original marginal note NTR-B03-M013 1605 p. 210 · GOT-194

Latin Metallorum antipathia qualis.

English What the antipathy of metals is.

NTR-B03-P007 1605 p. 210 · GOT-194

Latin Post haec sciendum est etiam, quod metalla inter se inimicitias exerceant, & se

invicem oderint ex ingenua natura, ut videtis in h, qui soli summus hostis est, ex congenita natura: nam omnia auri membra dirumpit, reddit illud deforme, invalidum, & perdit & corrumpit illud ad summum usque; ad mortem, plusquam ullum aliud metallum. Stannum etiam odit, & hostis est omnium metallorum: nam reddit ea degeneria, immalleabilia, dura, inepta, si misceatur illis in igne & fluxu.

²⁶ The double naturae in the printed phrase non est naturae suae naturae is retained in the Latin; the sense concerns attraction between a displaced spirit and a body of its own nature. The alleged effects of common mercury on iron and magnets are preserved as historical claims, not verified demonstrations.

English It must also be understood that metals exercise hostilities among themselves and hate one another by their innate nature. You see this in Saturn, which is the Sun's greatest enemy by its inborn nature: it breaks up all Gold's members, makes it disfigured and weak, and ruins and corrupts it utterly, even to death, more than any other metal. Tin too hates and is the enemy of all metals: if mixed with them in fire and fusion, it makes them degenerate, unmalleable, hard and unserviceable.

Original marginal note NTR-B03-M014 1605 p. 210 · GOT-194

Latin ☉ Praeservatio, urina puerorum.

English The preservation of Gold: boys' urine.

NTR-B03-P008 1605 pp. 210–211 · GOT-194, GOT-195

Latin Quoniam igitur iam audivistis de hostibus metallorum, cognoscite porro ipsorum praeservativa & conservativa, quae metalla ab omni damno & corruptione custodiunt, & praeterea in ipsorum natura & virtute constant, & in colore altius graduant. Primo igitur de auro sciendum est, quod non possit illud melius & pulcrius conservari, quam in urina puerorum, in qua dissolutum sit sal armoniacum, aut in sola aqua salis armoniaci. In istis cum tempore tam altum gradum coloris acquirit, ut altius pervenire nequeat. Argentum non melius praeservari & conservari potest, quam si coquatur in aqua vulgari vel aceto, in quo tartarus & sal sint resoluta: ita quodlibet argentum vetus, denigratum & maculatum renovatur, si in his excoquatur. Ferri & chalybis conservativa & praeservativa optima & utilissima sunt recens lardum non salitum ex sue castrata, quod quidem omne ferrum & chalybem a rubigine custodit, si singulis mensibus eo semel ungantur. Similiter si ferrum cum Arsenico fixo liquescat, & aliquoties fluat, ita renovari & fixari potest, ut in perpetuum non contrahat rubiginem, sicut argentum.

Cuprum vero conservari & praeservari potest, si solummodo cum ☿ sublimato misceatur, aut oleo salis inungatur, ita ut in aeternum nullum vitriolum vel viride aeris ex se praebeat aut virescat.

English Having heard about the enemies of metals, learn now their preservatives, which guard them from every injury and corruption, maintain their nature and virtue and raise their colour to a higher degree. First, Gold cannot be preserved better or more beautifully than in boys' urine in which sal ammoniac has been dissolved, or in water of sal ammoniac alone. In these it eventually acquires so high a degree of colour that it can rise no further. Silver cannot be protected and preserved better than by boiling in common water or vinegar in which tartar and salt are dissolved. Any old, blackened or stained silver is thus renewed by boiling in them. The best and most useful preservatives of iron and steel are fresh unsalted fat from a castrated pig: it guards all iron and steel from rust if they are anointed with it once a month. Likewise, if iron is melted with fixed arsenic and brought into fusion several times, it can be renewed and fixed so that it never rusts, like silver. Copper can be preserved and protected if merely mixed with sublimed Mercury or anointed with oil of salt, so that it never produces vitriol or verdigris or becomes green.²⁷

²⁷ The source gives historical treatments with hazardous materials under period names, including "fixed arsenic" and "sublimed Mercury." The translation does not identify them with a single modern preparation or validate the stated protections.

Original marginal note NTR-B03-M015 1605 p. 210 · GOT-194

Latin ♂

English Iron.

Original marginal note NTR-B03-M016 1605 p. 211 · GOT-195

Latin ♀

English Copper.

Original marginal note NTR-B03-M017 1605 p. 211 · GOT-195

Latin ḥ

English Lead.

NTR-B03-P009 1605 p. 211 · GOT-195

Latin Plumbum melius conservari non potest, quam in terra frigida & in loco humido, qualis est ipsius natura. In conservatione autem magnetis nihil est melius limatura ferri vel chalybis: nam nullius magnetis vis, si in hac ponatur, infirmatur, imo quotidie augetur in virtute sua.

English Lead cannot be better preserved than in cold earth and a moist place, corresponding to its own nature. Nothing preserves a magnet better than filings of iron or steel. No magnet's strength weakens if placed in them; rather, its virtue increases daily.

Original marginal note NTR-B03-M018 1605 p. 211 · GOT-195

Latin Magnetis conservatio, limatio ferri.

English The preservation of the magnet: iron filings.

Original marginal note NTR-B03-M019 1605 p. 211 · GOT-195

Latin Salium conservatio.

English The preservation of salts.

NTR-B03-P010 1605 p. 211 · GOT-195

Latin De conservatione vero salium & omnium eorum quae salsae naturae sunt, & sub nomine salis comprehendendi possunt, quorum quidem plus quam centum sunt, sciendum est, quod in calido & sicco loco conservanda sint, & quidem in ligneis thecis, & bene ab aere custodiri, & neque in vitris, lapidibus, neque in metallis reponi debeant. Nam in illis resolvuntur & fiunt aqua & amalgama, quod in ligno non fieri potest.

English As to the preservation of salts and everything of a salty nature which can be included under the name salt—of which there are more than a hundred kinds—know that they must be kept in a warm dry place, in wooden containers, well protected from air. They must not be stored in glass, stone or metal, for in these they dissolve and become water and amalgam, which cannot happen in wood.

Original marginal note NTR-B03-M020 1605 p. 211 · GOT-195

Latin Liquorum & oleorum conservatio.

English The preservation of liquors and oils.

NTR-B03-P011 1605 p. 211 · GOT-195

Latin Porro etiam cognoscenda est conservatio quarundam aquarum & liquorum ex herbis, radicibus, & omnibus aliis fructibus & crescentibus expressorum, quae facile situm & mucorem contrahunt, ita ut quasi pellis ipsis inducantur. Istae igitur aquae

vel liquores reponantur in vitro superius angusto, inferius amplo, & impleatur vitrum usque ad summum, demum aliquot guttae olei olivae addantur, ita ut aqua vel liquor totus contegatur: ita oleum supernabit, & liquorem vel aquam longa tempora a situ vel mucore conservabit. Nulla enim aqua vel liquor, si oleo tegatur, unquam potest mucida vel maleolens fieri. Possunt hac ratione etiam duae aquae, duo liquores, duo vina in uno vitro separatim conservari, ita ut non misceantur, & non solum duplicia, sed & triplicia, quadruplicia, quintuplicia, & adhuc plura, si tantum modo oleum intersit: nam ab oleo discriminantur, ut a muro, qui non sinit ea coniungi & uniri. Nam oleum & aqua sunt duo contraria, & neutrum alteri misceri potest. Sicut vero oleum aquas uniri non permittit, ita contra aqua olea non misceri sinit.

English The preservation of certain waters and liquors pressed from plants, roots and all other fruits and growing things must also be understood. They readily acquire mould and mildew, as though a skin formed over them. Store such waters or liquors in a glass narrow above and broad below, filling it to the top; then add a few drops of olive oil so that the entire water or liquor is covered. The oil floats above and preserves the liquor or water from mould and mildew for a long time. No water or liquor covered with oil can ever become mouldy or foul-smelling. In this way two waters, two liquors or two wines can also be kept separately in one glass without mixing—not only two but three, four, five or more, provided oil is interposed. They are separated by oil as by a wall which does not allow them to join and unite. Oil and water are two contraries, and neither can mix with the other. As oil prevents waters from uniting, so conversely water prevents oils from mixing.²⁸

Original marginal note NTR-B03-M021 1605 p. 211 · GOT-195

Latin Vestes, ut conservandae.

English How clothing is to be preserved.

NTR-B03-P012 1605 p. 211 · GOT-195

Latin Conservatio autem & praeservatio panni & vestium ne arrodantur a tineis, neve in illis habitent, nulla est melior, quam mastix, camphora ambra, muscus: optima vero est zibetha, quae non solum a tineis conservat, sed & tineas una cum aliis vermibus, pulcibus, pediculis & cimicibus pellit & fugat.

English For preserving cloth and garments so that moths do not gnaw or inhabit them, nothing is better than mastic, camphor, ambergris and musk. Best of all is civet: it not only preserves them from moths but also drives away moths together with other worms, fleas, lice and bedbugs.

Original marginal note NTR-B03-M022 1605 p. 212 · GOT-196

Latin Ligna ut conservanda.

English How wood is to be preserved.

NTR-B03-P013 1605 pp. 211–212 · GOT-195, GOT-196

Latin Possunt & omnia ligna, ut in aedificiis, pontibus, navibus, & ubicunque sint, conservari, ita ut in aeternum non putrescant, sive sint in aquis, sive sub aquis, vel extra aquam, etiam in terra, sub terra vel extra terram, sive sint posita in pluvia vel vento, aere, nive vel glacie, aestatis vel hyemis tempore: praeterea ne cariosa fiant, nec ulli vermes in illis generentur, quandocunque etiam sint caesa. Conservativum

²⁸. The absolute preservation claim belongs to the source. An oil layer does not by itself establish that a food or medicine is safe from spoilage.

autem illud est magnum Arcanum contra omnes putrefactiones, imo tam insigne secretum, ut nullum ei comparari possit. Est autem nihil aliud, quam oleum sulphuris, cuius processus talis est: Pulvericetur vulgare flavum sulphur, & ponatur in cucurbita, cui superfundatur fortissimae aquae fortis tantum, ut quatuor transversos digitos superemineat, hanc abstrahe per distillationem ter vel quater, ultimo usque ad siccitatem. Sulphur quod in fundo remanet nigri & rufi coloris, ponatur in marmore vel in vitro, & facile in oleum solvetur: quod magnum secretum est in conservatione ligni, ut in perpetuum non putrescat, & a vermibus praeservetur. Nam si sulphur eo modo quo dictum est, praeparetur, & in oleum vertatur, tingit postea lignum eo perunctum, ita ut non possit ex illo elui. Possunt & multo plura in hoc oleo sulphuris conservari & praeservari a putredine, & praecipue restes & funes in navibus & malis navium, in curribus, retibus piscatoriis, nassis aucupum & venatorum, & omnia similia, quae saepe in aquis & pluviis usurpantur, & alias facile corrumpuntur & franguntur, ita & linteamina & alia multa similia.

English All wood, whether in buildings, bridges, ships or anywhere else, can also be preserved so that it never rots: in or under water, out of water, in or under earth, out of earth, exposed to rain, wind, air, snow or ice, in summer or winter. It can also be protected from worm-eating and the generation of any worms, whenever it was cut. This preservative is a great arcanum against every putrefaction, so outstanding a secret that none can compare with it. It is nothing but oil of sulphur, whose process is as follows. Powder common yellow sulphur and place it in a cucurbit; pour on enough of the strongest aqua fortis to stand four transverse fingerbreadths above it. Draw it off by distillation three or four times, finally to dryness. Place the black and reddish sulphur remaining at the bottom on marble or in glass, and it will readily dissolve into an oil. This is a great secret for preserving wood so that it never rots and remains protected from worms. Sulphur prepared and converted to oil in this way stains wood anointed with it so that it cannot be washed out. Many other things can also be kept from putrefaction in this oil of sulphur, especially cords and ropes on ships and masts, on wagons, fishing nets, snares of birdcatchers and hunters, and similar things often used in water and rain which otherwise readily decay and break, as well as linen and many comparable things.

Original marginal note NTR-B03-M023 1605 p. 212 · GOT-196

Latin Oleum sulphuris fixum.

English Fixed oil of sulphur.

Original marginal note NTR-B03-M024 1605 p. 212 · GOT-196

Latin Potabilia quid sint, & ut conservantur.

English What drinkables are and how they are preserved.

NTR-B03-P014 1605 p. 212 · GOT-196

Latin Est & notanda conservatio potabilium, sub quibus intelligimus vinum, cerevisiam, hydromeli, acetum & lac. Si iam ista quinque sine noxa & in sua virtute conservare volumus, summe necessarium est bene nosse ipsorum summum hostem: qui quidem non est alius quam impurae mulieres tempore menstrui fluentis. Nam illae dictas res, si eas praesent, circa eas versentur, eas inspiciant & anhelitu tangant, corrumpunt. Vinum enim mutatur & fit pendulum, cerevisia & hydromeli acescunt, acetum infirmatur & acedinem suam amittit: lac etiam acescit & coagulatur.

English The preservation of drinkables must also be considered: by these we mean wine, beer, mead, vinegar and milk. To preserve these five without damage and in their virtue, their greatest enemy must be well known. It is none other than impure women during the flow of menstruation: if they press these things, move around them, look at them or touch them with their breath, they corrupt them. Wine changes and becomes ropy, beer and mead turn sour, vinegar weakens and loses its sharpness, and milk too sours and coagulates.²⁹

Original marginal note NTR-B03-M025 1605 p. 212 · GOT-196

Latin Menstruosae mulieres potabilium hostes.

English Menstruating women are enemies of drinkables.

Original marginal note NTR-B03-M026 1605 p. 212 · GOT-196

Latin Vinum conservatur sulphure, &c.

English Wine is preserved with sulphur and so forth.

NTR-B03-P015 1605 p. 212 · GOT-196

Latin Hoc igitur bene sciendum est priusquam specialiter de uniuscuiusque illorum conservatione dicatur. Porro vini summum conservativum & praeservativum est sulphur & oleum sulphuris, per quod omne vinum diutissime conservari potest, ita ut nec fiat pendulum, nec alio modo alteretur.

English This must therefore be well understood before speaking specifically of each one's preservation. The greatest preservative and safeguard of wine is sulphur and oil of sulphur, by which every wine can be kept a very long time without becoming ropy or otherwise changing.

Original marginal note NTR-B03-M027 1605 p. 212 · GOT-196

Latin Cerevisia conservatur oleo garyophyllorum.

English Beer is preserved with oil of cloves.

NTR-B03-P016 1605 p. 212 · GOT-196

Latin Cerevisiae conservatio est oleum Garyophyllorum, si aliquot eius guttae iniiciantur, ita ut una mensura tres aut duas guttas habeat: melius tamen est oleum Benedictae Garyophyllatae, quod cerevisiam ab acetositae praeservat. Hydromeli conservativum est oleum zuccari, quo utendum est ut oleo Garyophyllorum vel Benedictae.

English Beer's preservative is oil of cloves, if a few drops are added, so that one measure contains three or two drops. Better still is oil of blessed avens, which preserves beer from sourness. Mead's preservative is oil of sugar, to be used like oil of cloves or of avens.³⁰

Original marginal note NTR-B03-M028 1605 p. 212 · GOT-196

Latin Hydromeli conservatur oleo zuccari.

English Mead is preserved with oil of sugar.

²⁹. This repeats the source's false belief about menstruation and contamination. The translation records a historical prejudice, not a valid explanation of food spoilage.

³⁰. Benedicta garyophyllata is a historical name for avens; it is distinct from the cloves named just before it. The source does not specify a modern equivalent of its mensura, so "measure" is retained.

Original marginal note NTR-B03-M029 1605 p. 213 · GOT-197

Latin Acetum & lac quibus conserventur.

English By what means vinegar and milk are preserved.

NTR-B03-P017 1605 p. 213 · GOT-197

Latin Aceti conservativum est oleum zinziberis: lactis conservativum est oleum amygdalarum expressum: ista duo, ut dictum est, usurpari debent.

English Vinegar's preservative is oil of ginger; milk's preservative is expressed oil of almonds. These two must be used as described.

Original marginal note NTR-B03-M030 1605 p. 213 · GOT-197

Latin Casei conservantur hyperico &c.

English Cheeses are preserved with hypericum and so forth.

NTR-B03-P018 1605 p. 213 · GOT-197

Latin Caseorum conservativum est herba hypericon vel perforata, quae omnes caseos a vermibus tuetur & custodit. Nam si iuxta caseum ponatur & illum attingat, nullus vermis in illo nascitur & si iam aliqui ibi nati sint & habitent, omnes emoriuntur, & ex caseo cadunt.

English The preservative of cheeses is the plant hypericon or perforata, which defends and guards all cheeses from worms. If placed beside a cheese and touching it, no worm is born in it; if any have already been born and live there, they all die and fall out of the cheese.³¹

Original marginal note NTR-B03-M031 1605 p. 213 · GOT-197

Latin Mellis summus hostis panis.

English Bread is honey's greatest enemy.

NTR-B03-P019 1605 p. 213 · GOT-197

Latin Mel vero nullum peculiare conservativum habet, nisi quod a suo hoste praeservandum est. Est autem summus ipsius hostis panis. Nam si panis ex farre parum tantum iniiciatur vel cadat, mel totum vertitur in formicas & totum perit.

English Honey has no particular preservative, except that it must be protected from its enemy. Bread is its greatest enemy. If even a little bread made from spelt is thrown or falls into it, all the honey turns into ants and is entirely lost.

³¹. Hypericon and perforata are names for St John's wort. The proposed food preservation effect is a historical claim.

Book 4 On the Life of Natural Things

Liber IV. De vita rerum naturalium.

Latin witness: Frankfurt 1605, printed pp. 213–215, SUB Göttingen PPN578052199.

Source facsimile: <https://gdz.sub.uni-goettingen.de/id/PPN578052199?tify=%7B%22pages%22%3A%5B197%5D%7D>

Original marginal note NTR-B04-M001 1605 p. 213 · GOT-197

Latin Aëris usus vitæ rerum.

English Air's service to the life of things.

NTR-B04-P001 1605 p. 213 · GOT-197

Latin Nemo negare potest, aerem omnibus rebus corporibus & substantialibus, quæ ex terra nascuntur & generantur vitam dare. Quid autem & qualis sit vita uniuscuiusque rei specialiter, sciendum est, vitam rerum nihil esse aliud quam Essentiam spiritualem, invisibilem & impalpabilem rem, spiritum & spiritualem rem. Propterea nihil corporale est quin habeat in se latentem spiritum, & vitam, quæ ut dictum est, nihil est aliud quam res spiritalis. Non autem solum vivit id quod movetur & agitur ut homines, animalia, vermes terræ, aves sub coelo, pisces in mari, sed & omnes res corporales & substantiales. Nam hic scire debemus, quod Deus in principio creationis omnium rerum, nullum omnino corpus absque suo spiritu creaverit, quem occulte in se continet. Quid enim esset corpus absque spiritu? nihil prorsus. Propterea spiritus continet in se occulte rei virtutem & potentiam & non corpus. Nam in corpore est mors, & corpus est subiectum mortis, neque aliud in corpore quaeri debet, quam mors. Potest enim variis modis perdi & corrumpi, spiritus vero non. Nam semper manet spiritus vivus, & est quoque vitæ subiectum. Vivum quoque suum corpus conservat, sed in eversione corporis ab illo separatur & mortuum corpus relinquit, & redit in suum locum unde venerat, nempe in chaos & aerem superioris & inferioris firmamenti. Ex his patet varios esse spiritus, sicut varia sunt corpora. Sunt enim Spiritus Coelestes, Infernales, Humani, Metallici, Mineralium, Salium, Gemmarum, Marcasitarum, Arsenicales, Potabilium, Radicum, Liqueurum, Carnium, Sanguinis, Ossium, &c. Quapropter & sciatis spiritum esse verissime vitam & balsamum omnium rerum corporalium. Iam vero per genus & species, & peculiariter cuiusque rei naturalis vitam vobis hic quam brevissime describemus.

English No one can deny that air gives life to all corporeal and substantial things born and generated from the earth. To know specifically what the life of each thing is and what kind it is, understand that the life of things is nothing but a spiritual essence, an invisible and intangible thing, a spirit and spiritual thing. Nothing corporeal therefore lacks a hidden spirit within it and a life which, as stated, is nothing other than a spiritual thing. Nor does only what moves and stirs live—humans, animals, worms of the earth, birds beneath heaven and fish in the sea—but also every corporeal and substantial thing. We must understand that at the beginning of the creation of all things, God created no body whatsoever without its own spirit, secretly contained within it. What would a body be without spirit? Absolutely nothing. It is therefore spirit, not body, which secretly contains the thing's virtue and power. Death is in the body, and the body is the subject of death; nothing but death should be sought in the body. It can be destroyed and corrupted

in various ways, whereas spirit cannot. Spirit always remains alive and is also the subject of life. It also keeps its own body alive, but when the body is overthrown it separates from it, leaves the body dead and returns to the place from which it came: the chaos and air of the upper and lower firmament. From this it is evident that spirits vary as bodies vary. There are heavenly, infernal, human and metallic spirits, spirits of minerals, salts, gems, marcasites, arsenical substances, drinkables, roots, liquors, flesh, blood, bones and so forth. Know therefore that spirit is most truly the life and balsam of all corporeal things. We shall now describe here, as briefly as possible, the life of each natural thing by genus and species and in its particularity.³²

Original marginal note NTR-B04-M002 1605 p. 213 · GOT-197

Latin Vita rerum quid sit.

English What the life of things is.

Original marginal note NTR-B04-M003 1605 p. 213 · GOT-197

Latin Vita quibus rebus insit.

English In what things life resides.

Original marginal note NTR-B04-M004 1605 p. 213 · GOT-197

Latin Spiritus & corporis quae diversitas sit.

English What the difference between spirit and body is.

Original marginal note NTR-B04-M005 1605 p. 213 · GOT-197

Latin Spiritus nunquam moritur.

English Spirit never dies.

Original marginal note NTR-B04-M006 1605 p. 213 · GOT-197

Latin Spirituum divisio secundum varietatem corporum.

English The division of spirits according to the variety of bodies.

Original marginal note NTR-B04-M007 1605 p. 213 · GOT-197

Latin Spiritus est vita rerum corporalium.

English Spirit is the life of corporeal things.

Original marginal note NTR-B04-M008 1605 p. 214 · GOT-198

Latin Vita hominum quid.

English What human life is.

NTR-B04-P002 1605 p. 214 · GOT-198

Latin Vita igitur omnium hominum nihil aliud est quam Balsamus quidem astralis, balsamica impressio, & coelestis ac invisibilis ignis, inclusus aer, & tingens spiritus salis. Evidentius appellare non possum, quanquam multis & pluribus nominibus proponi posset. Cum vero praecipua & optima a nobis hic indicata sint, reliqua minora reticebimus.

English The life of all humans is therefore nothing but a certain astral balsam, a balsamic impression, a heavenly and invisible fire, enclosed air and a tinging spirit of salt. I cannot name it more clearly, though it

³² "Subject" translates subiectum, the underlying bearer of a condition or operation, not a grammatical subject. This doctrine attributes life and spirit to metals and other materials as well as organisms; it must not be reduced to modern biological definitions.

could be presented under many further names. Since we have indicated the chief and best ones here, we shall leave the lesser ones unspoken.

Original marginal note NTR-B04-M009 1605 p. 214 · GOT-198

Latin Vita metallorum quid.

English What the life of metals is.

NTR-B04-P003 1605 p. 214 · GOT-198

Latin Vita metallorum est latens pinguedo, quam a sulphure acceperunt: quod ostenditur ex fluxu ipsorum, quia omne quod in igne fluit ob occultam suam pinguedinem fluit. Nisi ea esset, nullum metallum in fluxum, redigi posset, sicut videmus in ferro & chalybe, quae minimum sulphuris, habent & pinguedinis inter omnia metalla, quare siccioris naturae sunt, quam alia metalla omnia.

English The life of metals is the hidden fatness they have received from Sulphur. Their melting shows this, because everything that flows in fire flows through its hidden fatness. Without it no metal could be brought into fusion, as we see in iron and steel, which have the least Sulphur and fatness of all metals and are therefore drier in nature than every other metal.

Original marginal note NTR-B04-M010 1605 p. 214 · GOT-198

Latin Vita Mercurii quid. Mercurius est similis vesti pelliceae, &c.

English What the life of Mercury is. Mercury resembles a fur garment, and so forth.

NTR-B04-P004 1605 p. 214 · GOT-198

Latin Vita Mercurii nihil aliud est quam interior calor & exterior frigiditas, h.e. interior sui corporis is calefacit, exterius frigefacit, & merito vesti pelliceae comparari potest, quae etiam ut Mercurius calefacit & frigefacit. Nam si talis ab homine ea induto gestetur, calefacit eum & custodit eum, a frigore. Si autem pars calva nudo corpori applicata gestetur, frigefacit & valet contra nimium calorem, quare vetustissimis temporibus usitatum fuit & adhuc in multis locis usitatum est, ut tales vestes pelliceae aestatis simul & hyemis tempore gestentur, tam contra frigus, quam contra calorem, in aestate partem glabram interius, pilosam vero exterius vertunt, tempore vero frigoris in hyeme, partem pilosam interius & glabram exterius gerunt. Sicut igitur iam de veste pellicea audivistis, ita & de Mercurio usurpari potest.

English The life of Mercury is nothing but inner heat and outer coldness: inside its body it heats, outside it cools. It may rightly be compared with a fur garment, which, like Mercury, both heats and cools. When someone puts on and wears such a garment, it warms and protects against cold. But if the hairless side is worn against the naked body, it cools and works against excessive heat. Thus from the earliest times, and still in many places, such fur garments have been worn in summer as well as winter, against heat as well as cold. In summer the smooth side is turned inward and the hairy side outward; in winter's cold the hairy side is worn inward and the smooth side outward. What you have now heard about the fur garment can likewise be applied to Mercury.

Original marginal note NTR-B04-M011 1605 p. 214 · GOT-198

Latin Vita Sulphuris quid.

English What the life of Sulphur is.

NTR-B04-P005 1605 p. 214 · GOT-198

Latin Sulphuris vita est combustibilis maleolens pinguedo. Nam dum flagrat & male olet, potest vivum dici.

English The life of Sulphur is combustible, foul-smelling fatness. While it burns and stinks, it can be called alive.

Original marginal note NTR-B04-M012 1605 p. 214 · GOT-198

Latin Vita Salium quid.

English What the life of salts is.

NTR-B04-P006 1605 p. 214 · GOT-198

Latin Vita vero omnium salium nihil aliud est quam spiritus Aquae fortis. Nam abstracta ab ipsis aqua, quod in fundo remanet, terra mortua dicitur.

English The life of all salts is nothing but the spirit of aqua fortis. Once their water is drawn off, what remains at the bottom is called dead earth.

Original marginal note NTR-B04-M013 1605 p. 214 · GOT-198

Latin Vita Gemmarum, &c. quid.

English What the life of gems and so forth is.

NTR-B04-P007 1605 p. 214 · GOT-198

Latin Vita gemmarum & corallorum est solus color qui ipsis per spiritum vini adimi potest. Perlarum vita nihil est aliud quam splendor earum, quem in sua calcinatione amittunt. Vita magnetis est spiritus ferri, qui ex ipso vino ardenti rectificato vel spiritu vini extrahi & auferri potest.

English The life of gems and coral is colour alone, which can be taken from them through spirit of wine. The life of pearls is nothing but their lustre, which they lose in calcination. The life of the magnet is the spirit of iron, which can be extracted and removed from it by rectified ardent wine or spirit of wine.

Original marginal note NTR-B04-M014 1605 p. 214 · GOT-198

Latin Vita Magnetis quid.

English What the life of the magnet is.

Original marginal note NTR-B04-M015 1605 p. 214 · GOT-198

Latin Marcasitarum vita quid.

English What the life of marcasites is.

NTR-B04-P008 1605 p. 214 · GOT-198

Latin Vita vero silicum est materia mucilaginosa: vita marcasitarum, cachymiarum, talci, kobalti, zinzi, granatorum, zwitter, Wismat, antimonii est tingens metallicus spiritus.

English The life of flints is a mucilaginous material. The life of marcasites, cachymiae, talc, cobalt, zinz, garnets, zwitter, Wismat and antimony is a tinging metallic spirit.³³

Original marginal note NTR-B04-M016 1605 p. 214 · GOT-198

Latin Realgari, &c. vita quid.

English What the life of realgar and so forth is.

NTR-B04-P009 1605 p. 214 · GOT-198

Latin Arsenicalium, auripigmenti, opermenti, realgaris & similium materiarum vita est minerale & coagulatum venenum.

English The life of arsenical substances, auripigment, orpiment, realgar and similar materials is a mineral and coagulated poison.

Original marginal note NTR-B04-M017 1605 p. 214 · GOT-198

Latin Stercoris, &c. vita quid.

English What the life of dung and so forth is.

NTR-B04-P010 1605 p. 214 · GOT-198

Latin Vita undosorum, hoc est, omnis stercore hominum & animalium, est ipsorum gravis & foetens odor. Nam hoc amisso mortua sunt.

English The life of undosa—that is, all human and animal dung—is their strong and fetid smell. When they have lost it, they are dead.³⁴

Original marginal note NTR-B04-M018 1605 p. 214 · GOT-198

Latin Aromaticorum vita quid.

English What the life of aromatic things is.

NTR-B04-P011 1605 pp. 214–215 · GOT-198, GOT-199

Latin Rerum aromaticarum vita, quales sunt muscus, ambra, zibetra, & quicquid fortem odorem, bonum & suavem praebet, est nihil aliud quam odor ipse gratus: nam si hunc amittant sunt res mortuae & inutiles.

English The life of aromatic things—musk, ambergris, civet and whatever gives off a strong, good, sweet smell—is nothing but the pleasing smell itself. If they lose it, they are dead and useless things.

Original marginal note NTR-B04-M019 1605 p. 215 · GOT-199

Latin Vita dulcium quid.

English What the life of sweet things is.

NTR-B04-P012 1605 p. 215 · GOT-199

Latin Vita rerum dulcedinosarum ut sacchari, mellis, mannae, fistulae cassiae & similium, est tingens & subtilis dulcedo: nam si ipsi ista dulcedo distillando vel sublimando adimatur, sunt res mortuae & fatuae, quae nihil amplius valent.

³³. The material names kobalt, zinz, zwitter and Wismat belong to early modern mining vocabularies. Their historical scope should not be inferred solely from similarly spelled modern element names; Wismat is a form associated with bismuth.

³⁴. The unusual printed undosorum is retained. The following hoc est supplies the text's own explanation as human and animal excrement.

English The life of sweet things, such as sugar, honey, manna, cassia fistula and the like, is a tinging and subtle sweetness. If that sweetness is taken away by distillation or sublimation, they are dead and insipid things which no longer have any value.

Original marginal note NTR-B04-M020 1605 p. 215 · GOT-199

Latin Vita Resinarum quid.

English What the life of resins is.

NTR-B04-P013 1605 p. 215 · GOT-199

Latin Vita vero Resinarum ut carabae, terebinthinae, gummi, est mucilaginosa, nitens pinguedo, quae omnia egregiam vernicem dant, cum autem vernicem non amplius praebent, & nitorem suum amittunt, mortuae sunt.

English The life of resins, such as amber, turpentine and gum, is a mucilaginous, shining fatness. They all yield an excellent varnish; when they no longer yield varnish and lose their shine, they are dead.

Original marginal note NTR-B04-M021 1605 p. 215 · GOT-199

Latin Vita Herbarum quid.

English What the life of plants is.

NTR-B04-P014 1605 p. 215 · GOT-199

Latin Herbarum, radicum, pomorum, & aliorum eiusmodi fructuum vita nihil aliud est quam liquor terrae, quem sponte amittunt, si tantum carent aqua & terra.

English The life of plants, roots, apples and other fruits of that kind is nothing but the liquor of earth, which they lose of themselves if they merely lack water and earth.

Original marginal note NTR-B04-M022 1605 p. 215 · GOT-199

Latin Vita Lignorum quid.

English What the life of woods is.

NTR-B04-P015 1605 p. 215 · GOT-199

Latin Ligni vita est resina quaedam: nam quodvis lignum si resina caret non amplius vivere potest.

English The life of wood is a certain resin: any wood which lacks resin can no longer live.

Original marginal note NTR-B04-M023 1605 p. 215 · GOT-199

Latin Vita Ossium quid.

English What the life of bones is.

NTR-B04-P016 1605 p. 215 · GOT-199

Latin Ossium vita est liquor mumiae: carnis & sanguinis vita nihil aliud est quam spiritus salis, qui ea a foetore & putredine conservat, & sponte, ut aqua ab ipsis separatur.

English The life of bones is the liquor of mummia. The life of flesh and blood is nothing but the spirit of salt, which preserves them from stench and putrefaction and separates from them of itself as water.

Original marginal note NTR-B04-M024 1605 p. 215 · GOT-199

Latin Vita Aquarum quid.

English What the life of waters is.

NTR-B04-P017 1605 p. 215 · GOT-199

Latin De vita vero Elementorum sciendum est, vitam aquae esse cursum eius. Nam cum per frigus firmamenti coagulatur, & in glaciem congelatur, tum est mortua & malitia ei omnis adempta est, cum nemo amplius in ea suffocari possit.

English Concerning the life of the elements, know that the life of water is its course. When it is coagulated through the cold of the firmament and frozen into ice, it is dead and all its harmfulness has been taken away, since no one can drown in it any longer.³⁵

Original marginal note NTR-B04-M025 1605 p. 215 · GOT-199

Latin Vita Ignis quid.

English What the life of fire is.

NTR-B04-P018 1605 p. 215 · GOT-199

Latin Ita ignis vita est aer quidam: nam aer ignem vehementius & maiori cum aestu flagrare facit. Procedit etiam ab omni igni aer quidam, ita ut candelam extinguat, vel levem plumam suffumigat, ut oculis patet. Quare omnem vivum ignem, hoc est, ignem flammaram, si obturetur, vel aerem suum emittendi facultate privetur, suffocari necesse est.

English The life of fire is likewise a certain air, for air makes fire burn more violently and with greater heat. A certain air also proceeds from every fire, enough to extinguish a candle or waft a light feather upward, as is evident to the eyes. Every living fire—that is, a fire of flames—must therefore be suffocated if it is stopped up or deprived of the ability to release its air.

Original marginal note NTR-B04-M026 1605 p. 215 · GOT-199

Latin Aeris & terrae vita quid.

English What the life of air and earth is.

NTR-B04-P019 1605 p. 215 · GOT-199

Latin Aer per se & ex se vivit, & omnibus aliis rebus vitam dat. Terra autem per se est mortua, sed elementum ipsius est invisibilis & occulta vita.

English Air lives in and from itself and gives life to all other things. Earth in itself is dead, but its element is an invisible and hidden life.

³⁵. The claim about frozen water follows the text's equation of liquid motion with water's life. It is not a statement that ice is safe to walk upon or cannot cause drowning.

Book 5 On the Death of Natural Things

Liber V. De morte rerum naturalium.

Latin witness: Frankfurt 1605, printed pp. 215–223, SUB Göttingen PPN578052199.

Source facsimile: [https://gdz.sub.uni-goettingen.de/id/PPN578052199?](https://gdz.sub.uni-goettingen.de/id/PPN578052199?dify=%7B%22pages%22%3A%5B199%5D%7D)

[tify=%7B%22pages%22%3A%5B199%5D%7D](https://gdz.sub.uni-goettingen.de/id/PPN578052199?dify=%7B%22pages%22%3A%5B199%5D%7D)

Original marginal note NTR-B05-M001 1605 p. 215 · GOT-199

Latin Mors quid.

English What death is.

NTR-B05-P001 1605 pp. 215–216 · GOT-199, GOT-200

Latin Mors omnium rerum naturalium nihil aliud est quam alteratio & eversio virium & virtutum, praedominatio malitiae & bonitatis, oppressio & deletio prioris naturae, & generatio novae & alterius naturae. Nam sciendum est multas res in vita sua bonas esse & habere suas virtutes, mortuas vero, nihil aut parum virtutis suae retinere, sed plane fatuas & invalidas apparere. Ita e contra multa in vita sua sunt mala, sed in morte vel postquam mortificata sunt multiplicem vim & efficaciam ostendunt, & multum prosunt. Exempla multa hic recensere possemus, sed id plane non est nostri propositi. Ut autem videatis me hic non ex verisimili opinione mea scribere, sed ex mea experientia, oportet me afferre unum exemplum, quo sedabo & mutos faciam Sophistas qui dicunt, quod ex rebus mortuis prorsus nihil accipi possit, nec aliquid in ipsis quaeri vel reperiri debeat. Causa vero est, quod Alchymistarum praeparationes nihil aestiment, per quas multa eiusmodi magna Secreta reperiuntur. Nam inspicite Mercurium, Sulphur vivum & crudum, & Antimonium crudum, ita ut ex fodinis afferuntur, hoc est, dum vivunt, quam parva sit ipsorum virtus, quam leniter & tarde efficaciam suam exerceant, imo plus mali quam boni afferant, & potius venenum sint quam medicina. Si vero per solertis Alchymistae industriam, in prima sua substantia corrumpantur, & prudenter

praeparentur, (nempe ♂ coaguletur, praecipitetur, sublimetur, resolvatur & in oleum vertatur: sulphur sublimetur, calcinetur, reverberetur, & in oleum vertatur:

similiter & ♀ sublimetur, calcinetur, reverberetur, & in oleum vertatur) videris utique quantam utilitatem, quantam vim & virtutem & quam celerem efficaciam praestent & ostendant, ut nemo eam satis eloqui aut describere possit. Nam ipsorum multiplices virtutes sunt impervestigabiles, nec quisquam omnes indagare potest. Quare quilibet Alchymista & fidelis Medicus, in his tribus rebus per totam vitam suam quaerere debet, & usque ad mortem suam in his ludere & tempus terere. Nam certissime omnes ipsius labores, studium & sumptus egregie compensabunt.

English The death of all natural things is nothing but the alteration and overthrow of their forces and virtues, the predominance of badness and goodness, the suppression and destruction of the former nature, and the generation of a new and different nature. Many things are good and possess their virtues in life, but once dead retain little or none of their virtue and appear utterly insipid and powerless. Conversely, many things are bad in life, but in death, or after being mortified, display manifold force and efficacy and confer great benefit. We could list many examples here, but that is not our purpose. Yet to show that I write from experience rather than plausible opinion, I must offer one example

to quiet and silence the sophists who say that absolutely nothing can be obtained from dead things, and nothing should be sought or found in them. They say this because they set no value on alchemists' preparations, through which many such great secrets are discovered. Consider Mercury, living and crude Sulphur, and crude Antimony as brought from the mines—that is, while alive. How small their virtue is, how mildly and slowly they exert their efficacy! Indeed, they bring more harm than good and are poison rather than medicine. But if through an expert alchemist's diligence they are corrupted in their first substance and prudently prepared—Mercury coagulated, precipitated, sublimed, dissolved and converted into oil; sulphur sublimed, calcined, reverberated and converted into oil; likewise Copper sublimed, calcined, reverberated and converted into oil—you will see how much benefit, force and virtue and how swift an efficacy they display, beyond anyone's adequate expression or description. Their manifold virtues cannot be fully investigated, and no one can discover them all. Every alchemist and faithful physician should therefore search in these three things throughout life and occupy and spend time with them until death. They will most certainly compensate all that labour, study and expense magnificently.³⁶

Original marginal note NTR-B05-M002 1605 p. 216 · GOT-200

Latin ♀ Sulphuris ♀ praeparationes.

English Preparations of Mercury, Sulphur and Copper.

Original marginal note NTR-B05-M003 1605 p. 216 · GOT-200

Latin Mors hominis quid.

English What human death is.

NTR-B05-P002 1605 p. 216 · GOT-200

Latin Sed ad specialia veniamus & specialiter scribamus, mortem & mortificationem uniuscuiusque rei naturalis, quid sit mors eius & qua ratione mortificetur. Sciendum est igitur primum de morte hominis, quod sine dubio nihil aliud sit, nisi finis operis diurni, ablatio aeris, evanescencia balsami, extinctio lucis naturalis & magna separatio trium substantiarum, corporis, animae, & spiritus, & reditus in uterum maternum. Nam quoniam naturalis terrenus homo ex terra est, terra quoque mater eius erit, in quam redire eum oportet, & inibi terrenam naturalem carnem amittere, & ita in ultimo die in nova coelesti & clarificata carne regenerari, ut Christus Nicodemo dicit, cum noctu ad ipsum veniret. Nam ita ut dictum est haec verba sunt intelligenda, de regeneratione.

English Let us turn to particulars and describe the death and mortification of each natural thing: what its death is and how it is mortified. First, human death is undoubtedly nothing but the end of the day's work, the

³⁶ The source prints *malitiae & bonitatis* ("badness and goodness"), not an explicit conquest of goodness by badness. In the preparation list it prints the Venus/Copper sign ♀ although the preceding three materials are Mercury, Sulphur and Antimony. The translation retains Copper and records the inconsistency rather than silently replacing the sign with Antimony. These claims about preparing poisons into medicines are historical, not validated treatments.

withdrawal of air, the disappearance of balsam, the extinguishing of the natural light, the great separation of the three substances—body, soul and spirit—and the return to the mother's womb. Since the natural earthly human is from earth, earth will also be the mother to which that human must return, there to lose the earthly natural flesh and thus be regenerated on the last day in new, heavenly and clarified flesh, as Christ says to Nicodemus when he came to him by night. These words about regeneration must be understood in the manner just described.³⁷

Original marginal note NTR-B05-M004 1605 p. 216 · GOT-200

Latin Mors metallorum quid.

English What the death of metals is.

NTR-B05-P003 1605 pp. 216–217 · GOT-200, GOT-201

Latin Mors autem & mortificatio metallorum est ablatio compaginis corporis ipsorum, & sulphureae pinguedinis, quae ipsis multis modis adimi potest, ut per calcinationem, reverberationem, resolutionem, cementationem, & sublimationem. Calcinatio vero metallorum non est unius modi. Una enim fit per sal, una per sulphur, una per aquas fortes, una per Mercurium vulgi & Mercurium vivum. Calcinatio per sal est, ut metallum tenuissime laminetur, & cum sale stratificetur & cementetur. Calcinatio vero per sulphur est, ut metallum laminetur, cum sulphure stratificetur & reverberetur. Calcinatio per aquas fortes est, ut metallum granuletur & in aqua forti resolvatur & praecipitetur in ea. Calcinatio per Mercurium vulgi est talis, ut etiam laminetur metallum: Mercurius vero ponatur in terreo vase superius angusto, inferius amplo, & postea in ignem mediocre carbonum, qui parum

suffletur, donec ☿ incipiat fumare & alba nebula ex ore vasis egrediatur tum laminatum metallum ori vasis imponatur, ita Mercurius vulgi penetrat metallum & fragile reddit sicut lapidem carbonarium. Calcinatio vero per Mercurium vivum est, ut metallum in parvas particulas scindatur, laminetur vel granuletur, & cum Mercurio amalgametur, postea per pellem Mercurius exprimatur, & remanebit in pelle metallum in forma calcis vel arenae.

English The death and mortification of metals is the removal of their bodily structure and sulphurous fatness, which can be taken from them in many ways: by calcination, reverberation, dissolution, cementation and sublimation. Metallic calcination is of more than one kind. One occurs through salt, one through sulphur, one through aquae fortes, and one through common Mercury and living Mercury. Calcination through salt requires the metal to be beaten into extremely thin plates, layered with salt and cemented. For calcination through sulphur, the metal is beaten into plates, layered with sulphur and reverberated. Through aquae fortes, it is granulated, dissolved in aqua fortis and precipitated in it. Calcination through common Mercury likewise requires metal plates: place Mercury in an earthen vessel narrow above and broad below, then in a moderate charcoal fire gently blown until Mercury begins to fume and a white cloud emerges from the vessel's mouth. Put the plated metal over its mouth: common Mercury

³⁷. The dialogue with Nicodemus is John 3:1–21. The text reads its language of rebirth through an analogy between earthly burial and final resurrection.

penetrates it and makes it brittle like coal. Calcination through living Mercury requires the metal to be cut into small pieces, beaten into plates or granulated and amalgamated with Mercury. Afterward squeeze the Mercury through a skin, and the metal remains in the skin in the form of calx or sand.³⁸

Original marginal note NTR-B05-M005 1605 p. 216 · GOT-200

Latin *Calcinatio varia metallorum.*

English The various calcinations of metals.

Original marginal note NTR-B05-M006 1605 p. 216 · GOT-200

Latin *Calcinatio per Sal quid.*

English What calcination through Salt is.

Original marginal note NTR-B05-M007 1605 p. 217 · GOT-201

Latin *Calcinatio per sulphur quid.*

English What calcination through sulphur is.

Original marginal note NTR-B05-M008 1605 p. 217 · GOT-201

Latin *Calc. per aquas fortes quid.*

English What calcination through aquae fortes is.

Original marginal note NTR-B05-M009 1605 p. 217 · GOT-201

Latin *Calc. per Merc. vulgi quid.*

English What calcination through common Mercury is.

Original marginal note NTR-B05-M010 1605 p. 217 · GOT-201

Latin *Calc. per Merc. vivum quid.*

English What calcination through living Mercury is.

Original marginal note NTR-B05-M011 1605 p. 217 · GOT-201

Latin *Aliae mortificationes metallorum.*

English Other mortifications of metals.

Original marginal note NTR-B05-M012 1605 p. 217 · GOT-201

Latin *Ferrugo mors ferri, &c.*

English Rust is the death of iron, and so forth.

NTR-B05-P004 1605 p. 217 · GOT-201

Latin *Ultra has autem mortificationes metallorum, destructiones & ablationes virium ipsorum, sciatis etiam alias plures esse mortificationes metallorum. Nam praeterquam quod ferrugo omnis ferri & chalybis mors est, aliae sunt ex plurimis sunt facienda. Sciendum enim est quodlibet vitriolum, aut etiam aes ustum, esse cuprum mortificatum: quemlibet praecipitatum, sublimatum, calcinatum, cinnabarim, Mercurium mortificatum esse: quamlibet cerussam, quodlibet minium vel flavum plumbi, mortificatum plumbum: quemlibet lazurium mortificatum argentum: ita etiam quodlibet ☉, cui tinctura sua Quinta Essentia, resina vel crocus vitriolum vel sulphur detractum est, mortuum est, quia non amplius, formam habet auri, sed est metallum album, simile ☽ fixae.*

³⁸ The distinction between common Mercury and living Mercury is retained as the historical source presents it. This account includes mercury fumes; its place in a historical translation does not make it an appropriate procedure to reproduce.

English Beyond these mortifications of metals, destructions and removals of their forces, know that there are many further mortifications of metals. Besides rust being the death of all iron and steel, many others can be effected. Every vitriol, or burnt copper, is mortified copper. Every precipitate, sublimate, calcinate and cinnabar is mortified Mercury. Every ceruse, minium or yellow of lead is mortified lead; every lazurium is mortified silver. Likewise any Gold from which its tincture, quintessence, resin or crocus, vitriol or sulphur has been taken is dead: it no longer has the form of gold but is a white metal like fixed Silver.³⁹

Original marginal note NTR-B05-M013 1605 p. 217 · GOT-201

Latin Crocus ♂ duplex, & utriusque praeparatio.

English The twofold crocus of Iron and the preparation of each.

NTR-B05-P005 1605 p. 217 · GOT-201

Latin Sed pergamus vobis proponere qua ratione mortificatio metallorum fiat. Primum igitur de ferro sciendum, quod hoc modo illud mortificetur & in crocum redigatur. Lamina tenuissime chalybem, has laminas candefac & extingue in optimo aceto ex vino, hoc fac toties donec videas acetum insignem rubedinem contraxisse: cum vero satis aceti rubri habes, omne confunde & distilla inde humiditatem aceti, residuum coagula in pulverem siccum. Is est valde nobilis Crocus Martis. Est autem & alia ratio Crocum Martis faciendi, quae partim priorem superat, & longe minori sumptu & labore fit, nempe ita: Stratifica tenuissimas laminas chalybis cum sulphure & tartaro ana, postea reverbera, hoc parit pulcherrimum crocum, qui ex laminis demi debet.

English Let us continue to explain how the mortification of metals is effected. First, iron is mortified and reduced to crocus in this way. Beat steel into extremely thin plates, heat them until glowing and quench them in the best wine vinegar. Repeat until the vinegar has acquired a striking redness. When you have enough red vinegar, combine it all, distil off its moisture and coagulate the residue into dry powder. This is a very excellent crocus of Mars. There is another way of making crocus of Mars, partly surpassing the first and requiring far less cost and labour: layer extremely thin steel plates with equal quantities of sulphur and tartar, then reverberate. This produces a very fine crocus, which must be removed from the plates.⁴⁰

NTR-B05-P006 1605 pp. 217–218 · GOT-201, GOT-202

Latin Similiter sciatis quamlibet laminam ferri vel chalybis, si aqua forti linatur, etiam pulcrum crocum reddere. Ita etiam fit cum oleo vitrioli, aqua salis, aqua aluminis, aqua salis Armoniaci, aqua salis nitri, Mercurio sublimato, quae omnia ferrum mortificant, & in crocum redigunt, sed nullus ex istis modis, superioribus duobus est comparandus: nam solum modo in Alchimia usurpari possunt, &

³⁹. The phrase *aliae sunt ex plurimis sunt facienda* is defective in the printing; the translation gives the intended transition to further examples. Lazurium is retained as a historical material name. These broad classifications do not map neatly onto modern chemical identities.

⁴⁰. Crocus, literally saffron, names a coloured preparation rather than the culinary plant in these metallic contexts. Ana signifies equal portions.

prorsus non in medicina, quare utaris duobus primis modis, & reliquos omitte & fuge.

English Know likewise that any plate of iron or steel anointed with aqua fortis also yields a fine crocus. It happens too with oil of vitriol, water of salt, water of alum, water of sal ammoniac, water of salt nitre and sublimed Mercury, all of which mortify iron and reduce it to crocus. None of these methods compares with the first two: they can be used only in alchemy, absolutely not in medicine. Therefore use the first two methods and omit and avoid the rest.⁴¹

Original marginal note NTR-B05-M014 1605 p. 218 · GOT-202

Latin Mortificatio cupri vel fiat.

English How the mortification of copper is effected.

Original marginal note NTR-B05-M015 1605 p. 218 · GOT-202

Latin Vitriolum cupri duobus modis fit.

English Copper vitriol is made in two ways.

NTR-B05-P007 1605 p. 218 · GOT-202

Latin Mortificatio vero cupri, ut illud scilicet redigatur in vitriolum viride aeris, vel aes ustum, etiam variis modis fieri potest: & sunt varii processus in hoc, attamen unus longe melior altero, unus utilior altero. Quare opus erit optimos & utilissimos hic annotare, & reliquos reticere. Optimus igitur, facillimus & utilissimus modus cuprum in vitriolum redigendi est: Illinantur laminae cupri aqua salis aut salis petrae & suspendantur vel ponantur in aere, donec laminae incipiant virescere, quod quidem cito fit, hanc viriditatem elue aqua clara fontana, laminae sicca panno aliquo, & iterum inunge aqua salis, vel salis petrae & iterum fac ut antea, tamdiu donec aqua plane viridis fiat vel multum vitrioli in superficie emittat: tunc aquam inclinando remove vel exhalando, & habebis nobile vitriolum ad medicinam. In Alchymia non est pulcrius, nobilius vel melius vitriolum, quam quod fit per aquam fortem, aut aquam regis, aut aquam salis armoniaci. Proceditur autem ita: Inungantur laminae cupri una ex dictis aquis, & quam primum viriditas extracta fuerit, & laminae siccae fuerint, viriditas pede leporino, aut alia ratione pro libitu dematur, ut cerussa de laminis plumbi raditur: iterum inungantur ut antea, donec laminae prorsus consumantur, inde fit vitriolum pulcherrimum, ut non possis non mirari.

English Copper can likewise be mortified in various ways, reducing it to vitriol, verdigris or burnt copper. There are different processes, yet one is much better and more useful than another. We must therefore record the best and most useful and leave the rest unspoken. The best, easiest and most useful way to reduce copper to vitriol is this. Anoint copper plates with water of salt or saltpetre, and hang or place them in air until they begin to turn green, which soon happens. Wash this greenness off with clear spring water, dry the plates with a cloth and anoint them again with water of salt or saltpetre. Repeat until the water becomes entirely green or produces much vitriol on its surface. Remove the water by decanting or evaporation, and you will have excellent vitriol

⁴¹ The author explicitly distinguishes preparations intended for alchemy from those he considers medicinal. This distinction is preserved, without validating the medicinal suitability of either of his preferred methods.

for medicine. In alchemy no vitriol is finer, more excellent or better than that made through aqua fortis, aqua regis or water of sal ammoniac. Proceed as follows. Anoint copper plates with one of those waters. As soon as the greenness has been drawn out and the plates are dry, remove the greenness with a hare's foot, or by another method you choose, as ceruse is scraped from lead plates. Anoint them again as before until they are entirely consumed. A very beautiful vitriol results, which cannot fail to astonish you.⁴²

Original marginal note NTR-B05-M016 1605 p. 218 · GOT-202

Latin Aqua salis petrae & salis armoniaci, ut fiant.

English How water of saltpetre and of sal ammoniac are made.

NTR-B05-P008 1605 p. 218 · GOT-202

Latin Aqua vero salis petrae fit ita: Purifica sal petrae, liquefac & pulveriza, postea in vesica in aqua bulliente per se solve, ita habes aquam salis petrae. Aqua salis Armoniaci fit ita. Calcina sal Armoniacum, & super marmore in cella resolve, haec est aqua salis armoniaci.

English Water of saltpetre is made as follows. Purify saltpetre, liquefy and powder it, then let it dissolve by itself in a bladder in boiling water: thus you have water of saltpetre. Water of sal ammoniac is made thus: calcine sal ammoniac and dissolve it on marble in a cellar. This is water of sal ammoniac.

Original marginal note NTR-B05-M017 1605 p. 218 · GOT-202

Latin Viride aeris duob. modis praeparatur.

English Verdigris is prepared in two ways.

Original marginal note NTR-B05-M018 1605 p. 218 · GOT-202

Latin Viridis aeris medici praeparatio.

English The preparation of medicinal verdigris.

NTR-B05-P009 1605 pp. 218–219 · GOT-202, GOT-203

Latin Ut autem ex cupro fiat viride aeris, sunt variae quoque viae, quas non opus est hic recensere. Tantum igitur duas describemus, attamen duplici praeparatione, unam scilicet ad medicinam, alteram ad Alchimiam. Viride igitur aeris, quod in medicina usurpandum est, talem habet processum: Accipe laminas cupri, quas inunge sequenti materia: Recipe mellis & aceti ana, & salis tantum, ut ex his tribus pultem crassiorem facere possis, bene miscendo: postea pone in reverberatorio aut furno figulino, tandiu donec figulus vasa sua torruerit, & videbis materiam adhaerentem laminis nigram esse, sed hoc ne tibi pariat sollicitudinem, nec te terreat. Nam si ad aerem suspendas vel ponas laminas illas, tota materia nigra in paucis diebus viridis fiet, & fiet pulcherrimum viride aeris, quod balsamus cupri appellari possit, & summe laudatum est ab omnibus medicis. Sed neque hoc mirari debes, quod istud viride aeris in aere primum viride fit, & quod aer colorem nigrum in tam pulcrum viridem transmutare possit. Nam hic sciendum est, quod & quotidiana experientia in Alchymia demonstrat, quod quaelibet terra mortua vel caput mortuum, quam primum ex igne in aerem venit, citissime alium colorem acquirit & suum colorem, quem in igne assumpserat, relinquit. Mutationes autem

⁴² The Latin opening lists vitriolum, viride aeris and aes ustum without all the punctuation needed for a modern list; the translation distinguishes the three historical preparations. The historical claim of medicinal suitability is not an endorsement.

istorum colorum sunt variae. Prout enim materia est, fiunt quoque colores, quanquam plerunque ex nigredine terrae mortuae fluant. Nam vos qui Alchymiae periti estis, videtis quod quaelibet terra mortua pulveris fixi vel aquae fortis, nigra ex igne veniat, & quo plura sunt ingredientia, eo magis varie ostendunt se colores in aere: interdum videntur rubri tantum, sicut quidem vitriolum facit, interdum solum flavi, albi, virides, coerulei: interdum mixtum, ut in Iride vel Cauda pavonis. Isti colores omnes post mortem se ostendunt & ex morte: nam in omnium rerum naturalium morte videntur alii colores & a primo colore in alium mutantur, quilibet iuxta suam naturam & proprietatem.

English There are also various ways to make verdigris from copper, which need not all be listed here. We shall describe only two, with different preparations: one for medicine and the other for alchemy. Verdigris intended for medicinal use has this process. Take copper plates and anoint them with the following material: equal portions of honey and vinegar and enough salt to make a rather thick paste from the three, mixing well. Place them in a reverberatory or pottery kiln until the potter has fired the vessels. You will see the material adhering to the plates is black, but do not let this concern or frighten you. If you hang or place those plates in air, the whole black material becomes green in a few days, producing very fine verdigris which may be called the balsam of copper and is highly praised by all physicians. Nor should you wonder that this verdigris becomes green only in air, and that air can change black into so beautiful a green. Every dead earth or caput mortuum, as soon as it comes from fire into air, very quickly acquires another colour and abandons the colour it assumed in fire, as daily alchemical experience demonstrates. These colour changes vary according to the material, though they mostly flow from the blackness of dead earth. Those skilled in alchemy see that every dead earth of fixed powder or aqua fortis comes black from fire. The more ingredients there are, the more variously colours appear in air: sometimes only red, as with vitriol; sometimes only yellow, white, green or blue; sometimes mixed, as in a rainbow or peacock's tail. All these colours appear after death and from death. In the death of all natural things other colours are seen, and each changes from its first colour to another according to its nature and property.⁴³

Original marginal note NTR-B05-M019 1605 p. 218 · GOT-202

Latin Balsamus cupri.

English The balsam of copper.

Original marginal note NTR-B05-M020 1605 p. 219 · GOT-203

Latin Aer mutat colores rerum ustarum.

English Air changes the colours of burnt things.

Original marginal note NTR-B05-M021 1605 p. 219 · GOT-203

Latin Viridis aeris Alchimici praeparatio.

English The preparation of alchemical verdigris.

⁴³ Caput mortuum, "dead head," is the residual material after an operation. The rainbow and peacock's tail describe a mixed display of colours. The author's designation of a copper preparation as medicinal is a historical statement, not a recommendation for use.

NTR-B05-P010 1605 p. 219 · GOT-203

Latin Porro dicemus & de viridi aeris, quod Alchymiae dedicavimus. Eius autem praeparatio & processus talis est: Lamina tenuissime cuprum, quod cum sale, sulphure & tartaro ana tritis & mixtis stratifica in tigillo magno: postea reverbera viginti quatuor horis forti igne, ita tamen ne fluant laminae cupri, postea exime, tigillum frange, laminas cum adhaerente materia aeri expone aliquot diebus, & convertetur materia in laminis in pulcherrimum viride aeris, quod in omnibus aquis fortibus, aquis gradationum, & in cementis & auri colorationibus aurum & argentum alto colore tingit.

English Let us now speak of the verdigris assigned to alchemy. Its preparation and process are as follows. Beat copper into extremely thin plates and layer it in a large crucible with equal portions of salt, sulphur and tartar, ground and mixed. Reverberate in a strong fire for twenty-four hours, yet do not allow the copper plates to melt. Remove it, break the crucible and expose the plates with the adhering material to air for a few days. The material on the plates will become very fine verdigris, which in all aquae fortes, waters of gradation, cements and colourings of gold tinges gold and silver with a deep colour.

Original marginal note NTR-B05-M022 1605 p. 219 · GOT-203

Latin Aes ustum vel crocus ♀ ut paretur.

English How burnt copper or crocus of Copper is prepared.

NTR-B05-P011 1605 p. 219 · GOT-203

Latin Ut vero cuprum aes ustum fiat, quod & crocus cupri appellatur, tali modo procedendum est: Laminetur cuprum, & ungantur sale, cum optimo aceto in pulvem redacto, postea ponatur in magno tigillo, & collocetur in furno venti & per quadrantem horae forti igne uratur, ita tamen ne fluant laminae: hae laminae ita candentes in aceto restinguantur, in quo sal Armoniacum sit resolutum, in libra aceti semper una semiuncia: iterum candefiant laminae, & in aceto restinguantur ut antea: semper autem squamas, quae post restinctionem adhaerent laminis in acetum radito, vel pulsando deicito, aut ut potes: Hoc tandiu fiat, donec laminae cupri bona ex parte inde absumantur: iam vero destillando abstrahatur acetum, vel aperto vase exhalet, & in durissimum lapidem coaguletur. Ita habes summum crocum cupri, cuius usus est in Alchymia: Multi quidem communiter aes ustum vel crocum

Veneris ex ♀ per extractionem alcoolis, vini (alii aceti) ut crocum Martis faciunt: ego vero laudo hunc modum longe magis.

English To make burnt copper, also called crocus of copper, proceed in this way. Beat copper into plates and anoint them with salt made into a paste with the best vinegar. Place them in a large crucible in a wind furnace and burn them in a strong fire for a quarter of an hour, without allowing the plates to melt. Quench the glowing plates in vinegar containing dissolved sal ammoniac, always half an ounce to a pound of vinegar. Heat them again and quench as before. Always scrape the scales adhering to the plates after quenching into the vinegar, or knock them off, or remove them however you can. Continue until a good part of the copper plates has been consumed. Then draw off the vinegar by distillation, or let it evaporate in an open vessel, and coagulate it into a

very hard stone. You thus have the highest crocus of copper for use in alchemy. Many ordinarily make burnt copper or crocus of Venus from Copper by extraction with alcohol of wine—others with vinegar—as they do crocus of Mars. I praise this method much more.⁴⁴

Original marginal note NTR-B05-M023 1605 p. 220 · GOT-204

Latin Sublimatus Mercurius ut fiat.

English How sublimed Mercury is made.

NTR-B05-P012 1605 p. 220 · GOT-204

Latin Mortificatio vero ꝑ ut sublimetur, fit per vitriolum & sal, cum his duobus misceatur, & inde sublimetur, ita durescit ut crystallus, & albescit ut nix. Ut autem in praecipitatum redigatur Mercurius, non alio modo procedendum est, quam ut in optima aqua forti calcinetur, postea gradiva aqua fortis ab eo abstrahatur quinquies, plus minusve, donec praecipitatus pulchrum colorem rubeum acquirat. Hunc praecipitatum dulcifica quantum potes: ultimo quoque rectificatum vinum ardens ab eo destilla septies vel novies, vel toties, donec in igne candescat & non aufugiat: tunc habes Mercurium praecipitatum diaphoreticum.

English Mercury is mortified for sublimation through vitriol and salt: mix it with these two and sublime it from them. It thus becomes hard like crystal and white like snow. To reduce Mercury to a precipitate, proceed by calcining it in the best aqua fortis, then draw graduated aqua fortis off from it about five times, more or less, until the precipitate acquires a fine red colour. Sweeten this precipitate as much as possible. Finally distil rectified ardent wine from it seven or nine times, or until it glows in fire without fleeing. You then have diaphoretic precipitated Mercury.⁴⁵

Original marginal note NTR-B05-M024 1605 p. 220 · GOT-204

Latin Praecipitatus diaphoreticus fixus ut fiat.

English How fixed diaphoretic precipitate is made.

Original marginal note NTR-B05-M025 1605 p. 220 · GOT-204

Latin Praecipitatus dulcis ut fiat. Eius usus.

English How sweet precipitate is made, and its use.

NTR-B05-P013 1605 p. 220 · GOT-204

Latin Porro hic notandum est magnum Secretum de Mercurio praecipitato, si post colorationem suam cum aqua salis tartari dulcificetur, distillando eam inde, semper recentem, toties quidem, donec aqua non amplius acris a praecipitato ascendat, sed plane dulcis sit. Tum habebis praecipitatum dulce ut saccarum vel mel, qui in omnibus vulneribus, ulceribus, & morbo Gallico summum Arcanum est, ut melius aliud sibi Medicus optare non debeat: praeterea exhilarat Alchimistas perditos. Est enim augmentum ☉, & ingreditur ☉, & cum ipso aurum constans & bonum fit.

⁴⁴. The source's punctuation between *alcoholis* and *vini* is loose; the phrase denotes an extraction associated with spirit of wine, with vinegar reported as an alternative. Historical pounds and ounces are retained, without conversion to an assumed modern measure.

⁴⁵. Diaphoretic means sweat-inducing in historical medicine. *Dulcificare*, rendered "sweeten," is an operational term for removing an acrid quality; it does not establish that the resulting mercury preparation is safe or edible.

Quanquam autem multum laboris & sudoris requiratur ad hunc praecipitatum, satis tamen ea recompensat, & sumptus tuos tibi reddit: & praeterea satis lucri inde habes, plus quidem quam optimo artificio aliquo assequi posses: merito autem de hoc laetari debes, & Deo & mihi ob id gratias agere.

English A great secret about precipitated Mercury must be noted here. After its colouring, sweeten it with water of salt of tartar, distilling that water from it, always fresh, until the water rising from the precipitate is no longer acrid but entirely sweet. You will then have a precipitate sweet as sugar or honey, a supreme arcanum in all wounds, ulcers and the French disease, so that a physician should wish for nothing better. It also cheers ruined alchemists: it is an augmentation of Gold, enters Gold and becomes stable, good gold with it. Though much labour and sweat are required for this precipitate, it amply compensates them and repays your expense. You also gain considerable profit, more than you could obtain through any excellent craft. You should rightly rejoice and thank God and me for it.⁴⁶

Original marginal note NTR-B05-M026 1605 p. 220 · GOT-204

Latin Mercurius ut coaguletur.

English How Mercury is coagulated.

Original marginal note NTR-B05-M027 1605 p. 220 · GOT-204

Latin Mercurius ut in cinnabarim redigatur.

English How Mercury is reduced to cinnabar.

NTR-B05-P014 1605 p. 220 · GOT-204

Latin Ut autem Mercurius coaguletur, dixi iam in acri aqua forti oportere id fieri, quae distillando abstrahatur, & praecipitatio fiat. Ut vero Mercurius in cinnabarim redigatur, oportet eum prius cum sale & sulphure flavo mortificare & liquefacere, & in pulverem album redigere, postea in cucurbita ponere, & superponere Aludel & sublimare in maximo fluxu, ut moris est, ita ascendit cinnabaris in Aludel, & adhaeret durus, ut haematites.

English As I have already said, Mercury must be coagulated in acrid aqua fortis, which is drawn off by distillation to bring about precipitation. To reduce Mercury to cinnabar, first mortify and liquefy it with salt and yellow sulphur and reduce it to white powder. Then place it in a cucurbit, put an aludel above it and sublime at the greatest flux, as customary. Cinnabar rises into the aludel and adheres hard like hematite.⁴⁷

Original marginal note NTR-B05-M028 1605 p. 220 · GOT-204

Latin Cerussa duplex, & utriusque praeparatio.

English The two kinds of ceruse and the preparation of each.

⁴⁶. Morbus Gallicus, "the French disease," is a period designation associated with syphilis. The source's claim of a supreme remedy is historical and does not validate mercury treatment or the safety of this preparation.

⁴⁷. An aludel is a head or vessel used in sublimation. "Greatest flux" preserves the source's operational expression rather than assigning a modern temperature.

NTR-B05-P015 1605 pp. 220–221 · GOT-204, GOT-205

Latin Mortificatio plumbi ut redigatur in cerussam, est duplex, una ad medicinam, altera ad Alchymiam. Praeparatio vero cerussae in medicina est talis: Laminas plumbi suspende in olla de vitrea supra acetum forte ex vino, olla optime obturata, ne spiritus exhalent: hanc ollam pone in cineres calidos, vel in hyeme post fornacem, tunc semper post decem vel quatuordecim dies invenies optimam cerussam adhaerentem laminis, quam pede leporis abradito: laminam vero reponito supra acetum tandiu, donec satis cerussae habes. Altera autem praeparatio cerussae ad Alchymiam est similis superiori, nisi quod in aceto multum optimi & pulcerrimi Salis Armoniaci solvi oporteat, hac ratione pulcerrimam & subtilissimam cerussam habebis ad purgandum stannum & plumbum & cuprum dealbandum. Si vero ex plumbo minium conficere volumus, oportet prius sale calcinari in cinerem, & postea in vitrea lata olla lateraliter aduri, semper agitando filo ferreo, donec rubescat. Hoc minium est optimum & carissimum, & in Medicina simul ac Alchymia usurpari debet: alterum autem quod mercatores vendunt in tabernis, non valet. Fit enim tantum ex cineribus, qui in minerarum liquefactione permanent, quod & figuli ad incrustandum vasa emunt, tale minium tantum ad picturas, & neque ad medicinam neque ad Alchymiam valet.

English Lead has a twofold mortification into ceruse: one for medicine and one for alchemy. The medicinal preparation is this. Suspend lead plates above strong wine vinegar in a glass pot, closely stopped so the spirits cannot escape. Put the pot in warm ashes, or in winter behind the furnace. After ten or fourteen days you will find excellent ceruse adhering to the plates; scrape it off with a hare's foot and replace the plate above the vinegar until you have enough. The alchemical preparation of ceruse resembles the first, except that much of the best and finest sal ammoniac must be dissolved in the vinegar. This produces very fine and subtle ceruse for purifying tin and lead and whitening copper. To make minium from lead, first calcine it with salt into ashes, then heat it from the side in a broad glass pot, continually stirring with an iron wire until it reddens. This minium is the best and most valuable and should be used in medicine as well as alchemy. The other kind, sold by merchants in shops, is worthless: it is made only from ashes remaining after the melting of ores, which potters also buy to glaze vessels. Such minium is useful only for painting, neither for medicine nor alchemy.⁴⁸

Original marginal note NTR-B05-M029 1605 p. 221 · GOT-205

Latin Minii ex plumbo praeparatio.**English** The preparation of minium from lead.

Original marginal note NTR-B05-M030 1605 p. 221 · GOT-205

Latin Crocus ḥ.**English** Crocus of Lead.

⁴⁸ Ceruse and minium are historical lead preparations. The author's distinctions between medicinal, alchemical and painting grades are preserved; none makes lead appropriate for medicinal use. The printed in olla de vitrea is irregular but identifies a glass pot.

NTR-B05-P016 1605 p. 221 · GOT-205

Latin Ut autem plumbum redigatur in flavedinem, fit praeparatio eius non absimilis praeparationi minii. Nam plumbum hic quoque sale calcinari, & in cinerem redigi debet, & postea continuo ferro agitari in lata patina probantium mineras, in mediocri igne carbonum, diligenter animadvertendo, ne nimium caloris sentiat, neve agitatio sit negligens, alias enim flueret & fieret vitrum flavum: atque ita

habebis pulcrum flavum ex h.

English To reduce lead to a yellow substance, prepare it much as minium is prepared. Here too the lead must be calcined with salt and reduced to ashes, then continually stirred with iron in a broad assay pan over a moderate charcoal fire. Take care not to expose it to excessive heat or neglect the stirring, for otherwise it would melt and become yellow glass. You will thus have a fine yellow from Lead.

Original marginal note NTR-B05-M031 1605 p. 221 · GOT-205

Latin Lazurius color ex argento ut fiat.

English How an azure colour is made from silver.

NTR-B05-P017 1605 p. 221 · GOT-205

Latin Mortificatio argenti ut ex eo fiat lazurium, vel illi simile aliquid, ita fit:

Laminetur ☽, & cum Mercurio misceatur, & in vitrea olla suspendatur supra acetum praestans, in quo prius auratae coctae sint, & postea in eo soluta sal armoniacum & tartarum calcinatum: in reliquis omnibus age, ut de cerussa dictum est, tunc semper post quatuordecim dies habebis nobilissimum & pulcerrimum lazurium adhaerens laminis argenti, quod pede leporino deterges.

English To mortify silver into lazurium or something like it, proceed thus. Beat Silver into plates and mix it with Mercury; suspend it in a glass pot above excellent vinegar in which auratae have first been boiled, and in which sal ammoniac and calcined tartar have afterward been dissolved. In every other respect proceed as described for ceruse. After fourteen days you will always have very excellent and beautiful lazurium adhering to the silver plates; wipe it away with a hare's foot.⁴⁹

Original marginal note NTR-B05-M032 1605 p. 221 · GOT-205

Latin Auri mortificatio, ut fiat.

English How Gold is mortified.

Original marginal note NTR-B05-M033 1605 p. 221 · GOT-205

Latin Nat. rer.

English Nature of things.⁵⁰

NTR-B05-P018 1605 pp. 221–222 · GOT-205, GOT-206

Latin Mortificationem auri ut redigatur in sua Arcana, ut in tincturam, 5. Essentiam, resinam, crocum, vitriolum & sulphur, & cetera praestantia arcana, quorum quidem praeparationes multiplices sunt: quia maxima ex parte talia arcana in aliis libris iam

⁴⁹. The printed auratae is retained as an uncertain material designation. The text does not explain it sufficiently to justify silently identifying it with a modern reagent. Lazurium denotes an azure material or colour, not necessarily lapis lazuli.

⁵⁰. This abbreviated marginal label is retained as printed.

satis tradidimus, ut extractionem tincturae Solis, 5. ess. Solis, Mercurii Solis, olei Solis, Solis potabilis, resinae Solis, croci Solis, & in Archidoxis & alibi, hic non opus esse censemur repetere. Quae autem arcana illic omissa sunt, hic indicabimus, ut vitriolum Solis, sulphur Solis, quae quidem non sunt minima, & quemlibet medicum summopere exhilarare debent. Ut autem vitriolum ex Sole extrahatur, ita procedendum est: Recipe auri purgati duas vel tres marcas, quas lamina & suspende super urina puerorum mixta cum acinis uvarum, in ampla cucurbita vitrea superius bene sigillata, quam in ferventem cumulum acinorum uvarum, ut ex torculari sumuntur, infodias, ubi stet quatuordecim dies, vel tres septimanas: postea aperi & reperiis subtilissimum colorem, qui est vitriolum Solis, adhaerentem laminis Solis, quem pede leporino demes, ut de aliis metallis audivisti, ut de ferri

laminis crocum σ , de cupri laminis vitriolum φ & viride aeris, de $\hbar$ laminis cerussam, de $\mathfrak{D}$ laminis lazurium, &c. sub uno processu comprehensis, sed non tamen uniusmodi praeparatione. Quando igitur satis habes huius vitrioli $\odot$, coque ipsum bene in aqua pluviali distillata, semper agitando spatula aliqua, tum sulphur auri tollitur in superficie aquae ut oleum, quod cochleari demito. Ita etiam cum alio vitriolo agendum est. Postquam autem iam ablatum est sulphur, aquam illam pluvialem evapora usque ad siccitatem & remanebit vitriolum $\odot$ in fundo, quod facile per se in marmore in humido resolvere potes. In his duobus Arcanis nempe in vitriolo auri & sulphure auri latet virtus diaphoretica. Virtutes autem eorum hic non describimus, nam in libro de Morbis metallicis, & in aliis libris eas satis indicavimus.

English We consider it unnecessary to repeat here the mortification of gold into its arcana—tincture, quintessence, resin, crocus, vitriol, sulphur and other outstanding arcana, for which there are many preparations. We have already sufficiently taught most of them in other books: the extraction of the Sun's tincture, quintessence, Mercury, oil, potable Sun, resin and crocus, in the Archidoxis and elsewhere. We shall describe here arcana omitted there, such as the Sun's vitriol and sulphur, which are far from insignificant and ought greatly to delight every physician. To extract vitriol from the Sun, take two or three marks of purified gold, beat them into plates and suspend them above boys' urine mixed with grape berries in a broad glass cucurbit well sealed above. Bury it in a fermenting heap of grape berries as taken from the press, and leave it there fourteen days or three weeks. Then open it: you will find a very subtle colour, the Sun's vitriol, adhering to the gold plates. Remove it with a hare's foot, as you heard for other metals: crocus of Mars from iron plates, vitriol of Venus and verdigris from copper plates, ceruse from lead plates, lazurium from silver plates and so forth. These are embraced by one process, though not by an identical preparation. When you have enough of this Gold vitriol, boil it well in distilled rainwater, continually stirring with a spatula. The sulphur of gold then rises to the water's surface like oil; remove it with a spoon. Proceed likewise with other vitriol. Once the sulphur has been removed, evaporate the rainwater to dryness: Gold vitriol remains at the bottom and can readily be dissolved by itself on marble in a moist place. A diaphoretic virtue lies hidden in these two arcana, vitriol of

gold and sulphur of gold. We do not describe their virtues here, for we have sufficiently indicated them in the book *On Metallic Diseases and other books*.⁵¹

Original marginal note NTR-B05-M034 1605 p. 221 · GOT-205

Latin Auri sulphur & vitriolum, ut fiant.

English How Gold's sulphur and vitriol are made.

Original marginal note NTR-B05-M035 1605 p. 222 · GOT-206

Latin Mortificatio & fixatio sulphuris, ut fiat.

English How sulphur is mortified and fixed.

NTR-B05-P019 1605 p. 222 · GOT-206

Latin Mortificatio autem sulphuris est, ut ipsi combustibilis & foetens pinguedo adimatur, & in fixam substantiam redigatur, quod hac ratione fit: Recipe vulgare flavum sulphur in tenuem pulverem redactum, & abstrahere ab ipso distillando aquam fortem valde acrem tertia vice: postea sulphur, quod in fundo est nigri coloris, dulcifica dulci aqua, toties ab eo distillando, donec aquae prorsus dulcis ab eo abscedat & non amplius sulphuris foetorem habeat. Hoc iam sulphur reverbera in reverberatorio clauso sicut Antimonium, tum fiet primo album: postea flavum: tertio rubrum ut cinnabaris. Quando ipsum iam tale habes, gaudere debes: Est enim initium divitiarum tuarum: Hoc reverberatum sulphur tingit altissime quamlibet Lunam in praestantissimum aurum, & corpus humanum in suam summam sanitatem, plus quam scribere licet, tantae virtutis est hoc reverberatum & fixatum sulphur.

English Sulphur is mortified by removing its combustible, stinking fatness and reducing it to a fixed substance. This is done as follows. Take common yellow sulphur reduced to fine powder and draw very acrid aqua fortis from it by distillation three times. Then sweeten the black sulphur remaining at the bottom with fresh water, repeatedly distilling it off until the water leaves entirely sweet and no longer smells of sulphur. Reverberate this sulphur in a closed reverberatory as with Antimony: it will first become white, then yellow, and thirdly red like cinnabar. When it has reached this condition you should rejoice, for it is the beginning of your riches. This reverberated sulphur tinges any Silver very deeply into the most excellent gold and the human body into its highest health, beyond what it is lawful to write: such is the virtue of this reverberated and fixed sulphur.

Original marginal note NTR-B05-M036 1605 p. 222 · GOT-206

Latin Salia ut mortificentur.

English How salts are mortified.

NTR-B05-P020 1605 p. 222 · GOT-206

Latin Mortificatio omnium salium, & quicquid est naturae salsae, est ablatio & distillatio aquositatis & oleitatis ipsorum, & praeterea spiritus salis. Nam si haec auferantur, vocantur postea terra mortua vel caput mortuum.

⁵¹. The marks, fortnight and three weeks are the historical measures and alternative periods in the source. Sol, "Sun," is retained in compound arcanum names where it carries more than a bare modern metal designation. The cited Archidoxis and *On Metallic Diseases* are historical cross-references, not additional books included within this work.

English The mortification of all salts, and whatever is of a salty nature, is the removal and distillation of their wateriness and oiliness, and also of the spirit of salt. When these are removed, they are afterward called dead earth or caput mortuum.

Original marginal note NTR-B05-M037 1605 p. 222 · GOT-206

Latin Gemmae, ut mortificentur.

English How gems are mortified.

NTR-B05-P021 1605 p. 222 · GOT-206

Latin Mortificatio gemmarum & corallorum est, ut calcinentur, sublimentur, & in liquorem solvantur, ut crystallus. Perlarum mortificatio est, ut calcinentur, & in aceto resolvantur in forma lactis.

English Gems and corals are mortified by being calcined, sublimed and dissolved into liquor, like crystal. Pearls are mortified by being calcined and dissolved in sharp vinegar into the form of milk.

Original marginal note NTR-B05-M038 1605 p. 222 · GOT-206

Latin Magnes, ut mortificetur.

English How a magnet is mortified.

NTR-B05-P022 1605 p. 222 · GOT-206

Latin Mortificatio Magnetis est, ut olei Mercurii inungatur, vel ☿ vulgi tangatur: nam postea nullum ferrum attrahit.

English A magnet is mortified by being anointed with oil of Mercury or touched by common Mercury: afterward it attracts no iron.

Original marginal note NTR-B05-M039 1605 p. 222 · GOT-206

Latin Silices, ut mortificentur.

English How flints are mortified.

NTR-B05-P023 1605 p. 222 · GOT-206

Latin Mortificatio silicum & lapidum est calcinatio.

English The mortification of flints and stones is calcination.

Original marginal note NTR-B05-M040 1605 p. 222 · GOT-206

Latin Marcasitae.

English Marcasites.

NTR-B05-P024 1605 pp. 222–223 · GOT-206, GOT-207

Latin Mortificatio marcasitarum, cachymiarum, talci, Kobalti, zinzi, granatorum, zwitter, wismut, antimonii est sublimatio, hoc est, ut cum sale & vitriolo sublimentur, tum vita ipsorum, quae est spiritus metallicus una cum spiritu salis ascendit. Quicquid autem in fundo sublimatorii remanet, lavetur, ut resolvatur ab eo sal, & habebis terram mortuam, in qua nihil est virtutis.

English The mortification of marcasites, cachymiae, talc, cobalt, zinz, garnets, zwitter, wismut and antimony is sublimation: sublime them with salt and vitriol, and their life, the metallic spirit, rises together with the spirit of salt. Wash whatever remains at the bottom of the

sublimatory so that its salt dissolves away. You will have dead earth in which no virtue remains.

Original marginal note NTR-B05-M041 1605 p. 223 · GOT-207

Latin *Realgaria ut mortificentur.*

English How realgars are mortified.

NTR-B05-P025 1605 p. 223 · GOT-207

Latin *Mortificatio arsenicalium, auripigmenti, opermenti, realgaris, &c. est ut cum sale nitro fluant, & in marmore in oleum vel liquorem vertantur, & fixentur.*

English The mortification of arsenical substances, auripigment, orpiment, realgar and so forth is to melt them with salt nitre, turn them into oil or liquor on marble, and fix them.

Original marginal note NTR-B05-M042 1605 p. 223 · GOT-207

Latin *Stercora, ut mortificentur.*

English How dung is mortified.

NTR-B05-P026 1605 p. 223 · GOT-207

Latin *Mortificatio rerum undosarum est coagulatio aeris.*

English The mortification of undosa is the coagulation of air.⁵²

Original marginal note NTR-B05-M043 1605 p. 223 · GOT-207

Latin *Aromata, &c.*

English Aromatics and so forth.

NTR-B05-P027 1605 p. 223 · GOT-207

Latin *Mortificatio armoniacarum rerum est ablatio boni odoris.*

English The mortification of aromatic things is the removal of their good smell.⁵³

Original marginal note NTR-B05-M044 1605 p. 223 · GOT-207

Latin *Dulcia, &c.*

English Sweet things and so forth.

NTR-B05-P028 1605 p. 223 · GOT-207

Latin *Mortificatio dulcedinosarum rerum est, ut cum corrosivis sublimentur & distillantur.*

English Sweet things are mortified by being sublimed and distilled with corrosives.

Original marginal note NTR-B05-M045 1605 p. 223 · GOT-207

Latin *Resinae, &c.*

English Resins and so forth.

⁵² The margin identifies this with dung. The unusual undosa terminology also occurs in Book IV; the text's wording is retained rather than supplied with a conjectural chemical meaning.

⁵³ The source prints armoniacarum, apparently for aromaticarum in this context; the margin reads Aromata. The Latin witness reading is retained and the evident sense translated.

NTR-B05-P029 1605 p. 223 · GOT-207

Latin Mortificatio carabarum, resinarum, terpentinae & gummi est, ut in oleum vel vernicem redigantur.

English The mortification of ambers, resins, turpentine and gum is to reduce them to oil or varnish.

Original marginal note NTR-B05-M046 1605 p. 223 · GOT-207

Latin Herbarum, &c.

English Of plants and so forth.

NTR-B05-P030 1605 p. 223 · GOT-207

Latin Mortificatio herbarum, radicum, & similium est, ut ab ipsis oleum & aqua eorum distilletur, & liquor exprimatur torculari, & praeterea alcali extrahatur.

English Plants, roots and the like are mortified by distilling their oil and water from them, expressing their liquor with a press and also extracting their alkali.

Original marginal note NTR-B05-M047 1605 p. 223 · GOT-207

Latin Ligna, &c.

English Woods and so forth.

NTR-B05-P031 1605 p. 223 · GOT-207

Latin Mortificatio lignorum est, ut in carbones vel cineres vertantur.

English The mortification of woods is to turn them into coals or ashes.

Original marginal note NTR-B05-M048 1605 p. 223 · GOT-207

Latin Ossa, &c.

English Bones and so forth.

NTR-B05-P032 1605 p. 223 · GOT-207

Latin Mortificatio ossium est ipsorum calcinatio.

English The mortification of bones is their calcination.

Original marginal note NTR-B05-M049 1605 p. 223 · GOT-207

Latin Caro, &c.

English Flesh and so forth.

NTR-B05-P033 1605 p. 223 · GOT-207

Latin Mortificatio carnis & sanguinis est ablatio spiritus salis.

English The mortification of flesh and blood is the removal of the spirit of salt.

Original marginal note NTR-B05-M050 1605 p. 223 · GOT-207

Latin Aquae & ignis, &c.

English Of water and fire, and so forth.

NTR-B05-P034 1605 p. 223 · GOT-207

Latin Mortificatio aquae fit per ignem. Nam calor ignis exsiccat & consumit omnem aquam: ita mortificatio ignis fit per aquam: aqua enim extinguit ignem & aufert ipsi suam vim & efficaciam.

English Water is mortified through fire, for fire's heat dries up and consumes all water. Fire is likewise mortified through water, for water extinguishes fire and removes its force and efficacy.

NTR-B05-P035 1605 p. 223 · GOT-207

Latin Ita iam satis instructi estis brevibus quidem verbis, quomodo mors in omnibus rebus naturalibus lateat, & quomodo mortificentur, & in aliam formam & naturam redigantur, & quae virtutes ex ipsis fluant. Quicquid praeterea hic dicendum erat, ponimus in libro sequenti de Resuscitatione rerum naturalium.

English You have now been sufficiently instructed, though briefly, how death lies hidden in all natural things, how they are mortified and reduced to another form and nature, and what virtues flow from them. Whatever more should be said here we place in the following book, On the Resuscitation of Natural Things.

Book 6 On the Resuscitation of Natural Things

Liber sextus. De resuscitatione rerum naturalium.

Latin witness: Frankfurt 1605, printed pp. 223–228, SUB Göttingen PPN578052199.

Source facsimile: <https://gdz.sub.uni-goettingen.de/id/PPN578052199?tify=%7B%22pages%22%3A%5B207%5D%7D>

Original marginal note NTR-B06-M001 1605 p. 223 · GOT-207

Latin Resuscitatio possibilis cuius sit.

English Of what resuscitation is possible.

NTR-B06-P001 1605 pp. 223–224 · GOT-207, GOT-208

Latin Resuscitatio & reductio rerum naturalium non est minimum in rerum natura, sed profundum & magnum Secretum, & potius divinum & angelicum quid, quam humanum & naturale. Volo autem hic cum maximo discrimine intelligi, & non aliter, quam mea est sententia, & quam natura quotidie & manifeste ostendit, & experientia probat, ne mendaciis & obtrectationibus pseudomedicorum, meorum hostium, sim expositus, (quae alias omnia mea sinistre interpretantur) quasi divinam potentiam usurpare velim, & naturae haec tribuere, quod nunquam illa praestare potuerit. Quapropter hic summa observatione opus est, quandoquidem mors est duplex, nempe violenta & spontanea. Una potest resuscitare altera non. Quare Sophistis ne credatis, qui dicunt, quod semel mortuum sit vel mortificatum, nunquam posse resuscitari, & resuscitationem & restaurationem nihili faciunt, qui quidem error ipsorum non est minimus. Verum quidem est, quicquid naturali sua morte perit, & quicquid natura mortificat ex praedestinatione sua, solus Deus resuscitare potest, aut ipsius iussu divino hoc fieri necesse est. Ita quicquid natura consumit, homo restaurare non potest. Quicquid autem homo destruit, restituere potest, & refectum frangere, ulterius homo nullam ex sua conditione potestatem habet, & si quis amplius niteretur facere, is Dei potentiam sibi arrogaret, & tamen frustra laboraret & confunderetur, nisi Deus esset cum ea vel haberet tantam fidem, qua montes transponere posset. Tali etiam hoc possibile esset, & adhuc plura maiora: quia scriptura ait, & Christus hoc ipse dixit: Si habeatis fidem ut granum sinapi, & dicatis isti monti, abeas, & colles te in illo, faciet & collocabit se, & omnia erunt vobis possibilia & nihil impossibile.

English The resuscitation and reduction of natural things is no small matter in nature, but a profound and great secret, something divine and angelic rather than human and natural. Yet I wish to be understood here with the greatest discrimination, and only in accordance with my meaning, with what nature daily and clearly shows and experience proves. Otherwise I would be exposed to the lies and slanders of my enemies, the false physicians, who habitually misinterpret everything of mine, as though I wished to usurp divine power and attribute to nature what it could never accomplish. The greatest care is therefore required, since death is twofold: violent and spontaneous. One permits resuscitation; the other does not. Do not believe the sophists who say that whatever has once died or been mortified can never be resuscitated, and make nothing of resuscitation and restoration. Their error is considerable. It is indeed true that only God can resuscitate whatever perishes by its natural death or nature mortifies according to its predestination; it must occur by his divine command. What nature

consumes a human cannot restore. What a human destroys, however, a human can restore and break again once repaired. Humanity has no further power by its own condition. Whoever attempted more would arrogate God's power and yet labour in vain and be confounded, unless God were with that person, or that person possessed faith great enough to move mountains. For such a person this too would be possible, and still greater things, because Scripture says, and Christ himself said: If you have faith like a mustard seed and say to this mountain, Go and settle there, it will do so and settle there; everything will be possible for you and nothing impossible.⁵⁴

Original marginal note NTR-B06-M002 1605 p. 224 · GOT-208

Latin Mors duplex.

English Death is twofold.

Original marginal note NTR-B06-M003 1605 p. 224 · GOT-208

Latin Resuscitatio quae & sit.

English What resuscitation is.⁵⁵

Original marginal note NTR-B06-M004 1605 p. 224 · GOT-208

Latin Quae res qua ratione resuscitari, quae non.

English Which things may be resuscitated, by what means, and which may not.

NTR-B06-P002 1605 pp. 224–225 · GOT-208, GOT-209

Latin Sed ut ad nostrum propositum redeamus, quid tandem sit discriminis inter mori & mortificari, & utrum ex his resuscitari possit, ita haec intelligenda sunt. Quicquid ex natura sua moritur, habet suum terminum ex praedestinatione, & ita fert Dei voluntas & ordinatio. Accidit tamen hoc quoque ex variis morbis & diversis casibus, & hoc nunquam resuscitari potest, neque est ullum praeservativum contra praedestinationem & consummatum terminum vitae usurpandum. Quod autem mortificatum est, et resuscitari & revivificari potest, quod multis argumentis probari posset, quae quidem in fine huius libri ponemus. Quare maximum discrimen est inter mori & mortificari, neque pro re una sub eodem nomine censi debet. Nam in ipsa proba longissime distant. Nam videte de homine qui moritur morte naturali & praedestinata, quid amplius boni vel utilis est in ipso? Nihil, tantum in terram ad vermes coniiciatur. Est enim putridum cadaver & debetur terrae. De homine autem occiso, qui gladio vel simili modo violento mortuus est, non similiter intelligendum est. Nam totum ipsius corpus est utile & bonum, & in pretiosissimam mumiam praeparari potest. Nam quamvis spiritus vitae ex tali corpore excesserit, restat tamen Balsamus, in quo adhuc vita latet, qui quidem ut Balsamus alia corpora humana conservat. Ita etiam de metallis videtis quando metallum mori vult incipit rubigine confici: & quod confectum est, mortuum est: & quando totum metallum rubigine absumtum est, totum est mortuum, & talis rubigo nunquam in verum metallum reduci potest, sed fit tantum modo scoria & non metallum. Mortuum est enim, & mors est in ipso, nec habet balsamum vitae amplius, sed in seipso perit.

⁵⁴. The wording *Una potest resuscitare* is grammatically irregular; the ensuing explanation makes the contrast clear: restoration of what is artificially destroyed is distinguished from resurrection after natural death. The mustard-seed mountain saying paraphrases Matthew 17:20. The source prints *cum ea* in the condition about divine assistance; the translation follows the personal referent required by the context.

⁵⁵. The compressed marginal wording is retained in the Latin as printed.

English To return to our purpose, the difference between dying and being mortified, and which permits resuscitation, must be understood as follows. Whatever dies according to its nature has its limit through predestination, as God's will and ordinance decree. This also occurs through various diseases and accidents, and it can never be resuscitated; nor can any preservative be employed against predestination and the completed term of life. What has been mortified, however, can be resuscitated and brought to life again, as many arguments could prove, which we shall offer at this book's end. There is therefore a very great difference between dying and being mortified; they must not be regarded as one thing under the same name, for in the test itself they stand far apart. Consider a person who dies a natural and predestined death: what good or useful thing remains? Nothing; the corpse should merely be cast into the earth to the worms, for it is putrid and owed to earth. The same must not be understood of a person killed by the sword or another violent means. The whole body is useful and good and can be prepared into most precious mummia. Though the spirit of life has departed from that body, balsam remains, with life still hidden in it, and this balsam preserves other human bodies. Likewise in metals you see that when a metal is about to die it begins to be consumed by rust. What has been consumed is dead. When the entire metal has been consumed by rust, it is entirely dead; that rust can never be reduced to true metal, but becomes only slag. It is dead, death is in it, and it no longer has the balsam of life but has perished in itself.⁵⁶

Original marginal note NTR-B06-M005 1605 p. 224 · GOT-208

Latin Aliud mori, aliud mortificari.

English Dying is one thing, being mortified another.

Original marginal note NTR-B06-M006 1605 p. 225 · GOT-209

Latin Differentia calcis & cineris metallorum.

English The difference between the calx and ash of metals.

Original marginal note NTR-B06-M007 1605 p. 225 · GOT-209

Latin Cinis metallorum quid sit.

English What the ash of metals is.

Original marginal note NTR-B06-M008 1605 p. 225 · GOT-209

Latin Calx metallorum quid.

English What the calx of metals is.

NTR-B06-P003 1605 p. 225 · GOT-209

Latin Est & calx metallorum & cinis duplex, & est maxima differentia inter ista duo. Nam unum revivificari potest & in metallum reduci, alterum vero minime: unum est volatile, alterum est fixum: unum est mortuum, alterum mortificatum. Cinis est volatilis nec in metallum reduci potest, tantum in vitrum vel scoriam. Calx autem metallorum est fixa & in suum metallum reduci potest. Ut autem differentiam &

⁵⁶ The distinction between a corpse after natural death and one after violent death is part of the historical doctrine of mummia. It does not establish medicinal usefulness or justify treating human remains as a material resource. The claim that rust cannot be reduced to metal is likewise the author's classification, not a universal modern metallurgical rule.

causam intelligatis, scitote, quod in cinere minus pinguedinis & plus siccitatis sit quam in calce, quae quidem fluxum dat. Calx vero pinguior est & humidior quam cinis, & adhuc secum habet suam resinam & fluxum, & praecipue Sal, quod ex propria natura fluxibile est, & metalla fluere facit & reducit. Ex hoc iam sequitur, cineribus metallorum, ut in metallum non reduci possunt, sal extrahendum esse, tunc perfecte sunt volatiles: & hoc quidem dulcissime & caute est summopere notandum, & non parum in eo situm est.

English There is also a twofold metallic residue, calx and ash, with a very great difference between them. One can be brought to life again and reduced to metal; the other cannot. One is volatile, the other fixed; one is dead, the other mortified. Ash is volatile and cannot be reduced to metal, only to glass or slag. Metallic calx is fixed and can be reduced to its own metal. To understand the difference and its cause, know that ash contains less fatness and more dryness than calx, which gives fusion. Calx is fatter and moister than ash and still has its resin and flux, especially Salt, which is fusible by its own nature and makes metals flow and reduces them. It follows that salt must be extracted from metallic ashes so that they cannot be reduced to metal; then they are completely volatile. This must be noted with the greatest gentleness and care, for much depends upon it.⁵⁷

Original marginal note NTR-B06-M009 1605 p. 225 · GOT-209

Latin Med. circa aurum error.

English Physicians' error concerning gold.

NTR-B06-P004 1605 p. 225 · GOT-209

Latin Nam apud falsos Medicos non parvus error existit, qui loco ☉ potabilis, quintae essentiae auri, tincturae ☉, &c. leprosam calcem Solis dederunt hominibus, non considerato discrimine & malo inde consequente. Nam duo notabilia & necessaria hic observanda sunt, nempe quod aut calcinatum vel pulverizatum ☉, si detur hominibus in ventriculo in unum cumulum congeratur, aut cum stercore iterum per anum prodeat & ita frustra sumatur & inutiliter: aut quod magno interiori calore in corpore humano reducitur, & intestina & ventriculum incrustat & deaurat, qua re concoctio in ventriculo impeditur, unde multae variaeque aegritudines consequuntur, & tandem etiam mors. Sicut autem de Sole audivistis, ita etiam de reliquis metallis septem intelligatis, nempe ne ullum metallicum Arcanum vel medicamentum intra corpus accipiatis, nisi prius sit redditum volatile, & in nullum metallum reduci possit. Quare primus gradus & initium praeparandi aurum potabile est hoc, ita postea tale volatile per spiritum vini solvi potest, ut ambo simul ascendant & volatilia & inseparabilia fiant. Sicut autem praepararis aurum, ita potestis etiam praeparare ☽ ♀ ♂ ♀ & ☿ potabile.

English A considerable error occurs among false physicians who have given people the leprous calx of the Sun instead of potable Gold, the quintessence of gold, the tincture of Gold and so forth, without considering the difference and the resulting harm. Two important and

⁵⁷. Calx, ash, fixed and volatile are used in the source's operational taxonomy. The translation keeps their distinctions even where a modern account would classify the materials differently.

necessary points must be observed. If calcined or powdered Gold is given to people, either it gathers in one heap in the stomach or passes out again with the dung and is taken vainly and uselessly; or it is reduced by the great inner heat of the human body and encrusts and gilds the intestines and stomach. This obstructs digestion, causing many different illnesses and finally even death. What you have heard about the Sun must also be understood of the remaining seven metals: take no metallic arcanum or medicine internally unless it has first been made volatile and cannot be reduced to any metal. This is the first stage and beginning of preparing potable gold. Such a volatile substance can then be dissolved through spirit of wine, so that both rise together and become volatile and inseparable. As you prepare gold, you can also prepare potable Silver, Copper, Iron, Tin, Lead and Mercury.⁵⁸

Original marginal note NTR-B06-M010 1605 p. 225 · GOT-209

Latin Arcana metallica quando intro sumenda.

English When metallic arcana are to be taken internally.

Original marginal note NTR-B06-M011 1605 p. 225 · GOT-209

Latin Quomodo fiant metalla potabilia irreducibilia.

English How potable and irreducible metals are made.

Original marginal note NTR-B06-M012 1605 p. 225 · GOT-209

Latin Resuscitationis probatio sumta ab animalibus, vermibus, &c.

English Proof of resuscitation taken from animals, worms and so forth.

NTR-B06-P005 1605 pp. 225–226 · GOT-209, GOT-210

Latin Sed ut ad nostrum propositum redeamus, & exemplis & sufficientibus rationibus probemus, quod res mortificatae non mortuae sint, & in morte cogantur manere, sed reduci & resuscitari ac vivificari possint, & hoc quidem per hominem ex ductu naturae & formula: videtis de leonibus, qui omnes mortui nascuntur, & primum ab horribili clamore suorum parentum vivificantur, quasi aliquis dormiens qui clamore aliquo suscitetur, ita etiam leones excitantur, non quod sic dormiant (nam qui dormit somnum naturalem, eum necesse est resurgere) sed leones non ita: Nam nisi excitatio per clamorem illum fieret, mortui manerent, nec unquam in illis vita reperiretur. Quare ex hoc satis intelligitur, quod per clamorem vitam suam acquirant & vivificentur. Similiter etiam videris in omnibus animalibus, quae non nascuntur, sed ex putredine oriuntur ut muscae, quae si in aquis suffocentur ita ut nulla amplius vita in ipsis reperiatur vel videatur, & si ita relinquerentur, mortuae manerent, neque ex seipsis unquam reviviscerent. Quod si sale inspergantur & in sole calido vel post fornacem calentem collocentur, priorem vitam recuperant, & haec quidem est ipsarum resuscitatio. Nam si hoc non fieret mortuae remanerent. Ita etiam videbis in serpente, si in frusta secetur & haec in cucurbitam ponatur, & in ventre equino putrefiant, totus serpens reviviscet in vitro in forma parvorum vermium vel ut semen piscium. Quod si isti vermiculi, ut decet, in putrefactione educuntur & enutrientur, multoties centum serpentes ex uno serpente nascuntur, quorum quilibet tam grandis est ut primus, quod quidem sola putrefactio potest. Atque ut de serpente dictum est, sic multa animalia resuscitari, revocari & restaurari possunt. Iuxta hunc processum conati sunt, adiuvante Nigromantia, Hermes &

⁵⁸ The warnings and the proposed mechanism of injury are the historical author's. His alternative of making metals "volatile" does not establish safety for ingestion. "Remaining seven metals" is the printed expression although the customary total is seven, including Gold.

Virgilius seipsos post mortem renovare & resuscitare, & denuo ut infantes nasci, sed non iuxta propositum ipsorum res cecidit, sed male cessit.

English Let us return to our purpose and prove by examples and sufficient reasons that mortified things are not dead and compelled to remain in death, but can be reduced, resuscitated and brought to life by humans under nature's guidance and pattern. Consider lions, all born dead and first brought to life by their parents' dreadful roar. Lions are thus awakened like a sleeper roused by a shout, but they are not simply asleep: someone naturally asleep must wake, whereas lions would remain dead without that awakening roar and life would never be found in them. From this it is clear enough that they acquire life and are animated through the roar. You see something similar in animals not born but arising from putrefaction, such as flies. If drowned in water until no life remains apparent or discoverable, they would remain dead if left so and never revive of themselves. But if sprinkled with salt and placed in warm sunshine or behind a warm furnace, they recover their former life: this is their resuscitation. Otherwise they would remain dead. Likewise, if a serpent is cut into pieces, placed in a cucurbit and putrefied in the horse's belly, the entire serpent revives in the glass in the form of little worms or fish spawn. If those little worms are properly reared and nourished in putrefaction, many hundreds of serpents will be born from one, each as large as the first. Putrefaction alone can accomplish this. As described for the serpent, many animals can be resuscitated, recalled and restored. Following this process with the aid of nigromancy, Hermes and Virgil attempted to renew and resuscitate themselves after death and be born again as infants. Things did not turn out as they intended, but ended badly.⁵⁹

Original marginal note NTR-B06-M013 1605 p. 226 · GOT-210

Latin Leonum vivificatio.

English The vivification of lions.

Original marginal note NTR-B06-M014 1605 p. 226 · GOT-210

Latin Muscarum resuscitatio ut fiat.

English How flies are resuscitated.

Original marginal note NTR-B06-M015 1605 p. 226 · GOT-210

Latin Generatio multorum serpentum ex uno.

English The generation of many serpents from one.

Original marginal note NTR-B06-M016 1605 p. 226 · GOT-210

Latin Hermetis & Virgilio conatus irritus.

English The unsuccessful attempt of Hermes and Virgil.

⁵⁹. The lion cub awakened by a parental roar belongs to an inherited natural-history legend, not an observed biological rule. The serpent regeneration and the accounts of Hermes and Virgil likewise belong to the work's legendary and alchemical argument. Nigromantia is rendered "nigromancy" to preserve the period term rather than silently identifying every operation with modern necromancy.

Original marginal note NTR-B06-M017 1605 p. 226 · GOT-210

Latin Metallorum resuscitatio duplex est.

English The resuscitation of metals is twofold.

Original marginal note NTR-B06-M018 1605 p. 226 · GOT-210

Latin Reductio metallorum in Mercurium vivum.

English The reduction of metals to living Mercury.

NTR-B06-P006 1605 pp. 226–227 · GOT-210, GOT-211

Latin Sed ut exempla omittamus & praxim resuscitationis & restaurationis aggrediamur, necesse est & decet a metallis nos incipere: quandoquidem metallica corpora humanis corporibus saepius assimilantur. Sciendum igitur, resuscitationem & restaurationem metallorum duplicem esse. Unam quae metalla calcinata per reductionem in suum primum metallicum corpus redigat: Alteram quae metalla in suam primam materiam reducat, hoc est in argentum vivum: & ita quidem in posteriori proceditur. Calcina metallum per Mercurium vulgi: hanc calcem & tantundem argenti vivi pone in sublimatorio, stent aliquandiu, donec ambo in amalgama coagulentur: postea eleva Mercurium per sublimationem a calce, elevatum iterum tere cum calce metallica, & sublima ut antea: hoc toties fac donec calx metallica tandem super candela ut cera vel glacies liquescat, tum probe factum est. Hoc metallum ponatur in digestionem ad suum tempus, & mutabitur totum in Mercurium vivum, hoc est in primam suam materiam, qui quidem Mercurius metallorum Mercurius philosophorum appellatur, quem plurimi Alchymistae quaesiverunt, sed pauci invenerunt. Ita iam paratur Mercurius vivus ex omnibus

metallis, nempe ♀ auri ♂ ♀ ♂ ♀.

English Leaving examples and approaching the practice of resuscitation and restoration, it is necessary and fitting to begin with metals, since metallic bodies are often compared with human bodies. The resuscitation and restoration of metals is twofold. One reduces calcined metals back to their first metallic body; the other reduces metals to their first matter, quicksilver. The latter proceeds as follows. Calcine the metal through common Mercury. Put this calx and an equal quantity of quicksilver in a sublimatory and leave them until both coagulate into an amalgam. Then raise Mercury from the calx by sublimation. Grind what has risen with the metallic calx again and sublime as before. Repeat until the metallic calx melts over a candle like wax or ice; then it has been properly done. Place this metal in digestion for its proper time, and it will all turn into living Mercury, its first matter. This Mercury of metals is called the philosophers' Mercury, which very many alchemists have sought but few have found. Living Mercury is thus prepared from all metals: the Mercury of Gold, Silver, Copper, Iron, Tin and Lead.

NTR-B06-P007 1605 p. 227 · GOT-211

Latin Resuscitatio autem vel restauratio Mercurii coagulati fit per Retortarum distillationes: nam solus Mercurius vivus ascendit in aquam frigidam & relinquatur

cinis h, q, vel sulphuris. Resuscitatio autem & restauratio Mercurii sublimati fit in aqua ferventi: attamen oportet eum prius minutissime teri, ita aqua fervens ab ipso resolvit spiritum salis & vitrioli, quem in sublimatione secum attulit, & Mercurius concurrit rursus vivus in fundo aquae. Si iam talis Mercurius denuo cum novo sale

& vitriolo sublimetur, & in aqua ferventi resuscitetur, & hoc septies vel novies fiat, melius purgari & renovari nequit. Et hoc pro magno Secreto retine in Alchymia & Medicina, & de eo gaude summopere. Nam hoc modo aufertur a Mercurio omnis impuritas & nigredo ac venenositas. Resuscitatio & restauratio Mercurii calcinati sine sublimatione fieri non potest: nam nisi post calcinationem sublimetur, nunquam revivificabitur, quare eum sublimabis, & postea ut alium sublimatum, reduces.

English Coagulated Mercury is resuscitated or restored through distillations in retorts: living Mercury alone rises into cold water, leaving ash of Lead, Copper or sulphur. Sublimed Mercury is resuscitated and restored in boiling water, but must first be ground extremely fine. The boiling water dissolves from it the spirit of salt and vitriol which it carried up in sublimation, and Mercury gathers again, alive, at the bottom of the water. If this Mercury is again sublimed with fresh salt and vitriol and resuscitated in boiling water, repeated seven or nine times, it cannot be better purified and renewed. Keep this as a great secret in alchemy and medicine and rejoice in it greatly: by this means all impurity, blackness and poisonousness are taken from Mercury. Calcined Mercury cannot be resuscitated and restored without sublimation. Unless sublimed after calcination, it will never be brought to life again; therefore sublime it and afterward reduce it like any other sublimate.⁶⁰

Original marginal note NTR-B06-M019 1605 p. 227 · GOT-211

Latin Mercurii sublimati reductio & purgatio summa.

English The reduction and highest purification of sublimed Mercury.

Original marginal note NTR-B06-M020 1605 p. 227 · GOT-211

Latin Calcinati & praecipitati.

English Of calcined and precipitated Mercury.

NTR-B06-P008 1605 p. 227 · GOT-211

Latin Resuscitatio cinnaberis lazurii, Auri musici, etiam praecipitati, ut vivificentur iterum in Mercurium vivum, est talis: Recipe horum quodvis, minutissime tere in marmore, & impasta albumine ovorum & smegmate, postea fac pilulas magnitudine avellanae, quas pone in firma cucurbita terrea: ad orificium eius pone laminam ferream quae multa parva foramina habeat, sitque luto agglutinata, atque distilla per descensum igne forti, ita ut cadat in aquam frigidam, & habebis iterum Mercurium vivum.

English Cinnabar, lazurium, mosaic gold and precipitate are resuscitated into living Mercury as follows. Take any one, grind it extremely fine on marble and make a paste with egg white and soap. Form pills the size of a hazelnut and place them in a strong earthen cucurbit. Over its mouth put an iron plate with many small holes, attached with lute, and distil

⁶⁰ The source's claim that this process removes all poisonousness from mercury is not accepted as a safety conclusion. The distinction between coagulated, sublimed and calcined Mercury is preserved.

downward with a strong fire so that it falls into cold water. You will again have living Mercury.⁶¹

Original marginal note NTR-B06-M021 1605 p. 227 · GOT-211

Latin *Instauratio ligni combusti.*

English **The restoration of burned wood.**

NTR-B06-P009 1605 pp. 227–228 · GOT-211, GOT-212

Latin *Resuscitatio autem & restauratio ligni est difficilis & ardua, attamen naturae possibilis, sed sine insigni solertia & industria fieri nequit. Ut autem revivificetur, tali maxime modo id fit: Recipe lignum quod primum fuerit carbo, postea cinis, & pone in cucurbita, una cum resina, liquore & oleitate illius arboris, omnium sit idem pondus, misceantur, & in leni calore liquefiant, & fiet mucilaginoso materia, atque ita habes tria principia simul, ex quibus scilicet omnia nascuntur & generantur, nempe phlegma, pinguedinem & cinerem. Phlegma est Mercurius, pinguedo est sulphur, cinis est sal. Nam omne quod igni fumat & evaporat, est Mercurius: quod flagrat & comburitur, est sulphur, & omnis cinis est sal. Cum iam ista tria principia simul habes, pone ea in ventre equino & putrefac ad suum tempus. Si postea illa materia in pingue solum sepeliatur vel infundatur, videbis eam reviviscere & arborem vel lignum parvum inde nasci, quod quidem in sua virtute multo est nobilius priore. Hoc vero lignum est & vocatur resuscitatum lignum, & renovatum, & restauratum, quod ab initio quoque lignum fuit, sed mortificatum, destructum, & in carbores & cineres & in nihilum redactum, & tamen ex illo nihilo aliquid factum & renatum est. Hoc sane in Luce Naturae magnum est Mysterium, nempe quod res, quae formam suam plane amiserat & in nihilum redacta fuerat, eam recuperet, & ex nihilo aliquid fiat, quod postea multo nobilius sit in sua virtute & efficacia quam primo fuerat.*

English **The resuscitation and restoration of wood is difficult and arduous, yet naturally possible, though it cannot be accomplished without exceptional skill and diligence. To bring it to life again, the chief method is this. Take wood which has first become charcoal and then ash and place it in a cucurbit together with the resin, liquor and oiliness of that tree, all in equal weight. Mix and melt them in gentle heat into a mucilaginous material. You thus have together the three principles from which everything is born and generated: phlegm, fatness and ash. Phlegm is Mercury, fatness is Sulphur and ash is Salt. Everything which fumes and evaporates in fire is Mercury; what flames and burns is Sulphur; every ash is Salt. When these three principles are together, place them in the horse's belly and putrefy them for their proper time. If that material is then buried or poured into rich soil, you will see it revive and a tree or small piece of wood arise from it, much more excellent in virtue than before. This is called resuscitated, renewed and restored wood: it was wood at the beginning, but was mortified, destroyed and reduced to charcoal, ashes and nothing; nevertheless, from that nothing something has been made and born again. This is truly a great mystery in the light of nature: a thing which entirely lost its form and was reduced to nothing recovers it, and something comes**

⁶¹. Aurum musicum is mosaic gold, a historical golden material designation. Per descensum is downward distillation; lute is sealing clay or compound. The translation retains the source's shared classification without asserting modern equivalence among these materials.

from nothing, afterward much more excellent in virtue and efficacy than at first.⁶²

Original marginal note NTR-B06-M022 1605 p. 227 · GOT-211

Latin Ligni phlegma est ipsius Mercurius: pinguedo sulphur: cinis sal.

English Wood's phlegm is its Mercury; fatness, Sulphur; ash, Salt.

Original marginal note NTR-B06-M023 1605 p. 228 · GOT-212

Latin Generalis ratio resuscitandi.

English The general method of resuscitation.

NTR-B06-P010 1605 p. 228 · GOT-212

Latin Ut autem generaliter de resuscitatione & restauratione rerum naturalium loquamur, sciendum est, praecipuum hic fundamentum esse, ut cuilibet rei reddatur cumque ea concordetur, iterum id, quod ei in mortificatione ademtum fuerat & ab eo separatum, quod difficulter hic specificè explicari potest. Quare hunc libellum concludemus, & in libro sequenti de transmutationibus rerum naturalium latius haec declarabimus.

English To speak generally of the resuscitation and restoration of natural things, its chief foundation is to restore to each thing and reunite with it what was taken away and separated from it in mortification. This is difficult to explain specifically here. We shall therefore close this little book and explain these matters more fully in the following book On the Transmutations of Natural Things.

⁶² The text claims regeneration by reuniting material fractions. Its "from nothing" is rhetorical: resin, liquor and oily material are explicitly added. That phrase should not be mistaken for a claim that no materials enter the operation.

Book 7 On the Transmutations of Natural Things

Liber VII. De transmutationibus rerum naturalium.

Latin witness: Frankfurt 1605, printed pp. 228–236, SUB Göttingen PPN578052199.

Source facsimile: [https://gdz.sub.uni-goettingen.de/id/PPN578052199?](https://gdz.sub.uni-goettingen.de/id/PPN578052199?dify=%7B%22pages%22%3A%5B212%5D%7D)

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NTR-B07-P001 1605 p. 228 · GOT-212

Latin Si nobis de transmutatione omnium rerum naturalium scribendum est, aequum & necessarium est, ut ante omnia ostendamus primum quid sit transmutatio: secundo qui sint gradus ad illam: tertio per quae media & quomodo ea fiat. Est igitur transmutatio cum res suam formam amittit, & ita alteratur, ut prorsus priori substantiae & formae suae non sit similis, sed aliam formam assumat, aliam essentiam, alium colorem, aliam virtutem, aliam naturam vel proprietatem, ut si metallum fiat vitrum vel lapis: si lapis fiat carbo: si lignum fiat carbo: argilla lapis fiat & later: pellis gluten: pannus papyrus & talia multa similia. Haec omnia sunt transmutationes rerum naturalium. Post hoc summopere quoque necessarium est scire gradus ad transmutationem, quotnam sint. Sunt autem non plures quam septem. Nam quamvis aliqui plures numerent, plures tamen quam septem praecipui non sunt, reliqui vero, qui etiam inter gradus recenseri possunt, sub istis septem comprehenduntur: sunt autem isti: Calcinatio, Sublimatio, Solutio, Putrefactio, Distillatio, Coagulatio, Tinctura. Si quis iam istam scalam ascendat, is in tam mirabilem locum perveniet, ut multa secreta videat & experiatur in transmutatione rerum naturalium.

English To write about the transmutation of all natural things, it is fitting and necessary first to show what transmutation is, second what its stages are, and third through what means and in what way it occurs. Transmutation occurs when a thing loses its form and is so altered that it is wholly unlike its former substance and form, assuming another form, essence, colour, virtue, nature or property: when metal becomes glass or stone; stone becomes coal; wood becomes coal; clay becomes stone and brick; skin becomes glue; cloth becomes paper, and many similar things. All these are transmutations of natural things. Next it is absolutely necessary to know how many stages there are toward transmutation. There are no more than seven. Though some count more, there are no more than seven principal stages; the others which can be counted as stages are included under these seven: Calcination, Sublimation, Solution, Putrefaction, Distillation, Coagulation and Tincture. Whoever climbs this ladder will reach so marvellous a place as to see and experience many secrets in the transmutation of natural things.

Original marginal note NTR-B07-M001 1605 p. 228 · GOT-212

Latin Quid sit transmutatio.

English What transmutation is.

Original marginal note NTR-B07-M002 1605 p. 228 · GOT-212

Latin Septem gradus transmutationis principales.

English The seven principal stages of transmutation.

Original marginal note NTR-B07-M003 1605 p. 228 · GOT-212

Latin 1. Calcinatio quid & quae eius species.

English 1. What Calcination is and its kinds.

NTR-B07-P002 1605 pp. 228–229 · GOT-212, GOT-213

Latin Primus igitur gradus est Calcinatio, sub qua & comprehenduntur Reverberatio & Cementatio. Nam inter haec tria parva est differentia quantum ad calcinationem attinet. Quare calcinatio hic praecipuus est gradus. Nam per Reverberationem & Cementationem etiam multae res corporales calcinantur & in cinerem reducuntur & praecipue metalla. Quod autem calcinatum est non propterea est reverberatum vel cementatum. Per calcinationem igitur omnia metalla, mineralia, lapides, vitra, &c. & omnes res corporales fiunt carbo & cinis, & hoc fit nudo, forti ac aerem habente igne, per quem omnis tenax, mollis, & pinguis terra in lapidem induratur: omnes vero lapides in calcem rediguntur, sicut videmus in furno figulorum, calcis & laterum.

English The first stage is Calcination, which also includes Reverberation and Cementation. There is little difference among these three insofar as calcination is concerned, so calcination is the principal stage here. Through reverberation and cementation many corporeal things, especially metals, are calcined and reduced to ash. Yet a thing which has been calcined has not thereby necessarily been reverberated or cemented. Through calcination all metals, minerals, stones, glasses and all corporeal things become coal and ash. This occurs through a bare, strong, aerated fire which hardens every tenacious, soft and fatty earth into stone, but reduces all stones to calx, as we see in pottery, lime and brick kilns.

Original marginal note NTR-B07-M004 1605 p. 229 · GOT-213

Latin 2. Sublimatio quid, & quae eius species.

English 2. What Sublimation is and its kinds.

NTR-B07-P003 1605 p. 229 · GOT-213

Latin Sublimatio est secundus gradus etiam valde principalis ad transmutationem multarum rerum naturalium: sub quo intelligitur, Exaltatio, Elevatio, & Fixatio; estque non adeo dissimilis distillationi. Nam sicut ab omnibus phlegmaticis & aqueis rebus aqua in distillatione ascendit, & a suo corpore separatur, ita in sublimatione spirituale a corporali, volatile a fixo, & in rebus siccis, ut sunt omnia mineralia, attollitur & subtiliatur, & purum ab impuro separatur. Praeter sublimationem enim multae bonae virtutes & mirabiles res reperiuntur in Mineralibus, multaeque res fixantur & constantes fiunt, ita ut in igni permaneant hoc modo: Sublimatum cum suis faecibus iterum teratur & misceatur, & ut antea sublimetur, quod toties fiat donec non amplius sublimetur, sed omnia simul in fundo maneant & fixa fiant. Ita postea fiet lapis & oleum quando & quoties velis, nempe si infrigidatum in aere vel vitro ponas: ibi enim resolvitur statim in oleum. Si autem iterum in ignem ponas, iterum coagulatur in lapidem, qui mirabilis & magnae virtutis est. Hoc autem habeas pro magno Secreto & mysterio naturae, nec Sophistis manifestes. Porro ut in sublimatione multa corrosiva dulcia fiunt coniunctione duarum materiarum, ita contra multa dulcia corrosiva fiunt: multa dulcia fiunt acerba & austera vel amara, & contra multa amara dulcia ut saccharum. Notandum quoque hic est, quod quodlibet metallum, quod per sal Armoniacum in sublimationem perducitur, postea in frigore vel in aere solvatur in oleum, & contra, in igni coaguletur in lapidem. Quae quidem una est ex maximis & summis

transmutationibus in omnibus rebus naturalibus, nempe metallum in lapidem transmutare.

English Sublimation, the second stage, is also highly important for the transmutation of many natural things. It includes Exaltation, Elevation and Fixation and is not very unlike distillation. As water rises in distillation from all phlegmatic and watery things and is separated from its body, so in sublimation the spiritual is raised and subtilised from the corporeal, the volatile from the fixed, in dry things such as all minerals, and the pure is separated from the impure. Through sublimation many good virtues and marvellous things are found in minerals, and many things are fixed and made stable so that they remain in fire, as follows. Grind and mix the sublimate again with its own dregs and sublime as before. Repeat until it no longer sublimes but everything remains together at the bottom and becomes fixed. It will afterward become stone or oil whenever and as often as you wish: place it, cooled, in air or glass, and it immediately dissolves into oil; put it back into fire and it coagulates again into a stone of marvellous and great virtue. Regard this as a great secret and mystery of nature and do not reveal it to sophists. Just as many corrosives become sweet in sublimation through the union of two materials, so conversely many sweet things become corrosive: many sweet things become tart, astringent or bitter, and conversely many bitter things become sweet as sugar. Note also that every metal brought to sublimation through sal ammoniac afterward dissolves into oil in cold or air and conversely coagulates into stone in fire. This is one of the greatest and highest transmutations among all natural things: to transmute a metal into a stone.⁶³

Original marginal note NTR-B07-M005 1605 p. 229 · GOT-213

Latin Fixatio mineralium in lapidem, ut fiat.

English How minerals are fixed into a stone.

Original marginal note NTR-B07-M006 1605 p. 229 · GOT-213

Latin Regula de Sale Armoniac.

English A rule concerning Sal Ammoniac.

Original marginal note NTR-B07-M007 1605 p. 229 · GOT-213

Latin 3. Solutio quid, & quae eius species.

English 3. What Solution is and its kinds.

Original marginal note NTR-B07-M008 1605 p. 229 · GOT-213

Latin Solutio est duplex.

English Solution is twofold.

NTR-B07-P004 1605 pp. 229–230 · GOT-213, GOT-214

Latin Tertius gradus est Solutio, sub qua subintelliguntur dissolutio & resolutio, qui quidem gradus saepius post sublimationem & distillationem sequitur, nempe, ut solvat materiam, quae in fundo remanet. Est autem solutio duplex. Una scilicet

⁶³ The source prints *Praeter sublimationem*, literally “besides sublimation,” but the examples describe virtues discovered in and through the operation; the translation follows that relation. “Sweet” and “corrosive” here describe the historical operational qualities and do not establish safety for tasting.

frigoris, altera caloris: una fit extra ignem, altera in igne. Solutio frigida solvit omnia salia, omnia corrosiva, omnia calcinata. Quicquid est salsae & corrosivae qualitatis, id resolvit, in oleum, in liquorem, in aquam: & hoc fit in humida & frigida cella, aut alias tantum in aere, in marmore vel vitro. Nam omne quod in frigore solvitur, continet acrem spiritum salis, quem saepe in sublimatione vel destillatione acquirit & assumit. Et omne quod in frigore vel aere solvitur, iterum calore ignis coagulatur in pulverem vel lapidem. Solutio vero caloris, solvit omnia pingua & omnia sulphurea: Et quicquid calor ignis solvit, hoc coagulat frigus in massam: & quicquid calor coagulat hoc solvit rursus aer & frigus. Hic quoque sciendum est, quicquid aer vel cella resolvit, id est magnae siccitatis, & in se absconditum habet ignem corrosivum: ita quicquid in igne & eius calore solvitur, habet in se dulcedinosam frigiditatem extra ignem. Ita & non aliter solutio intelligenda est.

English The third stage is Solution, which includes dissolution and resolution. This stage often follows sublimation and distillation, dissolving the material which remains at the bottom. Solution is twofold: one of cold, the other of heat; one outside fire, the other in fire. Cold solution dissolves all salts, corrosives and calcined things. Whatever is of a salty and corrosive quality it resolves into oil, liquor or water. This occurs in a moist, cold cellar, or merely in air, on marble or in glass. Everything dissolved in cold contains an acrid spirit of salt, which it often acquires and takes up in sublimation or distillation. Everything dissolved in cold or air is coagulated again by fire's heat into powder or stone. Solution by heat dissolves all fatty and sulphurous things. Whatever fire's heat dissolves, cold coagulates into a mass; whatever heat coagulates, air and cold dissolve again. Understand also that what air or a cellar dissolves is very dry and contains a hidden corrosive fire; what is dissolved in fire and its heat contains a sweet coldness outside fire. Solution must be understood in this way and no other.

Original marginal note NTR-B07-M009 1605 p. 230 · GOT-214

Latin Solutio calida quae solvat.

English What hot solution dissolves.

Original marginal note NTR-B07-M010 1605 p. 230 · GOT-214

Latin Duplex solutio caloris & frigoris.

English The twofold solution of heat and cold.

Original marginal note NTR-B07-M011 1605 p. 230 · GOT-214

Latin 4. Putrefactio quid & quae eius species.

English 4. What Putrefaction is and its kinds.

NTR-B07-P005 1605 p. 230 · GOT-214

Latin Putrefactio est quartus gradus, sub qua & comprehenduntur Digestio & Circulatio. Est autem putrefactio valde principalis gradus, qui & merito primus esse debebat, nisi contra iustum ordinem, & contra Mysterium, quod hic latet, & paucissimis patet, id fieret: Isti enim gradus ita se invicem, ut dictum est, sequi debent, sicut articuli in catena aut gradus in scala. Nam si unus articulorum tolleretur, catena esset interrupta, & captivus liberatus aufugeret: ita & de scala, si ullus gradus ex medio tolleretur, & in supremo vel infimo loco poneretur, scala quoque fracta esset, & multi in caput per eam deciderent, non sine copioso ac vitae suae damno & periculo. Ita etiam hic intelligitis, quod isti gradus iusto ordine

sequantur, alias totum opus nostri Mysterii esset perversum, & omnis labor & opera frustranea & inanis. Putrefactio autem tantae est efficaciae, ut veterem naturam aboleat, & transmutet omnes res in aliam novam naturam, & alium novum fructum afferat. Omnia viva in ea moriuntur, omnia mortua putrefiunt in ea, & omnia mortua in ea recuperant vitam: putrefactio omnibus corrosivis spiritibus salis acredinem adimit, & lenes ac dulces facit, transmutat colores, separat purum ab impuro, purum superius, impurum inferius, utrunque segregatim locat.

English Putrefaction is the fourth stage and includes Digestion and Circulation. It is a very important stage and would rightly be first, were that not contrary to the proper order and the mystery hidden here and revealed to very few. As stated, these stages must follow one another like links in a chain or rungs in a ladder. Remove one link and the chain is broken and the freed captive escapes. Remove a rung from the middle of a ladder and place it at the top or bottom, and the ladder is likewise broken: many would fall headlong from it, with great harm and danger to life. Understand that these stages must follow in their proper order; otherwise the entire work of our mystery would be disordered and all labour and effort vain and fruitless. Putrefaction is so effective that it abolishes the old nature, transmutes all things into a different new nature and produces another new fruit. All living things die in it; all dead things putrefy in it; all dead things recover life in it. Putrefaction removes acidity from all corrosive spirits of salt and makes them mild and sweet. It changes colours, separates the pure from the impure, and places the pure above and the impure below, each apart.

Original marginal note NTR-B07-M012 1605 p. 230 · GOT-214

Latin Ut in transmutandis servandus dictus ordo graduum.

English The stated order of stages must be kept in transmuting.

Original marginal note NTR-B07-M013 1605 p. 230 · GOT-214

Latin Putrefactionis vis mira quae sit.

English What the marvellous force of putrefaction is.

Original marginal note NTR-B07-M014 1605 p. 230 · GOT-214

Latin 5. Distillatio quid, & quot species habeat.

English 5. What Distillation is and how many kinds it has.

NTR-B07-P006 1605 pp. 230–231 · GOT-214, GOT-215

Latin Distillatio est quintus gradus ad transmutationem omnium rerum naturalium. Sub ea autem subintelliguntur Ascensio, Lavatio, & Fixatio. Per distillationem omnes aquae, liquores & olea subtiliantur, ex omnibus pinguibus oleum extrahitur, ex omnibus liquoribus aqua, & ex omnibus phlegmaticis rebus oleum & aqua separatur. Praeterea multae res in distillatione fixantur per cohobitionem. & praesertim si res fixandae aquam in se contineant, ut vitriolum. Quod si fixetur, Colcotar vocatur. Alumen si propria aqua fixetur, vocatur alumen Zuccari, quod & in liquorem resolvitur, qui si putrefiat per mensem, aquam parit dulcedine saccari, quae quidem magnae virtutis est, & praestans Arcanum in medicina ad restinguendum ignem microcosmicum in hominibus metallariis, sicut in libris de Morbis metallicis latius scribimus. Et sicut audivistis de vitriolo & alumine, ita etiam sal nitrum: & alia aquosa mineralia fixari possunt per cohobitionem.

English Distillation is the fifth stage toward the transmutation of all natural things. It includes Ascent, Washing and Fixation. Through distillation all waters, liquors and oils are subtilised; oil is extracted from all fatty things, water from all liquors, and oil and water are separated from all phlegmatic things. Many things are also fixed in distillation through cohobation, especially if the things to be fixed contain water, such as vitriol. When fixed it is called colcothar. Alum fixed with its own water is called sugar alum. It also resolves into liquor, which, if putrefied for a month, produces water sweet as sugar. This has great virtue and is an outstanding medical arcanum for extinguishing the microcosmic fire in miners, as we write more fully in the books *On Metallic Diseases*. What you have heard about vitriol and alum applies also to salt nitre: other watery minerals can be fixed through cohobation.⁶⁴

Original marginal note NTR-B07-M015 1605 p. 230 · GOT-214

Latin Cohobitio, &c.

English Cohobation and so forth.

Original marginal note NTR-B07-M016 1605 p. 231 · GOT-215

Latin Fixatio per distillationem.

English Fixation through distillation.

Original marginal note NTR-B07-M017 1605 p. 231 · GOT-215

Latin Cohobitio quid.

English What cohobation is.

NTR-B07-P007 1605 p. 231 · GOT-215

Latin Cohobitio autem est, ut caput mortuum saepius sua propria aqua imbibatur, eaque per distillationem iterum inde abstrahatur. Porro in distillatione multa amara, acerba & acria dulcissima ut mel, saccarum vel manna fiunt, & contra multa dulcia, ut saccarum, mel vel manna austera fiunt, ut oleum vitrioli vel acetum, aut amara ut fel, aut gentiana, acria ut corrosivum. Multae res undosae suum nimium foetorem in distillatione amittunt, qui quidem in aqua egreditur: multa aromatica perdunt bonum suum odorem. Et sicut sublimatio res in sua qualitate & natura alterat, ita etiam distillatio facit.

English Cohobation is the repeated imbibition of the caput mortuum with its own water, which is drawn off again by distillation. In distillation many bitter, tart and acrid things become very sweet like honey, sugar or manna. Conversely, many sweet things, such as sugar, honey and manna, become astringent like oil of vitriol or vinegar, bitter like gall or gentian, or acrid like a corrosive. Many undosa lose their excessive stench in distillation, which passes out in the water; many aromatics lose their good smell. Like sublimation, distillation alters things in quality and nature.

⁶⁴ The source's month-long period is retained. "Microcosmic fire" belongs to its medical explanatory vocabulary. Neither sweetness nor the text's designation "medical arcanum" establishes that a mineral preparation is safe.

Original marginal note NTR-B07-M018 1605 p. 231 · GOT-215

Latin Destillationis vis in rebus transmutandis.

English The force of distillation in transmuting things.

Original marginal note NTR-B07-M019 1605 p. 231 · GOT-215

Latin 6. Coagulatio quadruplex, & quid sit quaelibet.

English 6. Coagulation is fourfold, and what each kind is.

NTR-B07-P008 1605 pp. 231–232 · GOT-215, GOT-216

Latin Coagulatio est sextus gradus: Est autem duplex coagulatio, una per frigus, altera per calorem, hoc est, una aeris, altera ignis: & harum quaelibet iterum est duplex, ita ut sint quadruplices coagulationes, duae frigoris, & duae ignis. Ignis quidem coagulationes fixae sunt: reliquae frigoris non. Una quidem solummodo a communi aere fit, vel extra ignem: altera fit a superiori firmamento stellarum hyemalium, quae omnes aquas in nives & glacies coagulant. Ignis vero coagulatio, quae hic sola notanda est, fit per artificiosum & graduatum ignem Alchymistae, estque fixa & permanens. Nam quicquid talis ignis coagulat, id ita permanet. Altera coagulatio fit ab Aetnaeo & minerali igne in montibus, quem quidem Archeus terrae regit & graduat haud absimiliter Alchymistae, & quicquid per talem ignem coagulatur, etiam fixum est & constans, ut videtis in mineralibus & metallis, quae quidem initio mucilaginosa materia sunt, & ab Aetnaeo igne in montibus per Archeum terrae & laboratorem Naturae coagulantur in metalla, lapides, silices, salia, & alia corpora. Sciendum vero etiam est, ignem nullam aquam neque humiditatem coagulare, sed solum liquores & succos omnium rerum naturalium. Propterea etiam nullum phlegma coagulari potest, nisi in principio fuerit materia corporea, in quam quidem industria periti Alchymistae redire potest. Ita quaelibet mucilaginosa materia, vel spermaticus liquor per calorem ignis & in corpus & corporalem materiam coagulari, sed nequaquam in aquam iterum resolvi potest. Et sicut de coagulatione audivistis, ita etiam sciatis de Solutione, nempe quod nulla corporalis materia in aquam resolvi possit, nisi ab initio fuerit aqua, ita se res habet in omnibus rebus mineralibus.

English Coagulation is the sixth stage. It is twofold: one through cold, the other through heat; one of air, the other of fire. Each is itself twofold, giving four coagulations, two of cold and two of fire. Coagulations by fire are fixed; those by cold are not. One occurs through common air alone, outside fire; the other through the upper firmament of winter stars, which coagulate all waters into snow and ice. Coagulation by fire, the kind of concern here, occurs through the alchemist's artificial and graduated fire and is fixed and lasting: whatever such a fire coagulates remains so. The other occurs through the Etnean and mineral fire in mountains, which the Archaeus of earth governs and graduates much as an alchemist does. Whatever this fire coagulates is likewise fixed and stable, as you see in minerals and metals. Initially they are mucilaginous material, coagulated by the Etnean fire in mountains through the Archaeus of earth, nature's worker, into metals, stones, flints, salts and other bodies. Fire coagulates no water or moisture, but only the liquors and juices of all natural things. No phlegm can therefore be coagulated unless it was originally corporeal material, to which an expert alchemist's diligence can return it. Thus any mucilaginous material or spermatic liquor can be coagulated by fire's heat into body and corporeal material, but cannot be resolved again into water. Understand

of Solution what you have heard of Coagulation: no corporeal material can be resolved into water unless it was water at the beginning. So it is in all mineral things.⁶⁵

Original marginal note NTR-B07-M020 1605 p. 231 · GOT-215

Latin Coagulatio quae nequaquam.

English What cannot be coagulated.

Original marginal note NTR-B07-M021 1605 p. 232 · GOT-216

Latin Solutio, quae non possint.

English What things cannot undergo solution.

Original marginal note NTR-B07-M022 1605 p. 232 · GOT-216

Latin 7. Tinctura quid & quotuplex.

English 7. What Tincture is and how many kinds it has.

NTR-B07-P009 1605 p. 232 · GOT-216

Latin Tinctura est septimus gradus & ultimus, qui totum opus nostri Mysteriorum transmutationem concludit, & omnia imperfecta perfecta facit, & in nobilissimam Essentiam transmutat, & in summam suam sanitatem, ac in alium colorem alterat. Tinctura igitur est materia nobilissima, qua tinguntur corpora metallica & humana, & in meliorem Essentiam, & longe nobiliorem transferuntur, & in summam suam sanitatem & puritatem. Tinctura enim colorat omnes res iuxta suam naturam & colorem suum. Sunt autem multae & variae tincturae, & non solum ad metallica & humana corpora: quoniam omne, quod aliam materiam penetrat, vel tingit alio colore vel Essentia, ita ut priori non amplius similis sit, tinctura vocari potest. Quare multiplices sunt tincturae, nempe metallorum, mineralium, humanorum corporum, aquarum, liquorum, oleorum, salium, omnium pinguium, & in summa omnium, quae extra vel intra ignem ad fluxum perducere & reduci possunt. Nam si tinctura tingere debet, necesse est, corpus vel materiam, quae tingenda est, apertam esse, & in fluxu stare, & nisi hoc fieret, tinctura operari non posset. Nam fieret, sicut si quis crocum vel alium colorem in aquam coagulatum, vel glaciem proiiceret: ita enim non tam cito glaciem suo colore tingeret, ac si in aliam aquam proiiceretur. Et quamvis tingeret, simul tamen glaciem in aquam resolveret. Quare etiam metalla, quae tingere volumus, in igne liquefieri oportet, & a sua coagulatione liberari. Et hic sciendum est, quod quo calidius liquescunt, eo celerius ea tinctura transcurrit, sicut fermentum penetrat, & totam massam acetositatem inficit, & quo melius subigatur, & quo calidius custoditur massa, eo melius fermentat, & eo meliorem panem dat: Est enim & fermentum tinctura massae farinaceae & panis.

English Tincture is the seventh and final stage, completing the whole work of our mystery toward transmutation. It makes all imperfect things perfect, transmutes them into a most excellent essence and changes them into their highest health and another colour. A tincture is therefore a most excellent material by which metallic and human bodies are tinged and transferred into a better and far more excellent essence, into their highest health and purity. Tincture colours everything according to its own nature and colour. There are many different tinctures, not merely for metallic and human bodies: anything which penetrates another material or tinges it with another colour or essence,

⁶⁵ Etean fire is the subterranean or volcanic fire named from Mount Etna. The source distinguishes common air, winter-star cold, artificial graduated fire and subterranean mineral fire; these categories should not be collapsed into a single modern thermal explanation.

so that it no longer resembles its former condition, can be called a tincture. Thus there are tinctures of metals, minerals, human bodies, waters, liquors, oils, salts, all fatty things—in short, everything which can be brought into fluidity outside or inside fire. For a tincture to tinge, the body or material to be tinged must be open and in flow; otherwise the tincture cannot work. It would be as though someone threw saffron or another colour into coagulated water, or ice. It would not tinge the ice as quickly as if thrown into liquid water; and even if it tinged it, it would at the same time dissolve the ice into water. Metals which we wish to tinge must therefore be melted in fire and released from their coagulation. The hotter they melt, the more quickly the tincture runs through them, just as leaven penetrates and infects the whole dough with sourness. The better the dough is kneaded and the warmer it is kept, the better it ferments and the better bread it yields. Leaven too is a tincture of flour dough and bread.

Original marginal note NTR-B07-M023 1605 p. 232 · GOT-216

Latin Tingenda metalla sint aperta.

English Metals to be tinged must be open.

Original marginal note NTR-B07-M024 1605 p. 232 · GOT-216

Latin Faeces dant fixiora quam aquam.

English Dregs yield things more fixed than water.

NTR-B07-P010 1605 p. 232 · GOT-216

Latin Notandum quoque quaslibet faeces fixioris esse substantiae, quam suus potus, acrioris quoque & penetrantioris naturae: sicut de vino ardenti videtis, quod fit ex faecibus vini, de cerevisia ardenti, quae ex cerevisiae faecibus distillatur, & sicut vinum ardens flagrat, & sicut sulphur incenditur. Similiter si de faecibus aceti aliud acetum distilletur, sicut vulgo vinum ardens distillatur, fiet inde acetum tam igneae & acerrimae naturae, ut omnia metalla, lapides, & alia, quasi aqua fortis consumat.

English Note also that all dregs are of a more fixed substance than their drink and of a more acrid and penetrating nature. You see this in ardent wine made from wine lees and ardent beer distilled from beer dregs: it flames like ardent wine and ignites like sulphur. Likewise, if another vinegar is distilled from vinegar dregs as ardent wine is commonly distilled, a vinegar results of so fiery and intensely acrid a nature that it consumes all metals, stones and other things like aqua fortis.

Original marginal note NTR-B07-M025 1605 p. 232 · GOT-216

Latin Aceti radicati praepar. & natura.

English The preparation and nature of radical vinegar.

Original marginal note NTR-B07-M026 1605 p. 233 · GOT-217

Latin Quomodo fiant tincturae metallorum.

English How tinctures of metals are made.

NTR-B07-P011 1605 p. 233 · GOT-217

Latin Porro tincturas metallorum necesse est esse naturae fixae, fluxibilis & incombustibilis, ita ut si parum eius laminae metallica ignitae iniiciatur, mox sicut cera fluat, idque sine omni fumo metallumque penetret, ut oleum papyrus, vel

aqua spongiam, omniaque metalla in album & rubrum tingant, hoc est in ☽ & ☉. Hae iam sunt tincturae metallorum, quae necesse est per gradum calcinationis primum in alcool verti, postea per secundum gradum sublimationis suum facilem & levem fluxum nancisci: denique per gradum putrefactionis & distillationis tinctura fit fixa & incombustibilis, colorisque immutabilis.

English Tinctures of metals must be fixed, fusible and incombustible in nature. If a little is thrown onto a glowing metal plate, it must immediately flow like wax without any fumes and penetrate the metal as oil penetrates paper or water a sponge, tinging all metals into white and red—that is, into Silver and Gold. These are the tinctures of metals. They must first be converted into alcohol through the stage of calcination, then acquire their ready, easy fusion through the second stage, sublimation. Finally, through putrefaction and distillation, the tincture becomes fixed, incombustible and unchanging in colour.⁶⁶

Original marginal note NTR-B07-M027 1605 p. 233 · GOT-217

Latin Tincturae hominum.

English Tinctures of humans.

NTR-B07-P012 1605 p. 233 · GOT-217

Latin Tincturae vero humanorum corporum, ut ea tingantur in summam suam sanitatem, & expellantur ab ipsis omnes morbi: vires autem & colores amissi reddantur, utque ea instaurentur & renoventur, sunt istae, Aurum, Perlae, Antimonium, Sulphur, Vitriolum, &c. & similia, quarum praeparationes in aliis libris multipliciter docemus. Quare nobis non necessarium videtur hic ea repetere.

English The tinctures of human bodies, by which they are tinged into their highest health, all diseases expelled, lost strength and colour restored, and the bodies restored and renewed, are these: Gold, Pearls, Antimony, Sulphur, Vitriol and the like. We teach their preparations in many ways in other books and therefore do not consider it necessary to repeat them here.

Original marginal note NTR-B07-M028 1605 p. 233 · GOT-217

Latin Tincturae artificum.

English Tinctures of craftspeople.

NTR-B07-P013 1605 p. 233 · GOT-217

Latin De tincturis vero nihil amplius scribendum est, cum quilibet extractus color tinctura dici possit, qui quidem permanenti colore res tingat, quae non ingrediuntur ignem, vel in igne colores fixos servant. Ita omnia sunt in manu & potestate tinctoris vel pictoris, qui eas iuxta suum placitum praeparat.

English No more need be written about tinctures, since any extracted colour can be called a tincture if it tinges things with a lasting colour, whether those things do not enter fire or preserve fixed colours in fire. Everything thus lies in the hand and power of the dyer or painter, who prepares them as desired.

⁶⁶. Alcool here is a very fine powder, not beverage alcohol; the source explicitly obtains it through calcination. The white/red pair is then specified as Silver/Gold.

Original marginal note NTR-B07-M029 1605 p. 233 · GOT-217

Latin Gradus ignis Alchymistici quot sint.

English How many stages of alchemical fire there are.

NTR-B07-P014 1605 pp. 233–234 · GOT-217, GOT-218

Latin Summopere quoque in hoc libro necessarium est scire gradus ignis, qui sane multis modis graduari & intendi potest, & quilibet gradus peculiarem habet operationem, & nullus, ut alter, effectum dat, quod quilibet peritus Alchymista ex quotidiana experientia & exercitatione artis novit. Alius est enim ignis vivus & flammeus, qui reverberat & calcinat omnia corpora. Alius iugis ignis candelae & lychni, qui fixat omnia corpora volatilia. Alius ignis carbonum, qui cementat,

colorat, & purgat metalla a suis scoriis, ☉ ☽ altius graduat, ♀ dealbat, & in summa, omnia metalla renovat. Alius est ignis laminae ferreae ignitae, in qua tincturae metallorum probantur, quaeque ad alia utilis est. Aliter calefacit scobs ferri, aliter arena, aliter cinis, aliter balneum maris, in quo multiplices distillationes, sublimationes & coagulationes fiunt. Aliter balneum roris, in quo multae solutiones rerum corporalium fiunt. Aliter venter equinus, in quo praecipue putrefactiones & digestiones fiunt. Aliter quoque operatur ignis invisibilis, per quem radios solares intelligimus, quique per speculum ex chalybe, vel per crystallum manifestatur, & suam operationem & effectum ostendit, de quo igni veteres prorsus nihil scripserunt. Et hoc quidem igne tria principia ex qualibet corporali re in mensa separari possunt. Tam mirabilis virtutis est hic ignis, ut per eum metalla liquecant, & omnia pingua & fluxibilia in mensa absque igne, & omnia facile combustibilia in carbonibus & cineres redigantur.

English It is also most necessary in this book to know the degrees of fire. Fire can be graduated and intensified in many ways; every degree has its particular operation and produces a different effect, as any skilled alchemist knows through daily experience and practice. One kind is living, flaming fire, which reverberates and calcines all bodies. Another is the steady fire of a candle or lamp, which fixes all volatile bodies. Another is charcoal fire, which cements and colours metals, purifies them from slag, raises Gold and Silver to a higher degree, whitens Copper and, in short, renews all metals. Another is the fire of a glowing iron plate, on which metallic tinctures are tested and which has other uses. Iron filings heat in one way, sand another, ashes another, the sea bath another, in which many distillations, sublimations and coagulations occur. The dew bath operates differently, producing many solutions of corporeal things; the horse's belly differently again, chiefly producing putrefactions and digestions. Invisible fire also operates differently: by this we mean the sun's rays, manifested through a steel mirror or crystal, which show their operation and effect. The ancients wrote nothing whatever about this fire. Through it the three principles can be separated from any corporeal thing upon a table. Such is its marvellous virtue that metals and all fatty and fusible things melt upon the table without fire, and all readily combustible things are reduced to coals and ashes.⁶⁷

⁶⁷. The "sea bath" is the balneum maris, often called the water bath or bain-marie. The source distinguishes it from balneum roris, the dew bath. "Without fire" at the close means without

Original marginal note NTR-B07-M030 1605 p. 233 · GOT-217

Latin Ignis invisibilis.

English Invisible fire.

Original marginal note NTR-B07-M031 1605 p. 234 · GOT-218

Latin Transmutatio in ☽ vel ☉, ut fiat.

English How transmutation into Silver or Gold is effected.

NTR-B07-P015 1605 p. 234 · GOT-218

Latin Postquam igitur vobis proposui & aperui gradus artis Alchymisticae, & gradus Alchymistici ignis: porro vobis indicabo & describam in genere varias rerum naturalium transmutationes. Ante omnia vero de metallis loqui decet: secundo de lapidibus: tertio de variis rebus in genere. Transmutatio igitur metallorum magnum Secretum est in natura, & difficulter fieri potest multorum impedimentorum, & adversitatum causa: Attamen non est contra naturam, neque contra Dei ordinationem, ut multi falso loquuntur. Ut vero minora & impuriora metalla quinq̃ue, ut ♀ ☿ ☿ & ☿, in maiora & purissima, perfectaue metalla, utpote in ☉ &

☽ transmutentur, absque tinctura vel lapide Philosophorum fieri illud nequit. Cum autem iam antea in septem gradibus satis tincturarum secreta detexerimus & descriperimus, non est opus, ut amplius in hoc laboremus, quin potius in his, quae in aliis libris de transmutationibus metallorum scripsimus, acquiescimus.

English Having set out and revealed the stages of alchemical art and alchemical fire, I shall now indicate and describe generally various transmutations of natural things. It is fitting to speak first of metals, second of stones and third of various things in general. Metallic transmutation is a great secret in nature and difficult to accomplish because of many impediments and adversities. Yet it is neither contrary to nature nor to God's ordinance, as many falsely say. The five lesser and more impure metals—Copper, Tin, Lead, Iron and Mercury—cannot be transmuted into the greater, purest and perfect metals, Gold and Silver, without a tincture or the philosophers' stone. Since we have already sufficiently uncovered and described the secrets of tinctures in the seven stages, no further labour is needed here; we rest in what we have written in other books on metallic transmutations.

Original marginal note NTR-B07-M032 1605 p. 234 · GOT-218

Latin Ex ferro cuprum.

English Copper from iron.

NTR-B07-P016 1605 p. 234 · GOT-218

Latin Sunt autem aliae transmutationes imperfectiorum & impurorum metallorum, ut transmutatio ☿ in ♀, quae variis modis fieri potest, primum si limatura ferri in aqua vitrioli coquatur, aut laminae ferreae cum vitriolo calcinato cemententur: tertio si candentes laminae ferreae oleo vitrioli extinguantur. His tribus viis ferrum in optimum & naturale ponderosumque cuprum transmutatur, quod quidem optime

an ordinary flame, since the preceding sentences expressly identify concentrated solar rays as a kind of fire.

fluit, & suum pondus habet tam bene ac ullum nativum cuprum. Potest quoque limatura ferri quasi in plumbum reduci & transmutari, ita ut prorsus mollescat, ut

nativum plumbum, sed non facile fluit, nempe ita: Recipe limaturae σ & tantundem optimi pulveris liquefactitii, misceantur, ponantur in tigillo & in furno venti, fiat

ignis fortis talis, tamen ne σ fluat, sed quasi in cemento stet integram horam: postea fortifica ignem strenue, ut candescat & fluat: denique tigillum per se frigefieri sinito, & invenies regulum plumbi in tigillo, mollem & ductilem, ut nativum plumbum esse potest.

English There are other transmutations of the less perfect and impure metals, such as Iron into Copper. This can occur in various ways: first, by boiling iron filings in water of vitriol; second, by cementing iron plates with calcined vitriol; third, by quenching glowing iron plates in oil of vitriol. By these three ways iron is transmuted into the best natural and heavy copper, which melts very well and has its proper weight as well as any native copper. Iron filings can also be reduced and transmuted as though into lead, becoming entirely soft like native lead, though not readily fusible. Take Iron filings and an equal quantity of the best fluxing powder, mix them and place them in a crucible in a wind furnace. Apply a strong fire, yet do not melt the Iron; let it remain as though in cement for a whole hour. Then vigorously strengthen the fire until it glows and melts. Finally allow the crucible to cool by itself: you will find a regulus of lead, as soft and ductile as native lead can be.⁶⁸

Original marginal note NTR-B07-M033 1605 p. 234 · GOT-218

Latin Ex ferro plumbum.

English Lead from iron.

Original marginal note NTR-B07-M034 1605 p. 234 · GOT-218

Latin Ex cupro plumbum.

English Lead from copper.

NTR-B07-P017 1605 p. 234 · GOT-218

Latin Ut autem φ in $\hbar$ transmutetur, ita procedendum est: Primum omnium cuprum

φ sublimato & arsenico fixo in album redige, candidum ut $\mathfrak{D}$, postea granulato: huius & boni pulveris reductivi recipe ana, & primo quidem cementa, postremo in regulum funde, & habebis verum plumbeum regulum.

English To transmute Copper into Lead, first whiten copper with sublimed Mercury and fixed arsenic until white as Silver, then granulate it. Take equal portions of it and good reducing powder; first cement it, then melt it into a regulus. You will have a true lead regulus.

⁶⁸ The source's *impurtorum* is an irregular form for impure metals. *Regulus* denotes the collected metallic button or mass. The translation preserves the author's claimed transmutations rather than replacing them with an unproved modern explanation.

Original marginal note NTR-B07-M035 1605 p. 234 · GOT-218

Latin Ex plumbo cuprum.

English Copper from lead.

NTR-B07-P018 1605 pp. 234–235 · GOT-218, GOT-219

Latin Contra vero ut plumbum in cuprum transmutetur facile fit, neque opus est singulari industria, nempe sic: Laminas plumbi vitriolo calcinato, vel croco Veneris stratifica, cementa, & postremo liquefac, & videbis quodlibet nativum plumbum in bonum, ponderosum & ductile cuprum transmutatum.

English Conversely, transmuting lead into copper is easy and requires no exceptional skill. Layer lead plates with calcined vitriol or crocus of Venus, cement them and finally melt them. You will see any native lead transmuted into good, heavy and ductile copper.

Original marginal note NTR-B07-M036 1605 p. 235 · GOT-219

Latin Electrum simile auro.

English Electrum resembling gold.

NTR-B07-P019 1605 p. 235 · GOT-219

Latin Si iam tale cuprum vel quodvis aliud cuprum ita laminetur, & cum Thuria & Calaminari stratificetur, cementetur, & postremo fundatur, in egregium electrum ad rubrum transmutatur, simile auro.

English If this copper or any other copper is beaten into plates, layered with thuria and calamine, cemented and finally melted, it is transmuted into excellent reddish electrum resembling gold.⁶⁹

Original marginal note NTR-B07-M037 1605 p. 235 · GOT-219

Latin Ex plumbo stannum Anglicum facere.

English To make English tin from lead.

NTR-B07-P020 1605 p. 235 · GOT-219

Latin Si velis h̄ in ʒ transmutare, lamina h̄ & stratifica cum sale Armoniaco, cementa, & postremo funde, ut supra dictum est: ita plumbo omnis sua nigredo & obscuritas tollitur, & in albedine pulcherrimo Anglico stanno similis fit.

English To transmute Lead into Tin, beat Lead into plates, layer it with sal ammoniac, cement it and finally melt it as described above. All its blackness and darkness is thus removed, and in whiteness it becomes like the finest English tin.

Original marginal note NTR-B07-M038 1605 p. 235 · GOT-219

Latin Oleum sulphuris transmutat gemmas.

English Oil of sulphur transmutes gems.

NTR-B07-P021 1605 p. 235 · GOT-219

Latin Sicut autem audivistis in brevi summa aliquot transmutationes metallorum: ita porro sciatis de transmutationibus Gemmarum, quae quidem etiam variae sunt &

⁶⁹ Thuria and Calaminari are historical material names. Electrum here names a produced alloy resembling gold, not necessarily the naturally occurring gold–silver alloy denoted by the same word in other settings.

neutiquam similes. Videtis enim quanta transmutatio gemmarum in oleo sulphuris lateat. Quilibet enim crystallus in eo tingi & transmutari potest, & cum tempore distinctis coloribus graduari, ut Hyacintho Granato, vel Rubino similis fiat.

English Having heard a brief account of several metallic transmutations, learn now about the transmutations of gems, which are also varied and by no means alike. See how great a transmutation of gems lies hidden in oil of sulphur. Any crystal can be tinged and transmuted in it and, with time, graduated into distinct colours so that it resembles a hyacinth, garnet or ruby.

Original marginal note NTR-B07-M039 1605 p. 235 · GOT-219

Latin Magnetis transmutatio quis fiat. Mira confortatio magnetis.

English What transmutation of the magnet is effected. A marvellous strengthening of the magnet.

NTR-B07-P022 1605 p. 235 · GOT-219

Latin Similiter sciatis de Magnete, qui in decuplam potentiam & virtutem transmutari potest, nempe hoc modo: Recipe Magnetem, & in carbonibus candefac, ita quidem, ut caleseat valde, sed tamen non sit ignitus, quem statim in oleo croci martis, qui ex optimo Carinthio chalybe sit factus, extingue, ut imbibat quantum capere possit. Ita magnetem tam efficacem reddes, ut per eum clavos ex pariete evellas, & similia mirabilia operari queas, quae alius communis Magnes nunquam facere potest.

English Likewise the magnet can be transmuted to tenfold power and virtue. Heat a magnet in charcoal until very hot, yet without making it glowing; immediately quench it in oil of crocus of Mars made from the best Carinthian steel, so that it absorbs as much as it can. You will make it so effective that you can pull nails from a wall with it and perform similar marvels which an ordinary magnet can never accomplish.

NTR-B07-P023 1605 p. 235 · GOT-219

Latin Porro in transmutationibus Gemmarum sciendum est mundum situm esse in duobus gradibus tincturae & coagulationis. Nam sicut albumen ovi croco tingi, & postea coagulari potest in pulcrum flavum succinum: fuligine pini in nigrum succinum: viridi aeris in viride succinum, simili lapidi cyaneo vel Turcico: viridi succo in simile smaragdo: lazurio in succinum coeruleum, simile sapphyro: ligno praesiliae in rubrum succinum, granato vel rubino simile: purpureo colore amethysto simile: cerussa alabastro simile: Ita alii quoque liquores omnes & praecipue metalla & mineralia fixis coloribus tingi, & postmodum coagulari, & in gemmas transmutari possunt.

English In the transmutation of gems, understand that the world is situated in the two stages of tincture and coagulation. Egg white can be tinged with saffron and coagulated into beautiful yellow amber; with pine soot into black amber; with verdigris into green amber like a blue stone or turquoise; with green juice into something like emerald; with lazurium into blue amber like sapphire; with brazilwood into red amber like garnet or ruby; with purple colour into something like amethyst; with ceruse into something like alabaster. In the same way all other

liquors, especially metals and minerals, can be tinged with fixed colours, subsequently coagulated and transmuted into gems.⁷⁰

Original marginal note NTR-B07-M040 1605 p. 235 · GOT-219

Latin *Falsae perlae quomodo fiant.*

English **How false pearls are made.**

NTR-B07-P024 1605 pp. 235–236 · GOT-219, GOT-220

Latin *Similiter & perlae fieri possunt veris in forma prorsus similes, ita ut splendoris & speciei ratione non bene a veris discerni possint, nempe ita: Purga albumen ovorum per spongiam, quam purissime, in quod insperge & misce pulcherrimi albi*

Talci, vel conchae perlatae, aut ☿ per ☿ coagulati, & in alcool redacti, & simul in marmore optime tere, ita, ut fiat densum amalgama, quod in sole vel post fornacem calidam siccetur eo usque dum fiat, ut caseus vel par. Postremo ex hac massa forma Perlas quantascunque vis, quas setis suillis affige, & ita perforatas sicca sicut succinum, & parasti eas. Si vero non satis splendeant, exterius albumine ovorum inunge, & iterum sicca: ita fient pulcherrimae perlae in forma & similes veris, sed non in virtute.

English Pearls can likewise be made entirely like true pearls in form, so that they cannot readily be distinguished by lustre and appearance. Purify egg white through a sponge as thoroughly as possible. Sprinkle in and mix the finest white talc, mother-of-pearl shell, or Mercury coagulated through Tin and reduced to fine powder. Grind everything very well together on marble into a thick amalgam, then dry it in the sun or behind a warm furnace until it is like cheese or similar. Finally form pearls of any desired size from this mass, attach them to pigs' bristles and dry them pierced in this way like amber. They are then prepared. If they do not shine enough, anoint their outside with egg white and dry again. Very beautiful pearls result, like true pearls in form but not in virtue.⁷¹

Original marginal note NTR-B07-M041 1605 p. 236 · GOT-220

Latin *Falsi coralli ut fiant.*

English **How false corals are made.**

NTR-B07-P025 1605 p. 236 · GOT-220

Latin *Simili fere modo & coralli fiunt ab his, qui homines, ut & cum dictis perlis, fallere student, nempe ita: Cinnabarim cum albumine ovorum in marmore tere per horam, postea ut terram figulinam sicca: denique finge inde pilulas vel ramulos, prout vis: postremo ad summum sicca, & ut perlas exterius albumine ovorum inunge, & iterum per se sicca. Ita fiunt coralli nativis in specie similes, sed non in virtute.*

⁷⁰ The source prints *mundum* ("the world") in the opening claim. It is retained rather than silently replaced by a conjectural term for the work. The examples describe imitations or transformed coloured materials, not proof that their identity and properties match natural gems.

⁷¹ Here the source explicitly distinguishes likeness in appearance from likeness in virtue. Alcool again means fine powder. Its mercury-containing alternative is a historical fabrication method, not a safe craft formula.

English Corals are made in much the same way by those who seek to deceive people, as with the pearls just described. Grind cinnabar with egg white on marble for an hour, then dry it like potter's clay. Form pills or little branches as desired, dry them thoroughly, anoint the outside with egg white as with the pearls and dry them again by themselves. Corals result which resemble native corals in appearance but not in virtue.

Original marginal note NTR-B07-M042 1605 p. 236 · GOT-220

Latin Vernix aurea & argentea.

English Golden and silver varnish.

NTR-B07-P026 1605 p. 236 · GOT-220

Latin Sciendum quoque est, albumen ovorum per se in pulcherrimum vernicem coagulari posse, in cuius coagulatione Luna vel Sol inspergi possit.

English Know also that egg white by itself can be coagulated into a very beautiful varnish, into which Silver or Gold can be sprinkled during coagulation.

Original marginal note NTR-B07-M043 1605 p. 236 · GOT-220

Latin Lignum qui lapis fiat.

English How wood becomes stone.

NTR-B07-P027 1605 p. 236 · GOT-220

Latin Sunt aliae multae & variae transmutationes rerum naturalium: quarum quas scio, & expertus sum, vobis obiter & breviter iam proponam. Et primo teneatis, quod lignum quodvis, si ad certum tempus in Aqua Salis Gemmae, ponatur in lapidem certa admiratione convertatur. Ita & lapides igne Aetneo in Carbones transmutantur, qui lapidei Carbones vocantur.

English There are many other different transmutations of natural things. I shall now briefly mention those I know and have experienced. First, any wood placed for a certain time in water of rock salt is wonderfully changed into stone. Stones are likewise transmuted by Etnean fire into coals, which are called stone coals.

Original marginal note NTR-B07-M044 1605 p. 236 · GOT-220

Latin Carbones ex lapidibus.

English Coals from stones.

Original marginal note NTR-B07-M045 1605 p. 236 · GOT-220

Latin Gluten ex pellibus.

English Glue from skins.

Original marginal note NTR-B07-M046 1605 p. 236 · GOT-220

Latin Papyrus ex lino.

English Paper from flax.

Original marginal note NTR-B07-M047 1605 p. 236 · GOT-220

Latin Sericum ex lino.

English Silk from flax.

Original marginal note NTR-B07-M048 1605 p. 236 · GOT-220

Latin Plumae natiles, &c.

English Spinnable feathers and so forth.

NTR-B07-P028 1605 p. 236 · GOT-220

Latin Similiter & ex pellibus gluten excoquitur: ex Panno linco fit papyrus: ex lino in acerrimo lixivio ex calce & cinere Isatidis herba cocto fit sericum. Ita si pennis detrahantur partes plumae, & in tali lixivio coquantur, neri & texi instar gossypii possunt. Quodvis oleum vel spermatica mucilago potest coagulari in vernicem: quilibet liquor in Gummi &c. Haec omnes sunt rerum naturalium transmutationes: de quibus cum hactenus dictum satis sit, hic colophonem imponemus.

English Likewise glue is boiled from skins, paper is made from linen cloth, and silk from flax boiled in a very acrid lye of lime and ash of woad herb. If the downy parts are stripped from feathers and boiled in such a lye, they can be spun and woven like cotton. Any oil or spermatic mucilage can be coagulated into varnish, any liquor into gum, and so forth. All these are transmutations of natural things. Since enough has now been said about them, we shall set our concluding mark here.⁷²

NTR-B07-P029 1605 p. 236 · GOT-220

Latin Finis Libri septimi.

English End of the Seventh Book.

⁷². The source prints *linco* for linen and the irregular *Isatidis herba* for the woad-herb ash. The sense is retained in English and the witness forms in Latin. The marginal *natiles* is unusual beside a claim about spinning feathers; “spinnable” translates the passage’s explicit *neri & texi* rather than claiming the margin is a normal Latin form for it.

Book 8 On the Separation of Natural Things

Liber octavus de separationibus rerum naturalium

Latin witness: Frankfurt 1605, printed pp. 236–248, SUB Göttingen PPN578052199.

Source facsimile: [https://gdz.sub.uni-goettingen.de/id/PPN578052199?](https://gdz.sub.uni-goettingen.de/id/PPN578052199?tify=%7B%22pages%22%3A%5B220%5D%7D)

tify=%7B%22pages%22%3A%5B220%5D%7D

NTR-B08-P001 1605 p. 236 · GOT-220

Latin LIBER OCTAVUS DE SEPARATIONIBUS RERUM Naturalium.

English BOOK EIGHT ON THE SEPARATION OF NATURAL THINGS.

Original marginal note NTR-B08-M001 1605 p. 236 · GOT-220

Latin Chaos mundi materia.

English Chaos is the matter of the world.

NTR-B08-P002 1605 pp. 236–237 · GOT-220, GOT-221

Latin In mundi creatione prima Separatio a quatuor Elementis coepit, cum prima Materia Mundi esset unum Chaos. Ex Chao illo Deus condidit Maiorem Mundum, in quatuor discreta Elementa separatum, nempe in Ignem, Aerem, Aquam, Terram. Ignis pars erit calida: Aer, tantum frigida: Aqua humida: Terra denique pars tantum sicca Maioris mundi.

English At the creation of the world, the first separation began with the four elements, when the first matter of the world was a single chaos. From that chaos God established the greater world, separated into four distinct elements: fire, air, water and earth. Fire will be the hot part; air the cold part alone; water the moist part; and earth, finally, the dry part alone of the greater world.

Original marginal note NTR-B08-M002 1605 p. 237 · GOT-221

Latin Separatio quaenam hic tradetur.

English What separation is taught here.

NTR-B08-P003 1605 p. 237 · GOT-221

Latin Ut vero instituti nostri in hoc octavo libro rationem cognoscatis brevissime: sciendum est, nos non proposuisse hic de Separatione Elementorum omnium naturalium rerum tractare: quandoquidem, de Arcanis illis in Archidoxis de Separationibus Elementorum plene perfecteque docuimus: sed hic tradimus de Separatione rerum Naturalium, qua unumquodlibet seorsim & separatim materialiter ac substantialiter separatur & segregatur, cum scilicet duo, tria, quatuor, &c. plurave in unum corpus invicem permixta sunt, & tamen non nisi unica materia tangitur & videtur. Ubi hoc frequenter accidit, ut corporea eiusmodi materia a nemine cognosci aut expresso nomine designari possit, donec processus separationis instituatur. Tunc enim interdum ex unica materia, duo, tria, quatuor, quinque vel plura prodeunt: sicut per quotidianam experientiam in Scientia Alchimica evidens fit.

English To understand, very briefly, the purpose of this eighth book, you should know that we have not proposed to discuss here the separation of the elements of all natural things. We have already taught those arcana fully and completely in the Archidoxis, in the treatment of the

separation of elements. Here, however, we teach the separation of natural things by which each is materially and substantially separated and set apart on its own. This happens when two, three, four or more things have been mixed together in one body, although only a single matter is touched and seen. Frequently nobody can recognise a bodily matter of this kind or give it a specific name until a process of separation is undertaken. Then two, three, four, five or more things sometimes emerge from one matter, as daily experience in the science of alchemy makes evident.

Original marginal note NTR-B08-M003 1605 p. 237 · GOT-221

Latin Electrum quid.

English What electrum is.

Original marginal note NTR-B08-M004 1605 p. 237 · GOT-221

Latin Metalla quot numero.

English How many metals there are.

NTR-B08-P004 1605 p. 237 · GOT-221

Latin Exemplo vobis est Electrum, quod per se Metallum non est, sed tamen omnia Metalla in uno metallo & corpore recondit. Id si Alchimica industria Anatometur & separetur: omnia septem metalla, eaque pura & impermixta ex illo prodeunt, nempe Aurum, Argentum, Cuprum, Stannum, Plumbum, Ferrum, Argentum vivum, &c.

English Electrum offers you an example. It is not a metal in its own right, yet it conceals all metals in a single metal and body. If it is anatomised and separated by alchemical skill, all seven metals emerge from it, pure and unmixed: gold, silver, copper, tin, lead, iron and quicksilver, and so forth.⁷³

Original marginal note NTR-B08-M005 1605 p. 237 · GOT-221

Latin Separatio quid.

English What separation is.

NTR-B08-P005 1605 p. 237 · GOT-221

Latin Ut autem quidnam Separatio sit, intelligatur: notandum est, ipsam nihil esse aliud, quam unius ab altero segregationem, sive duo, tria, quatuor plurave permixta sint; segregationem inquam trium principiorum, ut Mercurii, sulphuris, salis, & extractionem puri ab impuro, seu puri & nobilis Spiritus ac Quintae Essentiae a crasso, & Elementalī corpore: & praeparationem duorum, trium, quatuor aut plurium ex uno: aut dissolutionem & liberationem rerum colligatarum & vinctarum, quae natura adversae sunt, & perpetuo sibi invicem contrariantur, nullo fine, donec sese mutuo perimant & destruant.

English To understand what separation is, observe that it is simply the setting of one thing apart from another, whether two, three, four or more have been mixed. I mean the separation of the three principles, mercury, sulphur and salt; the extraction of the pure from the impure, or of the pure and noble spirit and quintessence from the gross elemental body; the preparation of two, three, four or more things from

⁷³. Electrum here is the text's composite metallic body, said to contain all seven metals. Its meaning must not be restricted to the modern gold-silver alloy.

one; or the dissolution and release of things bound and tied together which are naturally opposed and continually resist one another without end, until they kill and destroy each other.

Original marginal note NTR-B08-M006 1605 p. 237 · GOT-221

Latin Separationis quot species.

English How many kinds of separation there are.

NTR-B08-P006 1605 p. 237 · GOT-221

Latin Iam vero Separationes variae & multiplices sunt, nobis quidem non omnes cognitae. Quae nobis ex Elementalibus dissolubilibus naturalibus rebus exploratae sunt: hoc loco secundum species constituentur & describentur.

English Separations are various and manifold, and we certainly do not know them all. Those which we have investigated in dissoluble elemental natural things will be arranged and described here according to their kinds.

Original marginal note NTR-B08-M007 1605 p. 237 · GOT-221

Latin 1. Microcosmi.

English 1. Of the microcosm.

Original marginal note NTR-B08-M008 1605 p. 237 · GOT-221

Latin Corpus hominis post mortem duplex.

English The human body is twofold after death.

NTR-B08-P007 1605 pp. 237–238 · GOT-221, GOT-222

Latin Prima separatio, de qua loquimur, inchoari debet ab homine, quoniam is Microcosmus, minor mundus est, & ipsius caussa Macrocosmus, maior mundus, conditus est, ut scilicet illius Separator esset. Separatio autem Microcosmi a morte demum incipit. In morte enim hominis corpora duo a se invicem separantur, Coeleste & Terrenum, hoc est, Sacramentale & Elementale. Horum unum in sublime evolat ut Aquila: alterum deorsum ad terram, ut plumbum labitur.

English The first separation of which we speak must begin with the human being, since the human is the microcosm, the lesser world, for whose sake the macrocosm, the greater world, was established: namely, so that the human might be its separator. Separation of the microcosm begins only at death. In human death two bodies are separated from each other, the heavenly and the earthly, that is, the sacramental and the elemental. One flies aloft like an eagle; the other falls down to earth like lead.

Original marginal note NTR-B08-M009 1605 p. 238 · GOT-222

Latin Corpus Elementale quale sit: Corp. Sacrament. quale sit.

English What the elemental body is; what the sacramental body is.

Original marginal note NTR-B08-M010 1605 p. 238 · GOT-222

Latin Cabalistica unde.

English The origin of the cabalistic art.

NTR-B08-P008 1605 p. 238 · GOT-222

Latin Elementale putrescit, & consumitur, fit putridum cadaver, quod in terram defossum, denuo non prodit aut apparet. Sacramentale autem, hoc est, Sydereum &

coeleste, non putrescit, non sepelitur, locum nullum occupat. Hoc corpus hominibus apparet, & post mortem etiam conspicitur. Hinc Spectra, visiones, & supernaturales apparitiones. Hinc a priscis Magis Ars Cabalistica, exstructa est, de qua in libris Cabaliae fusius tractatur.

English The elemental body rots and is consumed. It becomes a putrid corpse which, once buried in the earth, does not emerge or appear again. The sacramental body, however, that is, the sidereal and heavenly body, does not rot, is not buried and occupies no place. This body appears to people and is seen even after death. From it come ghosts, visions and supernatural apparitions. On this the ancient Magi built the cabalistic art, discussed more fully in the books of Cabalia.⁷⁴

NTR-B08-P009 1605 p. 238 · GOT-222

Latin Post hanc separationem factam, deinde per mortem hominis a se invicem etiam separantur tres substantiae, nimirum corpus, Anima, & Spiritus, quolibet ad suum locum tendente, ad Arcam, ex qua originaliter prodiit, corpore scilicet ad terram, ad primam Elementorum materiam: Anima ad primam materiam Sacramentorum: Spiritu denique ad primam materiam aerei chai.

English After this separation has occurred, human death also separates three substances from one another: body, soul and spirit. Each tends towards its own place, towards the repository from which it originally came: the body to earth, the first matter of the elements; the soul to the first matter of the sacraments; and the spirit, finally, to the first matter of the airy chaos.⁷⁵

Original marginal note NTR-B08-M011 1605 p. 238 · GOT-222

Latin 2. Macrocosmi.

English 2. Of the macrocosm.

Original marginal note NTR-B08-M012 1605 p. 238 · GOT-222

Latin Mundi tres partes.

English The three parts of the world.

NTR-B08-P010 1605 p. 238 · GOT-222

Latin Quod iam de separatione Microcosmi dictum est: idem etiam intelligi debet de mundo maiore, quem Oceanus magnus in tres partes segregavit, ita ut universus orbis, in tres secretus partes sit, in Europam scilicet Asiam & Aphricam: quae separatio, praefiguratio quaedam est trium principiorum, quod ipsa de qualibet terrena & Elementalī re separari possint. Tria haec principia sunt Mercurius, sulphur & sal: ex quibus tribus mundus conditus & compositus est.

English What has just been said about separation of the microcosm must also be understood of the greater world, which the great ocean divided into three parts, so that the whole globe is set apart into Europe, Asia and Africa. This separation is a kind of prefiguration of the three principles, showing that they can be separated from every earthly and

⁷⁴ Sacramental, sidereal and heavenly describe the subtle body within this historical account. The passage's apparitions are claims of the text. The books of Cabalia are an internal reference, not a bibliographically secure surviving title supplied by this edition.

⁷⁵ The Latin has Arcam, a chest or repository, and chai, the genitive of chaos. "Soul" and "spirit" must remain distinct in this threefold account.

elemental thing. These three principles are mercury, sulphur and salt, from which the world was established and composed.

Original marginal note NTR-B08-M013 1605 p. 238 · GOT-222

Latin 3. Metallorum.

English 3. Of metals.

NTR-B08-P011 1605 p. 238 · GOT-222

Latin Ab hoc scienda etiam est separatio metallorum a suis montibus, hoc est, separatio metallorum & mineralium. Separatione in his instituta, ex una materia multae prodeunt, sicuti videtis ex mineralibus prodire metallum, scoriam, vitrum, arenam, Piritem, Marcasitam, Granatum, Cobaltum, Talcum, Cackimiam, Zinetum, Bisemutum, Antimonium, Lithargyrum, sulphur, vitriolum, aeruginem, Chrysocollam, caeruleum seu Lasulum, Auripigmentum, Arsenicum Realgar, Cinnabarim, Ferri argillam, Spathum, Gypsum, Tripolim, Rubricam fabrillem, &c. & his similia alia plura: velut & deinceps horum cuiuslibet aquas, olea, resinas, calcem, sive cinerem, Mercurium, sulphur & sal, &c.

English Next one must also understand the separation of metals from their mountains, that is, the separation of metals and minerals. When separation is performed on these, many matters emerge from one, as you see minerals yield metal, slag, glass, sand, pyrite, marcasite, garnet, cobalt, talc, cackimia, zinetum, bismuth, antimony, litharge, sulphur, vitriol, verdigris, chrysocolla, blue mineral or lazulum, orpiment, arsenic realgar, cinnabar, iron clay, spar, gypsum, tripoli, red earth used by craftsmen, and many similar things. Subsequently each of these also yields waters, oils, resins, calx or ash, mercury, sulphur and salt, and so forth.⁷⁶

Original marginal note NTR-B08-M014 1605 p. 238 · GOT-222

Latin 4. Vegetabilium.

English 4. Of plants.

NTR-B08-P012 1605 p. 238 · GOT-222

Latin Vegetabilia in separatione sua dant Aquas, olea, succos, Resinas, Gummata, Electuaria, pulveres, cineres, Mercurium, sulphur & sal, &c. Animalia in separatione sua dant aquam, sanguinem, carnem, adipem, ossa, cutem, corpus, crines, Mercurium, sulphur, & sal, &c.

English Plants in their separation give waters, oils, juices, resins, gums, electuaries, powders, ashes, mercury, sulphur and salt, and so forth. Animals in their separation give water, blood, flesh, fat, bones, skin, body, hair, mercury, sulphur and salt, and so forth.

Original marginal note NTR-B08-M015 1605 p. 238 · GOT-222

Latin Separatorem bonum quae faciant.

English What makes a good separator.

⁷⁶ Historical mineral names do not always designate the purified substances of modern chemistry. Cackimia and lazulum are retained as source terms; “iron clay” renders Ferri argillam. The list must be read in the text’s mineralogical vocabulary.

NTR-B08-P013 1605 pp. 238–239 · GOT-222, GOT-223

Latin Qui ergo eius modi rerum naturalium omnium separatorem esse gloriatur, is longa experientia & rerum naturalium omnium perfecta cognitione opus habet. Praeterea oportet ipsum esse peritum & exercitatum Alchimistam, ut sciat quid conflagrabile sit, vel non sit, quid fixum, quid volatile sit, quid fluat vel non fluat, quid altero ponderosius existat. Explorata etiam habere debet cuiuslibet rei naturalem colorem, odorem, aciditatem, austeritatem, acorem, amarorem, dulcorem, gradum, complexionem, & qualitatem.

English Whoever boasts of being a separator of all natural things of this kind needs long experience and perfect knowledge of them all. Moreover, he must be a skilled and practised alchemist, so that he knows what is combustible and what is not, what is fixed and what volatile, what melts and what does not, and what is heavier than something else. He must also have investigated each thing's natural colour, smell, acidity, astringency, sharpness, bitterness, sweetness, degree, complexion and quality.

Original marginal note NTR-B08-M016 1605 p. 239 · GOT-223

Latin Separationis qui & quot gradus: & quid separet Distillatio. Resolutio. Putrefactio. Extractio.

English The kinds and number of stages of separation, and what is separated by distillation, dissolution, putrefaction and extraction.

Original marginal note NTR-B08-M017 1605 p. 239 · GOT-223

Latin Calcinatio. Reverberatio.

English Calcination. Reverberation.

Original marginal note NTR-B08-M018 1605 p. 239 · GOT-223

Latin Sublimatio.

English Sublimation.

Original marginal note NTR-B08-M019 1605 p. 239 · GOT-223

Latin Reductio.

English Reduction.

Original marginal note NTR-B08-M020 1605 p. 239 · GOT-223

Latin Coagulatio. Pulverisatio.

English Coagulation. Pulverisation.

Original marginal note NTR-B08-M021 1605 p. 239 · GOT-223

Latin Iaculatio.

English Tossing.

NTR-B08-P014 1605 p. 239 · GOT-223

Latin Nosse insuper etiam debet gradus separationis, ut sunt destillationis, Resolutionis, putrefactionis, extractionis, calcinationis, Reverberationis, Sublimationis, Reductionis, Coagulationis, pulverisationis, lavationis. Per destillationem separatur aqua & oleum de omnibus rebus corporeis. Per Resolutionem separantur metalla a mineralibus, & metallum unum ab altero, & sal ab aliis, & pinguedo, & leve, a graviori. Per putrefactionem separatur pingue a macro, purum ab impuro, putridum a non putrido. Per extractionem separatur purum ab impuro, & spiritus ac essentia Quinta a suo corpore, & margarita a crasso. Per calcinationem separatur Aquea humiditas, pinguedo, naturalis color, odor, & quicquid alias combustile est. Per Reverberationem separatur color, odor, flagrabile, omnis humiditas, aquositas, pinguedo, quicquid denique fluxile & inconstans rei

inest, &c. Per sublimationem separantur a se invicem fixum & volatile, spirituale & corporale, purum ab impuro, sulphur a sale, Mercurius a sale &c. Per Reductionem separatur fluxile a solido, metallum a suo minerali, & metallum unum ab altero, metallum a scoria, pingue a non pingui. Per coagulationem separatur mador ab humido, aqua a terra. Per pulverisationem separantur a se invicem pulvis & arena, cinis & calx, minerale a vegetabili & animali. Et pulveres omnes, qui inaequalis ponderis sunt separantur. Iaculatione, velut palea de frumento. Per Lotionem seu Ablutionem separantur cinis & arena, minerale a suo metallo, grave a levioere, vegetabile & animale a parte minerali, sulphur a Mercurio & sale, sal a Mercurio.

English He must also know the stages of separation: distillation, dissolution, putrefaction, extraction, calcination, reverberation, sublimation, reduction, coagulation, pulverisation and washing. Distillation separates water and oil from all bodily things. Dissolution separates metals from minerals, one metal from another, salt from other things, and fat and the light from the heavier. Putrefaction separates the fat from the lean, the pure from the impure and the putrid from the unputrid. Extraction separates the pure from the impure, spirit and quintessence from their body, and the pearl from the gross. Calcination separates watery moisture, fat, natural colour, smell and anything else combustible. Reverberation separates colour, smell, combustibles, all moisture, wateriness, fat, and finally anything fusible and unstable in a thing. Sublimation separates fixed from volatile, spiritual from bodily, pure from impure, sulphur from salt, mercury from salt, and so forth. Reduction separates the fusible from the solid, metal from its mineral, one metal from another, metal from slag, and fat from what is not fatty. Coagulation separates dampness from the moist and water from earth. Pulverisation separates dust from sand, ash from calx, and mineral from vegetable and animal matter. All powders of unequal weight are also separated by tossing, as chaff is separated from grain. Washing or ablution separates ash from sand, a mineral from its metal, the heavy from the lighter, vegetable and animal from the mineral part, sulphur from mercury and salt, and salt from mercury.⁷⁷

Original marginal note NTR-B08-M022 1605 p. 239 · GOT-223

Latin Metallor. separatio multiplex.

English The manifold separation of metals.

NTR-B08-P015 1605 p. 239 · GOT-223

Latin Ceterum ut missa iam theorica, ipsam separationis practicam aggrediamur, ac ad speciem descendamus: notandum est, separationem metallorum iure omnium primam esse. Ipsam ergo deinde tali ratione trademus.

English Leaving theory now, let us approach the practice of separation itself and descend to particular kinds. Observe that the separation of metals rightly comes first of all. We shall therefore teach it next in the following way.

⁷⁷ The catalogue of operations uses historical workshop senses. Resolution is rendered dissolution. Iaculatio is a tossing or winnowing action. Mador ab humido, literally dampness from the moist, is retained without silently replacing the printed distinction.

NTR-B08-P016 1605 p. 239 · GOT-223

Latin De Separatione Metallorum a suis mineris.

English On the Separation of Metals from Their Ores.

Original marginal note NTR-B08-M023 1605 p. 240 · GOT-224

Latin 1. Per pulveres liquefactorios.

English 1. By melting powders.

NTR-B08-P017 1605 pp. 239–240 · GOT-223, GOT-224

Latin Separatio metallorum a suis mineris, modis multis fieri potest, nempe Ebullitione seu excoctione, eliquatione per pulveres liquefacientes ut sunt sal Alkali, Lithargyrum, sal fluxum, Fel vitri, scoria, sal Gemmae, salpetrae, &c. Indantur in fictile seu catinum in fornace liquentur. Sic nimirum metallum, ceu Regulus in fundum fictilis residuebit: materia autem minerae enatabit in sublime, & fiet scoria. Regulum hunc metallicum per Reverberatorium in fornace urgebis tam diu, donec metallum omne purum, & ab omni sua sorde & scoria liberatum sit. Hoc modo metallum probe digeritur, & ab omni sorde seu scoria (ut ita dicam) finatur seu expurgatur. Eiusmodi minera interdum, plus uno metallo continebit, veluti multoties accidit, ut cuprum & argentum, cuprum & aurum, plumbum & argentum, stannum & argentum, &c. in uno minerali inveniantur: cuius rei signum est seu apparet si metallicus Regulus post reverberatorium in capella debito modo & ratione resolvatur. In eo enim imperfecta metalla omnia separantur, ut sunt cuprum, ferrum, stannum, plumbum: & sic una cum plumbo, cuius duplo plus quam Reguli esse in additamento debet, illa in fumum abeunt, solumque finum argentum aurumque in capella remanet. Idem similiter etiam deprehenditur, si metallicus Rex liquatur, & in glandes funditur. Ea namque fusione metalla permixta separantur, dum quod optimum & gravissimum est in fundum semper decadat, levioe contra supereminente &c.

English Metals can be separated from their ores in many ways: by boiling or smelting, or by fusion with melting powders such as alkali salt, litharge, fluxing salt, glass gall, slag, rock salt and saltpetre. Let them be put into an earthen vessel or crucible and melted in a furnace. The metal will settle as a regulus at the bottom of the vessel, while the matter of the ore rises and becomes slag. Drive this metallic regulus in the furnace under a reverberatory heat until all the metal is pure and freed from every impurity and slag. In this way the metal is thoroughly digested and, so to speak, refined or cleansed of all impurity and slag. An ore of this kind sometimes contains more than one metal. Copper and silver, copper and gold, lead and silver, tin and silver, and other such combinations are frequently found in one mineral. A sign of this appears if the metallic regulus, after reverberation, is dissolved in a cupel by the proper method. There all the imperfect metals are separated, such as copper, iron, tin and lead. They pass into fumes together with the lead, of which the amount added should be twice that of the regulus; only refined silver and gold remain in the cupel. The same is also found when the metallic king is melted and cast into

bullets: in that casting the mixed metals separate, since the best and heaviest always sinks to the bottom, while the lighter stands above it.⁷⁸

Original marginal note NTR-B08-M024 1605 p. 240 · GOT-224

Latin 2. Per aquas fortes &c.

English 2. By strong waters and so forth.

NTR-B08-P018 1605 p. 240 · GOT-224

Latin Possunt et duo vel tria permixta metalla in acri fortique aqua separari unumque ab alio extrahi, extendi, & resolvi: si autem utraque metalla una resolvantur, unum eorum in ista Resolutione, velut arena aut calx, cum sale, ut convenit, diverberari ac deprimi, & ita separari potest.

English Two or three mixed metals can also be separated in a sharp, strong water, and one extracted, drawn out and dissolved from another. If both metals dissolve together, one of them can be struck down and precipitated in that solution, like sand or calx, with a suitable salt, and thus separated.

Original marginal note NTR-B08-M025 1605 p. 240 · GOT-224

Latin 3. Per Sulphur.

English 3. By sulphur.

Original marginal note NTR-B08-M026 1605 p. 240 · GOT-224

Latin Sulphuris vis mira in separando.

English The remarkable power of sulphur in separation.

NTR-B08-P019 1605 p. 240 · GOT-224

Latin Praeterea metalla etiam per fluxionem separari queunt, hoc processu. Fac metalla fluant. Si facta fluxilia sunt, optime sublimati & purgati sulphuris pro qualibet libra metalli unciam unam iniice. Ibi id comburetur & eadem opera alterum metallum, nempe levissimum, in sublimem trahet, gravius autem in fundo relinquet. Hoc modo una stent, ut refrigerentur. Ita in uno Regulo metalla duo invenientur, non ut prius, mutuo permixta sed sibi opposita, & sulphure tanquam muro diremta, sicut oleum duas aquas ita intercludit, ut iungi & commisceri non possint: ita & sulphur metalla. Sulphur itaque Arcanum singulare insigni laude dignum est.

English Metals can also be separated by melting, through this process. Make the metals melt. Once they are fluid, cast in one ounce of thoroughly sublimed and purified sulphur for every pound of metal. It will burn there, and in the same action draw the lighter metal upwards, leaving the heavier at the bottom. Let them stand together in this state to cool. Two metals will thus be found in one regulus, no longer mixed as before but opposite one another, divided by sulphur as by a wall. Just as oil keeps two bodies of water apart so that they cannot unite and mix, so sulphur separates metals. Sulphur is therefore a singular arcanum worthy of exceptional praise.

⁷⁸. Regulus and metallic king denote the metallic button collected beneath slag. The abbreviated probe is expanded in the Latin; probe digeritur is translated "is thoroughly digested". These are historical process claims, not laboratory directions endorsed by the edition.

Original marginal note NTR-B08-M027 1605 p. 240 · GOT-224

Latin 4. Per Mercurium vivum.

English 4. By quicksilver.

NTR-B08-P020 1605 p. 240 · GOT-224

Latin Volatica & fugacia metalla, velut Aurum & argentum, si a mineris separanda, sunt quoniam nec in igne, nec in Aquis fortibus contineri & domari queunt, per Mercurium vivum Amalgamari, separari & extrahi debent. Mercurius autem vivus postea per gradum destillationis, a metalli, auri argentine calce abstrahendus & separandus est.

English Volatile and fugitive metals, such as gold and silver, when they are to be separated from ores and cannot be held and subdued either in fire or in strong waters, must be amalgamated, separated and extracted by quicksilver. Afterwards the quicksilver must be drawn off and separated by distillation from the calx of the metal, gold or silver.⁷⁹

NTR-B08-P021 1605 pp. 240–241 · GOT-224, GOT-225

Latin Hoc modo cetera etiam metalla, ut Aurum, Argentum, Cuprum, Ferrum, Stannum, Plumbum, &c. velut & alia ex his parata, ut Electrum rubeum, Magnesia alba, aurichalcum, plumbum cinereum, Laton, aes Caldarium, pars cum parte, &c. & quaecunque huius generis transmutata metalla sunt, cum Mercurio vivo, in pulverisatione ab extraneis abstrahuntur & separantur. Ea enim Mercurii vivi Natura & conditio est, ut cum metallis amalgametur, & totus uniatur, cum hoc tamen vel illo aut citius aut tardius, prout metallum eius naturae plus minusve cognatum est.

English In this way the other metals too, such as gold, silver, copper, iron, tin and lead, as well as things prepared from them, such as red electrum, white magnesia, aurichalcum, ash-coloured lead, laton, cauldron metal and part-with-part, and all transmuted metals of this kind, are drawn off and separated from foreign matter in their pulverised state by quicksilver. For it is the nature and condition of quicksilver to amalgamate and unite completely with metals, sooner or later with one or another according to the greater or lesser kinship of the metal with its nature.⁸⁰

NTR-B08-P022 1605 p. 241 · GOT-225

Latin Hoc in censu praecipuum est Aurum finum, deinde finum argentum, tertium plumbum, quartum stannum, quintum cuprum, postremum ferrum. Sic inter transmutata metalla primum est pars cum parte, deinde plumbum cinereum, praeterea Laton, insuper aes caldarium, porro Rubeum, & novissimum Album. Quanquam pro una vice Mercurius plus uno metallo non assumat, cum quo amalgametur. Illud tamen Amalgama postea semper per corium hircinum aut pannum gossypinum iniecta, ut decet, chorda, fortiter exprimendum est. Hoc enim pacto per corium aut pannum nihil praeter solum Mercurium vivum transibit. Is quod attraxerat metallum, illud in corio aut panno remanet instar calcis, quod

⁷⁹. The apparently surprising description of gold and silver as volatile and fugitive is present in this witness. It concerns the state in which the passage imagines them in ores and must not be silently corrected to modern properties of the pure metals.

⁸⁰. The source's alloy and material names are retained where modern identification would be uncertain. Part-with-part, pars cum parte, is explained below as a mixed gold–silver body.

postea cum sale Alkali aut alio in corpus Metallicum eliquando reducere potes. Hoc autem ingenio Mercurius vivus ab universis metallis multo expeditius & compendiosius, quam per gradum destillationis segregatur, &c. Hoc per Mercurium vivum processu a perito & industrio Alchimista metalla omnia post calcinationem suam in pulverisatione, a se invicem extrahi ac separari possunt. Eodem modo, facili admodum labore stannum etiam ac plumbum a cupro aut vasis cupreis, a ferro & chalybe stanno obductis, citra omnem ignem & aquam per solum Mercurii vivi Amalgama, ut diximus, separari potest. Nihilominus etiam fusum & foliatum aurum argentumve, velut & molitum tritumque quodvis metallum, penicillo aut calamo, pannis, membranis, papyro, corio, lignis, lapidibus aut aliis inscriptum illitumque per Mercurium vivum resolvi potest, ut tamen postea Mercurius ab illis metallis separari iterum ac segregari queat.

English In this ranking refined gold comes first, then refined silver, third lead, fourth tin, fifth copper and last iron. Among transmuted metals, part-with-part comes first, then ash-coloured lead, then laton, cauldron metal, the red, and finally the white. Yet at one time mercury takes up only one metal with which to amalgamate. Afterwards that amalgam must always be squeezed firmly through goatskin or cotton cloth, tied properly with a cord. In this way nothing but quicksilver passes through the skin or cloth. The metal it had attracted remains in the skin or cloth like a calx, which you can subsequently reduce by melting with alkali salt or another salt into a metallic body. In this manner quicksilver is separated from all metals much more readily and briefly than by distillation. Through this process with quicksilver, a skilled and industrious alchemist can extract and separate all metals from each other in their pulverised condition after calcination. In the same way, with very little labour, tin and lead can also be separated from copper or copper vessels, and from tinned iron and steel, without any fire or water, by an amalgam of quicksilver alone, as we have said. Cast and leaf gold or silver, and any ground or crushed metal written or spread with a brush or pen on cloth, parchment, paper, leather, wood, stone or other things, can likewise be dissolved by quicksilver, which can afterwards be separated and set apart from those metals again.

Original marginal note NTR-B08-M028 1605 p. 241 · GOT-225

Latin 5. Per corrosivas aquas.

English 5. By corrosive waters.

NTR-B08-P023 1605 pp. 241-242 · GOT-225, GOT-226

Latin Separatio autem metallorum in aqua forti, Aqua Regis, & similibus aliis corrosivis fortibus, hac ratione fit. Sumatur metallum permixtum, & alii coniunctum, & in laminas tenuissimas aut granula minima reducatur. Indatur in vas separatorium, & ei affundatur Aquae fortis communis, quantum satis est: stent, & mutuo macerentur, donec metallum omne in pellucidam aquam resolvatur. Id si argentum est, & aurum in se continet, argentum universum resolvetur in aquam, & aurum calcinabitur, & nigrae arenae specie in fundo subsidebit. Ea ratione duo metalla, aurum & argentum separata erunt. Si autem argentum solum sine gradu destillationis per aquam fortem separare, & in fundum instar arenae deorsum agere, ac a resolutione in calcinationem reducere voles: tunc in resolutionem illam

lamellam cupream iniice, & argentum in aqua illico subsidebit, ac instar nivis fundum occupabit vitri, & lamellam cupream paulatim consumere incipiet.

English Separation of metals in aqua fortis, aqua regis and other similar strong corrosives is carried out in this way. Take a metal mixed and joined with another, and reduce it to very thin plates or very small grains. Put it into a separating vessel and pour on enough ordinary aqua fortis. Let them stand and steep together until all the metal is dissolved into a clear water. If it is silver containing gold, all the silver will dissolve into the water, while the gold will be calcined and settle at the bottom like black sand. Thus the two metals, gold and silver, will be separated. If, however, you wish to separate the silver alone by aqua fortis without distillation, make it sink to the bottom like sand, and bring it from dissolution back into calcination, then cast a small copper plate into that solution. The silver in the water will immediately settle, covering the bottom of the glass like snow, and will begin gradually to consume the copper plate.

NTR-B08-P024 1605 p. 242 · GOT-226

Latin Argenti & cupri separatio per Aquam fortem communem, hoc modo fit. Cuprum, quod argentum, aut argentum quod cuprum in se continet, praedicta ratione in tenuissimas laminas aut granula reducito, & in vas vitreum indito, ac Aquae fortis communis quantum sufficit, addito. Hoc modo argentum calcinabitur, & fundum petet instar calcis candidae: cuprum vero resolvetur, & in pellucidam aquam convertetur. Haec aqua si una cum resolutio cupro per vitreum infundibulum ab argentea calce in vitrum peculiare abstrahatur, tunc resolutum cuprum in aqua cum communi aqua pluvia vel fluviali, aut marina calida reverberari ita poterit, ut instar arenae fundum vitri occupet.

English Silver and copper are separated by ordinary aqua fortis in this way. Reduce copper containing silver, or silver containing copper, into very thin plates or grains by the method already given. Put it into a glass vessel and add enough ordinary aqua fortis. In this way the silver will be calcined and sink to the bottom like a white calx, while the copper will dissolve and be converted into a clear water. If this water, together with the dissolved copper, is drawn away from the silver calx through a glass funnel into a separate glass, the copper dissolved in the water can then be struck down with ordinary rainwater, river water or warm seawater, so that it covers the bottom of the glass like sand.⁸¹

NTR-B08-P025 1605 p. 242 · GOT-226

Latin Separatio autem abditi auri a quolibet metallo, fit per Gradum Extractionis in Aqua Regis. Huiusmodi namque aqua metallum nullum, quam solum aurum finum resolvere aggreditur, &c. Eadem Aqua Regis separat etiam aurum finum ab inauratis Clenodiis. Illa enim si his illinatur, aurum abstergit & dstringit, &c.

⁸¹. This witness says that silver becomes a white calx while copper dissolves in ordinary aqua fortis. The historical wording is retained, although it should not be treated as a reliable modern account of nitric-acid chemistry. Reverberari here describes striking down the dissolved material, rather than necessarily furnace reverberation.

English Hidden gold is separated from any metal through the stage of extraction in aqua regis. For a water of this kind undertakes to dissolve no metal except refined gold alone. The same aqua regis also separates refined gold from gilded ornaments. If it is spread on them, it wipes off and strips away the gold.

Original marginal note NTR-B08-M029 1605 p. 242 · GOT-226

Latin 6. Per gradum Reverberationis.

English 6. Through the stage of reverberation.

Original marginal note NTR-B08-M030 1605 p. 242 · GOT-226

Latin Pars cum parte quid sit.

English What part-with-part is.

NTR-B08-P026 1605 pp. 242–243 · GOT-226, GOT-227

Latin Praeterea etiam cum cemento per gradum Reverberationis metalla duo permixta a se invicem separari possunt, maxime vero, si non in simili Fixationis gradu consistunt, ut ferrum & cuprum. Quod vero metallum Fixationis quam minimum habet, velut stannum & plumbum: id per gradum Reverberationis in Cemento universum consumitur. Quo autem Fixius est metallum, eo minus a cemento affici ac consumi potest. Sciendum itaque, aurum finum omnium fixissimum & perfectissimum esse metallum, quod a nullo cemento consumi possit. Huic proximum est Argentum finum. Si vero aurum & argentum invicem in uno corpore permiscantur, quod pars cum parte vocari solet, aut argentum in se aurum, aut aurum argentum continet: haec inquam permixta si una in cementum data Reverberentur, tunc aurum perpetuo integrum & inviolatum manet, argentum autem per cementum consumitur, & ex fino auro extrahitur, ita, ut seorsim sit cuprum ab argento ferroque aut stannum a cupro & ferro, aut plumbum a stanno, &c. & sic deinceps.

English Two mixed metals can also be separated from each other with cement through the stage of reverberation, especially if, like iron and copper, they do not have the same degree of fixation. A metal having very little fixation, such as tin or lead, is entirely consumed by reverberation in cement. The more fixed a metal is, the less it can be affected and consumed by cement. You should therefore know that refined gold is the most fixed and perfect of all metals, and cannot be consumed by any cement. Refined silver comes next. If gold and silver are mixed in one body, which is commonly called part-with-part, or if silver contains gold or gold silver, and these mixed materials are put together into cement and reverberated, the gold always remains whole and unharmed, while the silver is consumed by the cement and extracted from the refined gold. In the same way copper is set apart from silver and iron, tin from copper and iron, lead from tin, and so on.⁸²

NTR-B08-P027 1605 p. 243 · GOT-227

Latin De Separatione Mineralium.

English On the Separation of Minerals.

⁸². Cement means a prepared powder used around a metal in a refining process. The account distinguishes degrees of fixation, rather than modern elemental classifications.

NTR-B08-P028 1605 p. 243 · GOT-227

Latin Postquam Metallorum a sua terra & materia, velut etiam metalli unius ab alio separationem hactenus explicuimus, & qua fieri potuit, summa, attamen accurata brevitatem secundum artem Alchimicam & Experientiam proposuimus: fas utique ac necessarium erit, nos deinceps quoque de illis rebus tractare, ex quibus metalla crescunt & generantur, ut sunt tria principia, Mercurius, Sulphur & Sal, velut & mineralia alia, in quibus primum Ens Metallorum, hoc est, spiritus metallorum reperitur, velut evidens est in Marcasitis, Granatis, Cachimiis, Talco rubro, Lazurio, &c. & similibus, ut primum Ens Auri per gradum sublimationis invenitur. Sic in Marcasita alba, albo Talco, Auripigmento, Arsenico, Lithargyrio, &c. Primum Ens Argenti invenitur. In Cobalto, Zineto, &c. Primum Ens Ferri, in Zineto, Vitriolo, Atramento, Viridi aeris, &c. Primum Ens cupri: in Zineto, Bisemuto, etc. Primum Ens Stanni; in Antimonio, Minio, etc. Primum Ens Plumbi: in Cinnabari primum Ens Argenti vivi reperitur.

English We have now explained the separation of metals from their earth and matter, and of one metal from another, setting it out as briefly as possible, yet accurately, according to alchemical art and experience. It is therefore fitting and necessary next to discuss the things from which metals grow and are generated, such as the three principles, mercury, sulphur and salt, and other minerals in which the first being of metals, that is, their spirit, is found. Thus in marcasites, garnets, cachimiae, red talc, lazurium and similar things, the first being of gold is found through sublimation. In white marcasite, white talc, orpiment, arsenic and litharge the first being of silver is found; in cobalt and zinetum the first being of iron; in zinetum, vitriol, atramentum and verdigris the first being of copper; in zinetum and bismuth the first being of tin; in antimony and minium the first being of lead; and in cinnabar the first being of quicksilver.⁸³

NTR-B08-P029 1605 p. 243 · GOT-227

Latin De primo hoc Ente sciendum est, quod sit fugax Spiritus, in volatilitate adhuc consistens, velut infans in foeminae matrice latet, qui interdum Liquori, interdum Alcooli assimilatur. Quisquis ergo primum Ens cuiuslibet corporis talis habere, et separare satagit: huic multa experientia & Spagyricae scientiae cognitione opus est. Si enim in Alchimia non sedulo laboravit, nihil expediendo frustra omnia tentabit. Quo vero modo primum Ens a quibuslibet mineralibus corporibus separandum sit: in libris Archidox. satis explicatum est, nec hic cum taedio repeti debet. Quantum autem ad separationem Mineralium, notandum est, per gradum sublimationis huiusmodi multa separari, velut Fixum de non Fixo, spiritualia & volatilia corpora de Fixis, & sic consequenter secundum omnia membra, prout de metallis comprae-hensum est. Omnium enim mineralium unus ac similis processus est per omnes gradus, sicut ars Spagyrica docet, &c.

English You should know that this first being is a fugitive spirit still in a volatile state, lying hidden like an infant in a woman's womb, sometimes resembling a liquor and sometimes an alcohol. Whoever seeks to possess and separate the first being of any such body needs much experience and knowledge of spagyric science. Unless he has worked

⁸³ Primum ens is rendered first being, the text's early or seminal metallic spirit. Historical zinetum and cackimia/cachimia forms are preserved without identifying every occurrence with a modern substance.

diligently in alchemy, he will attempt everything in vain and accomplish nothing. How the first being is to be separated from mineral bodies has been sufficiently explained in the Archidoxis and need not be repeated tediously here. As for separation of minerals, observe that many such things are separated by sublimation: the fixed from the unfixed, spiritual and volatile bodies from fixed bodies, and similarly in every other respect, as was included in the treatment of metals. For all minerals have one similar process through all the stages, as the spagyric art teaches.⁸⁴

NTR-B08-P030 1605 p. 243 · GOT-227

Latin De Separatione Vegetabilium.

English On the Separation of Plants.

Original marginal note NTR-B08-M031 1605 p. 243 · GOT-227

Latin Vegetabilia quot modis separentur.

English In how many ways plants are separated.

NTR-B08-P031 1605 pp. 243–244 · GOT-227, GOT-228

Latin Separatio eorum, quae ex terra crescunt, & combustibilia sunt, velut fructus, herbae, flores, folia, gramina, radices, ligna, &c. multis quoque modis instituitur. Per Destillationem namque primum ab illis separatur phlegma, postea Mercurius, post hunc oleum, praeterea Resina, insuper sulphur, denique Sal. Separationibus his omnibus secundum artem Spagyricam factis, insignia & excellentia medicamenta multa prodeunt, cum intro tum extra corpori adhibenda.

English Things which grow from the earth and are combustible, such as fruits, herbs, flowers, leaves, grasses, roots and woods, are likewise separated in many ways. Distillation first separates phlegm from them, then mercury, then oil, then resin, then sulphur, and finally salt. When all these separations are performed according to the spagyric art, many distinguished and excellent medicines emerge, to be applied both internally and externally to the body.

Original marginal note NTR-B08-M032 1605 p. 244 · GOT-228

Latin Medic. reprehens.

English Reproof of physicians.

NTR-B08-P032 1605 p. 244 · GOT-228

Latin Cum vero ignavia tantopere apud Medicos illos invaluerit, & opera omnis, omne studium ad insolentiam tantum convertatur: non miror equidem, praeparationes eiusmodi passim negligi, & carbones tam vili pretio prostare, quod si fabri eadem facilitate carbonibus in suis cudendis & tractandis metallis carere possent, qua carent illis Medici isti in praeparandis medicinis: Haud dubio carbonarii omnes ad extremam egestatem iam pridem redacti essent.

English Since idleness has gained such strength among those physicians, and all their work and study is turned solely towards arrogance, I am certainly not surprised that preparations of this kind are everywhere

⁸⁴. Alcool here is an extremely fine material or powder, not necessarily potable or chemical alcohol. The infant image describes a latent stage of mineral development in the text.

neglected and charcoal sells so cheaply. If craftsmen could dispense with charcoal in forging and working their metals as easily as those physicians dispense with it in preparing medicines, all charcoal burners would undoubtedly have been reduced to utter poverty long ago.

Original marginal note NTR-B08-M033 1605 p. 244 · GOT-228

Latin Spagyricorum laus, & quibus differant a ceteris Medicis.

English Praise of spagyric physicians and how they differ from other physicians.

Original marginal note NTR-B08-M034 1605 p. 244 · GOT-228

Latin Alchimiae quot gradus.

English The stages of alchemy.

NTR-B08-P033 1605 p. 244 · GOT-228

Latin Interim debito suo Elogio Medicos Spagyricos iure effero & exorno. Nec enim otio illi & desidiaē dati, superbo habitu incedunt, holoserico induti, aut digitis annulos ostentantes, aut argenteos pugiones ex lumbis defigentes, aut nitidas Chirothecas manibus vertentes, sed laboribus suis sedulo vacantes, & noctes atque dies integras inter igneas fornaces desudantes. Hi non animi caussa exspatiando tempus fallunt: Sed oblectationem suam in Laboratorio captant. Vestibus induuntur coriaceis, aut scorteis, praecinctorium appendentes, quo manus tergant. Digitos suos immittunt in carbones, in lutum & stercus, non in annulos aureos. Instar fabrorum, & carbonariorum fuliginosi, & sordidi sunt, nec vultu nitido superbiunt. Apud aegros loquaces non sunt, nec sua medicamenta alte deprædicant: cum perspectum habeant, ipsum opus artificem non artificem opus laudare debere, verborumque elegantiam aegrotum minime sanare posse. Vanitatibus ergo his omnibus neglectis, gaudent circa ignem occupari, ac gradus scientiae Alchimiae addiscere. Huius classis sunt, Destillatio, Resolutio, putrefactio, Extractio, Calcinatio, Reverberatio, Sublimatio, Fixatio, Separatio, Reductio, Coagulatio, Tinctura & similia.

English Meanwhile I rightly exalt and honour spagyric physicians with the praise they deserve. They do not surrender to leisure and sloth, strut in proud dress clothed in silk, display rings on their fingers, hang silver daggers at their hips or turn fine gloves in their hands. They attend diligently to their work and sweat through whole days and nights among fiery furnaces. They do not pass the time strolling for pleasure, but find their delight in the laboratory. They wear garments of leather or hide, hanging an apron before them on which to wipe their hands. They put their fingers into charcoal, mud and dung, not into golden rings. Like smiths and charcoal burners they are sooty and dirty, and do not pride themselves on a polished face. They are not talkative at the sickbed and do not loudly praise their medicines, knowing that the work should praise the craftsman, not the craftsman his work, and that elegant words cannot cure the sick. Putting all these vanities aside, they rejoice in working around the fire and learning the stages of alchemical science: distillation, dissolution, putrefaction, extraction, calcination, reverberation, sublimation, fixation, separation, reduction, coagulation, tincture and the like.

NTR-B08-P034 1605 p. 244 · GOT-228

Latin Ceterum quomodo hae separationes omnes secundum Spagyricam & Alchimicam artem ope distinctorum graduum fiant: antea in genere dictum est. Itaque denuo idem hic repeti, vanum est. Ut vero ad Species nonnihil pergamus, & practicam istam brevissime explicemus: sciendum est, non uno eodemque processu, Aquam, Spiritum, Liquorem, Oleitatem, &c. ex herbis, floribus, seminibus, foliis, radicibus, arboribus, fructibus, lignis, per gradum distillationis separari posse.

English How all these separations are performed according to spagyric and alchemical art by means of distinct stages has already been stated in general, so it is pointless to repeat it here. To proceed a little towards particular kinds and explain the practice very briefly, you should know that water, spirit, liquor, oiliness and so forth cannot be separated by distillation from herbs, flowers, seeds, leaves, roots, trees, fruits and woods by one and the same process.

Original marginal note NTR-B08-M035 1605 p. 245 · GOT-229

Latin Ignis in destillando gradus 4.

English Four degrees of fire in distillation.

Original marginal note NTR-B08-M036 1605 p. 245 · GOT-229

Latin Quae res quo ignis gradu destillantur.

English Which things are distilled at which degree of fire.

Original marginal note NTR-B08-M037 1605 p. 245 · GOT-229

Latin Aquae.

English Waters.

Original marginal note NTR-B08-M038 1605 p. 245 · GOT-229

Latin Olea.

English Oils.

NTR-B08-P035 1605 pp. 244-245 · GOT-228, GOT-229

Latin Alium enim processum requirunt herbae, alium flores, alium semina, alium folia, alium radices, alium arbores, locustae & caules, alium fructus, alium ligna, &c. Et in hoc destillationis gradu discreti quoque quatuor gradus Ignis considerandi veniunt. Primus gradus Ignis in destillatione est Balneum Mariae. Haec est destillatio facta in aqua. Alter gradus Ignis est destillatio facta in cinere. Tertius, in arena. Quartus, in libero Igne, sicut etiam per Aquam fortem & alias violentas aquas destillatio fieri solet. Sub primum ignis gradum spectant Herbae, flores, semina, & similia. Sub secundum folia, fructus, &c. Sub tertium radices, rami & locustae arborum, &c. Sub quartum ligna, & quae his similia sunt. Horum tamen quodlibet minutim incidendum aut contundendum est priusquam in destillatorium indatur. Et haec de destillatione Aquarum, & vegetabilium substantiarum dicta sint. Quantum autem ad separationem & destillationem oleorum attinet, processus idem tenendus est cum eo, de quo in separatione Aquarum iam diximus, nisi quod ex parte per Descensum illa destillanda sint. Nec enim aquarum instar in Destillatorio sursum ascendere possunt. Itaque processus eorum hoc casu mutandus est. Ceterum Liquores non ut aquae & olea in destillatione separantur, sed sub praelo a corporeis suis substantiis exprimuntur. Et hic sciendum est, nonnulla quoque olea, eodem modo, quo Liquores, per praelum a suis corporeis substantiis exprimi & separari hac de causa, quia plane nullam ustionem aut Ignis calorem ferre possunt, sed ingratum ex illo odorem contrahunt. Huius census est oleum Amygdalarum, Nucum, durorum ovorum & similium. Notandum etiam hoc est, quod omnia olea, si secundum Spagyricam & Alchimicam artem praeparentur seu coagulentur,

vernitem, Electuarium, Gummi aut resinam quandam fundant, quae sulphur quoque vocari possunt, quod si species, quae in Destillatorio relinquuntur, calcinentur, et in cinerem redigantur, sola ac simplici aqua calida Alkali ab ipsis extrahi et separari potest. Cinis, qui relinquitur, vocatur terra mortua, nec ex illa quidquam amplius educi aut separari potest.

English Herbs require one process, flowers another, seeds another, leaves another, roots another, trees, shoots and stalks another, fruits another and woods another. In this stage of distillation four distinct degrees of fire must also be considered. The first degree of fire in distillation is the bath of Mary: distillation carried out in water. The second is distillation in ashes; the third, in sand; the fourth, in an open fire, as distillation is also commonly performed with aqua fortis and other violent waters. Herbs, flowers, seeds and similar things belong to the first degree; leaves and fruits to the second; roots, branches and shoots of trees to the third; woods and similar things to the fourth. Each, however, must be cut small or crushed before being put into the still. Let this suffice on distillation of waters and vegetable substances. As for separation and distillation of oils, the same process must be followed as was described for separating waters, except that some must be distilled downwards. They cannot rise upwards in the still as waters do, so their process must be changed in that case. Liquors, however, are not separated by distillation like waters and oils, but squeezed from their bodily substances under a press. Know also that some oils are pressed and separated from their bodily substances in the same way as liquors, because they cannot endure any burning or heat of fire, but acquire an unpleasant smell from it. Of this kind are oil of almonds, nuts, hard-boiled eggs and the like. Observe also that all oils, if prepared or coagulated according to spagyric and alchemical art, yield a varnish, electuary, gum or resin, which may also be called sulphur. If the materials left in the still are calcined and reduced to ash, alkali can be extracted and separated from them with plain hot water alone. The ash that remains is called dead earth, from which nothing further can be drawn or separated.

NTR-B08-P036 1605 p. 245 · GOT-229

Latin De Separatione Animalium.

English On the Separation of Animals.

Original marginal note NTR-B08-M039 1605 p. 245 · GOT-229

Latin Separat. animalium 4. modi seu gradus.

English Four methods or stages in the separation of animals.

Original marginal note NTR-B08-M040 1605 p. 245 · GOT-229

Latin Mumia &c.

English Mumia and so forth.

NTR-B08-P037 1605 pp. 245–246 · GOT-229, GOT-230

Latin Separationem animalium, Anatomiam praecurrere necesse est, ut seorsim sit sanguis, seorsim caro, seorsim ossa, seorsim cutis, seorsim intestina, seorsim

tendines, etc. post, quodlibet horum per se spagyrica arte separandum est. Itaque hoc loco Separationes praecipue quatuor sunt. Prima aquosam et phlegmaticam humiditatem a sanguine elicit. Sanguine namque hoc modo, secundum processum in libro de conservationibus traditum, separato, Mumia nobilissima prodit, et specificum tam praestans, ut quodlibet recens vulnus, viginti quatuor horarum spatio, per unicum ligaturam sanari & consolidari possit, &c.

English Anatomy must precede the separation of animals, so that blood, flesh, bones, skin, intestines and tendons are each apart. Afterwards each must itself be separated by the spagyric art. There are chiefly four separations here. The first draws watery and phlegmatic moisture from blood. When blood is separated in this way, according to the process given in the book on preservation, a most noble mumia emerges, a specific remedy so excellent that any fresh wound can be healed and closed within twenty-four hours with a single dressing.⁸⁵

Original marginal note NTR-B08-M041 1605 p. 246 · GOT-230

Latin Balsamus, &c.

English Balsam and so forth.

NTR-B08-P038 1605 p. 246 · GOT-230

Latin Altera Separatio est pinguedinis a carne. Ea enim a carne humana separata, praestantissimus fit Balsamus, sedans dolores podagrae, contracturae, & similes alios, si membra affecta illo calide inungantur. Prodest idem etiam tendinibus manuum pedumve convulsis, si quotidie inungantur. Sanat etiam scabiem, & omnes species Leprae. Adeoque hoc specificum chirurgicum summum est, in omnibus casibus & vulneribus apprime commodum, &c.

English The second separation is of fat from flesh. Separated from human flesh, it becomes a most excellent balsam, soothing the pains of gout, contracture and the like if the affected parts are anointed with it warm. It also benefits contracted tendons of the hands or feet if they are anointed daily. It cures scabies and all kinds of leprosy too. Thus this is a supreme surgical specific, especially useful in every injury and wound.

NTR-B08-P039 1605 p. 246 · GOT-230

Latin Tertia separatio est aquae & phlegmaticae humiditatis una cum pinguedine extractae ex ossibus. Duo namque haec si arte Spagyrica per gradum Destillationis ab ossibus humanis separentur: porro vero ossa per gradum Calcinationis in candidissimum cinerem redigantur seu exurantur: Et denique tria haec iterum debita ratione uniantur, ita ut butyrum referant: Arcanum id ac specificum admirandum erit, quo quamlibet ossis fracturam citra dolorem tribus saltem deligationibus curare integre possis, modo fracturam ipsam ad praescriptum scientiae chirurgicae tractes componasque, & specificum tandem forma Emplastri imponas, &c. Idem etiam vulnera cranii, & quamcunque aliam ossium contusionem expeditissime persanat.

⁸⁵. The claims about preparations of human blood, fat, bones and tissues in these paragraphs belong to historical corpse medicine. Their promised cures are not established medical facts or recommendations. Mumia is retained as the historical term; it does not everywhere mean an embalmed Egyptian mummy.

English The third separation is of watery and phlegmatic moisture extracted together with fat from bones. If these two are separated from human bones by spagyric art through distillation, the bones then burnt or reduced by calcination to a very white ash, and finally the three properly united again until they resemble butter, this will be a wonderful arcanum and specific. With it you can completely cure any broken bone without pain in only three dressings, provided you treat and set the fracture itself according to surgical science and then apply the specific as a plaster. It also heals wounds of the skull and every other bruising of bones very readily.

NTR-B08-P040 1605 p. 246 · GOT-230

Latin Quarta & ultima Separatio est Resinarum & Gummatum a cute, intestinis, & tendinibus. Resina namque haec per gradum extractionis Spagyrica arte ex illis extracta ac separata, & ad Solis radios per se coagulata, viscum nitidum & pellucidum evadit. Visco hoc, praescripto modo ex corpore humano praeparato, extracto & separato, Arcanum ac Specificum stypticum praestantissimum prodit, quo vulnus aut ulcus expedite conglutinari, ac labra eius adduci cogique possunt, (non secus ac duae tabulae visco immisso agglutinantur) modo resoluti illius duas tresve guttas vulneri iniicias. Hoc etiam arcanum singulare est pro Ambustis, pro unguium lapsu aut scabritie, si penna illinatur. Ita enim caro nuda cuticula inducetur.

English The fourth and last separation is of resins and gums from skin, intestines and tendons. This resin, extracted and separated from them by spagyric art through extraction and coagulated by itself in the sun's rays, becomes a shining, transparent glue. From this glue, prepared, extracted and separated from the human body in the prescribed way, comes a most excellent styptic arcanum and specific. By it a wound or ulcer can readily be joined and its lips drawn and brought together, just as two boards are joined by applying glue, if only two or three drops of it dissolved are cast into the wound. This is also a singular arcanum for burns and for fallen or rough nails, if applied with a feather, for bare flesh will thus be covered with a little skin.

NTR-B08-P041 1605 pp. 246–247 · GOT-230, GOT-231

Latin Multae hic quidem aliae quoque separationes horum, vel illorum recenseri possent. Quarum tamen cum mentionem in locis aliis fecerimus: illas otiose hic repeti, frustraneum foret. Hic illas saltem necesse est describi, quarum alibi mentionem non fecimus.

English Many other separations of these or other things could indeed be recounted here. Since we have mentioned them elsewhere, however, it would be pointless to repeat them idly. Here it is necessary to describe only those which we have not mentioned elsewhere.

Original marginal note NTR-B08-M042 1605 p. 247 · GOT-231

Latin Separatio ultima, est Iudicium extremum.

English The last separation is the Last Judgement.

Original marginal note NTR-B08-M043 1605 p. 247 · GOT-231

Latin Iudicii extremi, quae ratio futura sit.

English What the Last Judgement will be like.

NTR-B08-P042 1605 p. 247 · GOT-231

Latin Denique vero in fine rerum terrenarum omnium fiet ultima separatio, in tertia generatione, die illa magna, qua filius Dei in Maiestate & gloria sua venturus est, cui praeferentur non gladii, vincula, Diademata, Sceptra, &c. & thesauri seu clenodia regia alia, qualibus principes, Reges, Caesares, &c. sese pompose inferunt: Sed crux eius & corona spinea, & clavi per manus ac pedes traieci, & hasta, qua latus eius perfossum est, & arundo ac spongia, quibus potum ei porrexerunt, & virgae, quibus percussus & caesus est. Hunc nulla equitum turma tympanis late clangentibus comitabitur: Sed quatuor tubae ab Angelis versus quatuor mundi partes inflabuntur, sonitu suo fremebundo omnes in vivis adhuc existentes, uno momento occisurae, & hos iterum una cum defunctis sepultis confestim resuscitaturae.

English Finally, at the end of all earthly things, the last separation will take place in the third generation, on that great day when the Son of God will come in his majesty and glory. Before him will be carried neither swords, chains, diadems and sceptres, nor treasures and other royal ornaments such as princes, kings and emperors display in pomp, but his cross and crown of thorns, the nails driven through his hands and feet, the spear which pierced his side, the reed and sponge with which they gave him drink, and the rods with which he was struck and beaten. No troop of horsemen with loudly sounding drums will accompany him. Instead, angels will blow four trumpets towards the four quarters of the world. Their roaring sound will kill in a moment all who are still alive, and immediately raise them again together with the buried dead.

Original marginal note NTR-B08-M044 1605 p. 247 · GOT-231

Latin Matthaeus 25.

English Matthew 25.

NTR-B08-P043 1605 p. 247 · GOT-231

Latin Audietur enim vox, Surgite mortui, & venite ad iudicium. Ad hoc duodecim Apostoli considebunt, sellis ex nubibus paratis, & duodecim Israelis familias iudicabunt. Eo loco Sancti Angeli malos a bonis, maledictos a benedictis, hoedos ab ovibus separabunt. Ibi maledicti instar lapidum & plumbi deorsum praecipitabuntur: benedicti autem velut Aquilae sursum volabunt. Ibi a tribunali Dei ad stantes in laeva parte egredietur talis vox: Abite maledicti in ignem aeternum, quod Sathanae ac Diabolis ab aeterno paratum est. Nam esurii, & vos me non cibastis, sitivi, & potum mihi non porrexistis. Aeger fui, & captivus, & nudus, & vos me non visitastis, non liberastis, non vestivistis, denique nulla erga me misericordia tacti estis. Ideo nec hic ullam misericordiam experiemini. Econtra ad stantes in dextra parte sic loquetur: Venite benedicti & electi in regnum mei patris, quod vobis & omnibus angelis ab initio paratum est. Esurivi enim & dedistis mihi manducare, sitivi & dedistis mihi bibere. Hospes eram, & collegistis me. Nudus eram, & operuistis me, infirmus eram, & visitastis me: in carcere eram, & venistis ad me. Ideo & vos iam in domum patris mei recipiam, in qua multae sanctorum habitationes sunt. Miserati me estis: ideo & ego vos miserabor.

English For a voice will be heard: "Rise, you dead, and come to judgement." Then the twelve apostles will sit on seats prepared from clouds and judge the twelve families of Israel. There the holy angels will separate the wicked from the good, the cursed from the blessed, and the goats from the sheep. The cursed will be hurled down like stones and lead; the blessed will fly upwards like eagles. From God's tribunal a voice will address those standing on the left: "Depart, you cursed, into the eternal fire prepared from eternity for Satan and the devils. For I was hungry and you did not feed me; I was thirsty and you offered me no drink. I was sick, captive and naked, and you did not visit, free or clothe me; in the end you felt no mercy towards me. Therefore here you too will experience no mercy." To those standing on the right he will say: "Come, you blessed and chosen, into my Father's kingdom, prepared from the beginning for you and all the angels. For I was hungry and you gave me food; thirsty and you gave me drink. I was a stranger and you took me in; naked and you covered me; sick and you visited me; in prison and you came to me. Therefore I shall now receive you into my Father's house, in which are many dwellings of the saints. You had mercy on me; therefore I too shall have mercy on you."⁸⁶

NTR-B08-P044 1605 pp. 247–248 · GOT-231, GOT-232

Latin His omnibus completis & exactis, res Elementares universae ad primam materiam Elementorum redibunt, & in aeternum torquebuntur, nec unquam consumentur, &c. Econtra sacramentales creaturae omnes redibunt ad primam materiam sacramentorum, hoc est, clarificabuntur, & in aeterno gaudio Deum creatorem suum glorificabunt & venerabuntur, a mundo ad mundum, ab aeterno ad aeternum. Amen.

English When all these things are completed and accomplished, all elemental things will return to the first matter of the elements and be tormented eternally, yet never consumed. All sacramental creatures, by contrast, will return to the first matter of the sacraments: that is, they will be glorified, and in eternal joy will glorify and worship God their creator, from world to world and from eternity to eternity. Amen.

NTR-B08-P045 1605 p. 248 · GOT-232

Latin FINIS LIBRI OCTAVI.

English END OF BOOK EIGHT.

⁸⁶ The marginal citation names Matthew 25. The passage is a free composite retelling, not a verbatim quotation of that chapter; the many dwellings also recall John 14:2. It unites material separation with Christian judgement and works of mercy.

Book 9 On the Signature of Natural Things

Liber nonus de signatura rerum naturalium

Latin witness: Frankfurt 1605, printed pp. 248–271, SUB Göttingen PPN578052199.

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NTR-B09-P001 1605 p. 248 · GOT-232

Latin LIBER NONUS DE SIGNATURA RERUM NATURALIUM.

English BOOK NINE ON THE SIGNATURE OF NATURAL THINGS.

Original marginal note NTR-B09-M001 1605 p. 248 · GOT-232

Latin Signata & signatores triplices.

English Three kinds of signs and signators.

NTR-B09-P002 1605 p. 248 · GOT-232

Latin Hoc libro de signatura rerum Philosophaturis nobis ante omnia convenit, ut a quonam signata sint, quisve signator exsistat & quot signata numerentur, prius expediamus. Sciendum ergo est signata esse triplicia. Signata prima Homo signat. Secunda Archaeus. Tertia, Astra Supernaturalium. Itaque tres hoc modo signatores exsistunt: Homo, Archaeus, Astra. Insuper notandum est, signa ab hominibus signata perfectam secum cognitionem, & iudicium absconditarum rerum afferre, earumque virium & facultatum abditarum notitiam impertire.

English As we philosophise in this book about the signature of things, we must first explain by whom things are signed, who the signator is, and how many kinds of signs there are. Know, then, that there are three kinds of signs. The first are signed by the human being, the second by the Archaeus, and the third by the stars of supernatural things. In this way there are three signators: the human being, the Archaeus and the stars. Observe further that signs made by human beings bring with them complete knowledge and judgement of hidden things, and impart knowledge of their concealed powers and faculties.⁸⁷

NTR-B09-P003 1605 p. 248 · GOT-232

Latin Astrorum signa dant prophetias, praesagia, &c. rerumque supernaturales vires indicant, & vera iudicia ac indicia promunt in Geomantia, Chiromantia, Physionomia, Hydromantia, Pyromantia, Necromantia, Astronomia, Berillistica, &c. et aliis scientiis Astralibus.

English The signs of the stars give prophecies and foretellings, indicate the supernatural powers of things, and produce true judgements and indications in geomancy, chiromancy, physiognomy, hydromancy, pyromancy, necromancy, astronomy, beryllistics and other astral sciences.⁸⁸

⁸⁷. Signator means a maker or impressor of signs. The opening distinguishes humanly assigned signs, signs formed by the Archaeus, and astral signs. The printed *Astra Supernaturalium* is retained as “stars of supernatural things”; later passages develop both natural and supernatural astral claims.

NTR-B09-P004 1605 p. 248 · GOT-232

Latin Ut autem signa omnia quam rectissime et brevissime explicemus: ante omnia opus est, ut signa illa, quorum Homo ipse signator est proponamus. Illis intellectis cetera quoque tam naturalia quam supernaturalia rectius assequemini. Notum itaque est, Iudaeos signum flavum in pallio seu tunica circumferre. Hoc quid aliud est, quam id signum, ex quo quilibet obvius ipsum Iudaeum esse intelligat. Sic Lictor ex variegata tunica vel manica internoscitur. Sic magistratus quis suos ministros coloribus ac insignibus suis ornat. Mechanicus, opus suum peculiari signo designat, ut quilibet, quisnam opus fecerit, intelligat. Quo fine tabellarius sui domini aut civitatis insignia in pallio gestat, nisi ut ex illo pateat, quod nuncius sit, quod huic vel illi serviat, quod hinc vel illinc emigret, & sic transitum tutum impetret, &c.

English To explain all signs as correctly and briefly as possible, we must first set out those of which the human being is himself the signator. Once these are understood, you will grasp the other signs, both natural and supernatural, more correctly. It is known that Jews carry a yellow sign on their cloak or tunic. What else is this but a sign by which anyone meeting a person knows him to be Jewish? So a beadle is recognised by a parti-coloured tunic or sleeve, and a magistrate adorns his officers with his own colours and insignia. A craftsman marks his work with a special sign so that anyone may know who made it. Why does a messenger wear the insignia of his lord or city on his cloak, unless to make clear that he is a messenger, whom he serves, where he comes from, and thus obtain safe passage?⁸⁹

NTR-B09-P005 1605 p. 249 · GOT-233

Latin Sic miles tesseram vel symbolum nigrum, candidum, flavum, viride, coeruleum aut rubrum gestat, ut ab hoste discerni possit. Ex eo dignosci potest, hunc esse Caesarianum, illum Regum, hunc Italum, hunc Gallum, &c. Haec signa sunt, quae ad ordinem et officium spectant, quorum multa adhuc enumerari possent. Sed tamen, quoniam, alia signa, naturalium & supernaturalium rerum describenda nobis proposuimus, libellum hunc alienis signis minime infarciemus.

English A soldier likewise wears a black, white, yellow, green, blue or red badge or emblem, so that he can be distinguished from the enemy. By it one can recognise one man as imperial, another as belonging to kings, one as Italian and another as French. These signs concern rank and office, and many more could be listed. Since, however, we have proposed to describe other signs, those of natural and supernatural things, we shall not stuff this little book with signs foreign to its purpose.

NTR-B09-P006 1605 p. 249 · GOT-233

Latin Ut ergo Signata illa, quae homo signat, quaeque non tantum ad ordinem, officium aut nomen, sed etiam ad discrimen, notitiam, aetatem, dignitatem, gradum, &c. cognoscendum deducunt: deinceps sciendum est, de moneta, quod quaelibet

⁸⁸. These asserted divinatory powers belong to the historical text. Beryllistics refers to divination with a crystal or beryl. Astronomia here participates in astral interpretation and is not simply modern observational astronomy.

⁸⁹. The compulsory yellow mark imposed on Jews is cited here as an example of a conventional human sign. Its discriminatory historical context belongs to the passage and is not endorsed. The messenger's insignia are said to secure safe passage.

peculiarem suam probationem ac signum habeat, ex quo noscatur, quanti valoris sit, cuius domini sit, quo loco usitata & accepta sit. Hinc a Germanis proverbium iactatur: Numus nullibi gratior, quam ubi cusus est.

English As for those signs made by human beings, which reveal not only rank, office or name but also distinction, identity, age, dignity and degree, know next concerning coinage that each coin has its own particular proof and mark. By it one knows its value, whose lordship it belongs to, and where it is used and accepted. Hence the German proverb: "Nowhere is a coin more welcome than where it was struck."

NTR-B09-P007 1605 p. 249 · GOT-233

Latin Idem intelligendum etiam de signatis visitatis, quae a iuratis & ad id constitutis praegressa debita inspectione signantur: cuius rei documento sunt panni, insignibus peculiaribus notati, ex quibus sciri potest, eos in examine bonos ac probos inventos esse. Cur sigillum appenditur literis, nisi ut vis quaedam sit, quam violare nulli liceat? Sigillum enim est confirmatio literarum, unde illae apud omnes homines ac iudicia ratae habentur. Sine Sigillo Apocha mortua, irrita & inanis est.

English The same is understood of inspected goods, which sworn officers appointed for the purpose mark after due examination. Cloth bearing special marks provides an example: the marks show that it was found good and sound under inspection. Why is a seal attached to a document unless to give it a force which nobody may violate? A seal confirms the document, so that it is held valid by all people and courts. Without a seal a receipt is dead, void and empty.

NTR-B09-P008 1605 p. 249 · GOT-233

Latin Eodem modo paucis quoque literis, nominibus seu verbis res multae designantur, ut libri, qui uno tantum extra verbo inscripti, quid intus contineant, illico produnt. Eadem conditio etiam est vitrorum, & pyxidum in officinis medicinalibus, quae omnes peculiaribus nominibus seu chartis appensis discernuntur. Id nisi fieret, equisnam tot tamque inter se diversas Aquas, Liquores, Syrupos, olea, pulveres, semina, unguenta, &c. denique ipsa simplicia omnia discernere posset. Eodem modo & Alchimista in Laboratorio suo, omnes Aquas, Liquores, Spiritus, Olea, phlegmata, Crocos, Alkali, pulveres, denique omnes Species singulatim suis nominibus & chartis notat, ut ex illis, si opus sit, quod velit eligere possit. Sine quo praesidio impossibile est, singulorum propriam memoriam habere, &c. Sic etiam per numerum conclavia omnia, & aedificia hominum signari possunt, ut aetas cuiuslibet ex primo illo ascripti numeri aspectu sciri possit.

English Many things are likewise designated by a few letters, names or words: books, for instance, which, with a single word written outside, immediately disclose what they contain. The same applies to glass vessels and boxes in apothecaries' shops, all distinguished by particular names or attached labels. Without this, who could distinguish so many different waters, liquors, syrups, oils, powders, seeds, ointments and, finally, all the simple ingredients? In the same way the alchemist in his laboratory marks all waters, liquors, spirits, oils, phlegms, crocuses, alkalis, powders and every material individually with its name and label, so that when needed he can choose what he wishes. Without this aid it is impossible to remember each distinctly. All rooms and human

buildings can likewise be marked with a number, so that the age of each can be known at the first sight of the number written on it.

NTR-B09-P009 1605 p. 250 · GOT-234

Latin Haec & alia signata proponere vobis volui, ut his comprehensis, a vobis in ceteris eo dexterius intelligar, adeoque quorumlibet significatio planior & evidentior fiat.

English I wished to set these and other signs before you so that, once you grasp them, you may understand me more readily in the remaining matters, and the meaning of each may become plainer and more evident.

NTR-B09-P010 1605 p. 250 · GOT-234

Latin De Monstrosis signis hominum.

English On Monstrous Signs in Human Beings.

Original marginal note NTR-B09-M002 1605 p. 250 · GOT-234

Latin Monstrosa signa varia sunt.

English Monstrous signs are of various kinds.

Original marginal note NTR-B09-M003 1605 p. 250 · GOT-234

Latin Monstrosa signa quid indicent.

English What monstrous signs indicate.

NTR-B09-P011 1605 p. 250 · GOT-234

Latin Multi homines monstrosis signis deformes in lucem eduntur. Sic alius digito uno abundat, alter uno deficit, idque vel in manibus, vel pedibus. Nonnullis digiti omnes in utero matris connascuntur. Alius distortum pedem, brachium, collum, &c. secum ex utero fert: alius luxatum dorsum seu gibbum. Sic etiam nascuntur Hermaphroditae, Androgyni, homines scilicet, utroque pudendo, tam virili quam foemineo dotati, aut etiam utroque privati. Monstrosorum huiusmodi signorum multa tam in masculis quam in foemellis notavi, quae universa pro monstrosis signis arcanorum malorum Ascendentium habenda sunt. Unde etiam proverbium id invaluit: Quo distortior, eo nequior: Clauda membra, clauda opera. Ea enim signa vitiorum sunt, raro aliquid boni notantia.

English Many people are born deformed by monstrous signs. One has an extra finger or toe, another lacks one. In some, all the digits grow together in the mother's womb. Another brings from the womb a twisted foot, arm or neck; another a dislocated back or hump. So too are born hermaphrodites or androgynes, that is, people endowed with both male and female genitals, or deprived of both. I have observed many monstrous signs of this kind in males and females; all are to be considered monstrous signs of hidden evil ascendants. Hence the familiar proverb: "The more twisted, the more wicked; lame limbs, lame deeds." For these are signs of vices, rarely indicating anything good.⁹⁰

⁹⁰ The passage's equation of disability or variations of sex characteristics with vice is an unsupported and discriminatory historical claim. It is translated to preserve the argument under examination, not accepted as a way of judging people. "Monstrous" renders the source category, not the editor's description of human beings.

NTR-B09-P012 1605 p. 250 · GOT-234

Latin Ut suos filios infamibus signis carnifex notat: ita & mali Ascendentes, suos foetus supernaturalibus maliciosis notis inurunt, ut eo dexterius caveantur, exemplo facinorosorum hominum, qui stigmata vel in fronte, vel malis, aut auribus, digitis, manibus, oculis, linguis, &c. praecisis ostentant.

English As an executioner marks his children with infamous signs, so evil ascendants brand their offspring with supernatural malicious marks, so that they may more readily be guarded against. The example is that of criminals who display brands on the forehead or cheeks, or mutilated ears, fingers, hands, eyes or tongues.⁹¹

NTR-B09-P013 1605 p. 250 · GOT-234

Latin Quodlibet horum infamium signorum peculiare vitium designat. Sic stigma in faciem mulieris, &c. inustum, aut aurium detruncatio plerunque furtum indicat. Digitorum detruncatio improbos aleatores: manus abscissio, violatores pacis: duorum digitorum amissio periuros: oculi elisio acuta & subtilia facinora tractantes: linguae praecisio, blasphemos, calumniatores, &c. designat. Sic etiam Mamaluccos, (quos vocant) seu Christianae religionis abnegatores ex cruce plantis pedum inusta dignoscere potestis, quod scilicet Christum Redemptorem suum abnegaverint.

English Each of these infamous signs designates a particular vice. A brand burnt into a woman's face, for example, or the cutting off of ears usually indicates theft. The cutting off of fingers marks dishonest gamblers; of a hand, breakers of the peace; the loss of two fingers, perjurers; the putting out of an eye, those who practise cunning and subtle crimes; and the cutting out of the tongue, blasphemers and slanderers. Likewise you can recognise those called Mamelukes, or renouncers of the Christian religion, by a cross branded on the soles of their feet, signifying that they have denied Christ their redeemer.

Original marginal note NTR-B09-M004 1605 p. 250 · GOT-234

Latin Monstrousa signa a praegnantis imaginatione.

English Monstrous signs from the imagination of a pregnant woman.

NTR-B09-P014 1605 pp. 250–251 · GOT-234, GOT-235

Latin Sed, ut his missis ad malignorum Ascendentium monstrousa signa revertamur sciendum est, non omnia monstrousa signa ex solo Ascendente oriri, sed frequenter etiam ex Astris humani animi, quae iugiter ac omnibus momentis, cum Phantasia, Aestimatione seu Imaginatione ascendunt descenduntque, non aliter, ac in Firmamento superiore. Hinc vel ex metu vel terrore praegnantium multa monstra, aut liberi monstrosis notis in utero signati nascuntur. Horum caussa primaria est timor, terror, appetitus, a quibus Imaginatio suscitatur. Praegnans si imaginari incipit, tunc coelum ipsius motu suo circumfertur, non secus ac Firmamentum superius, singulis momentis Ascendentibus vel surgentibus, vel decumbentibus. Nam ad exemplum Firmamenti maioris Astra Microcosmi quoque per Imaginationem moventur, donec insultus quidam fiat, quo Astra Imaginationis Influentiam & Impressionem praegnantis conferant, non secus ac si quis sigillum imprimat, aut monetam effigiet. Unde haec signa & notae geniales, inferiorum

⁹¹ The executioner's "children" is a metaphor for those subjected to punishment. The analogy transfers punitive marks to congenital differences; its inference is the historical text's, and is not valid evidence of moral character.

Astrorum Impressiones vocantur, de quibus multi multa philosophari, & ex illis homines solide diiudicare conati sunt, quod tamen fieri minime potest. Adhaerent tamen illa, & imprimuntur foetibus, prout Astra matris vel frequentia vel violentia in foetus incumbunt, aut matris desiderio non satis fit. Nam si mater hunc vel illum cibum desideret, & eo potiri nequeat: Astra autem velut in seipsis suffocentur, & occidant: desiderium id foetum per omnem vitam comitatur, ut illud nunquam satiare commode possit. Eadem etiam aliorum ratio est: de quibus tamen hic prolixius non disquiremus.

English Leaving these matters and returning to the monstrous signs of evil ascendants, you should know that not all monstrous signs arise from the ascendant alone. They often also arise from the stars of the human mind, which continually, at every moment, rise and fall with phantasy, estimation or imagination, just as in the upper firmament. Thus from the fear or terror of pregnant women are born many monsters, or children marked in the womb with monstrous signs. Their chief cause is fear, terror and desire, which arouse imagination. When a pregnant woman begins to imagine, her heaven revolves with its own motion just like the upper firmament, the ascendants rising or setting at every moment. After the pattern of the greater firmament, the stars of the microcosm too are moved by imagination, until an impact occurs through which the stars impart the influence and impression of imagination to the pregnant woman, as when someone impresses a seal or stamps a coin. Hence these signs and birthmarks are called impressions of the lower stars. Many have tried to philosophise at length about them and judge people reliably from them, which nevertheless cannot be done. Yet they adhere to and are impressed upon offspring according to the frequency or violence with which the mother's stars act upon the foetus, or because the mother's desire is not satisfied. For if a mother desires a certain food and cannot obtain it, and the stars are, as it were, suffocated within themselves and die down, that desire accompanies the child throughout life, so that the child can never adequately satisfy it. The same applies to other matters, which we shall not investigate at greater length here.⁹²

NTR-B09-P015 1605 p. 251 · GOT-235

Latin De Astralibus signis Physionomiae in homine.

English On Astral Signs of Physiognomy in the Human Being.

Original marginal note NTR-B09-M005 1605 p. 251 · GOT-235

Latin Physionomiae origo qua.

English The origin of physiognomy.

NTR-B09-P016 1605 p. 251 · GOT-235

Latin Signa Physionomiae ex Astris superioribus suum ortum consequuntur. Scientia haec Physionomiae a maioribus nostris & comprimis ab Ethnicis, Tartaris,

⁹² This is the historical theory of maternal imagination, not an established cause of congenital differences or lifelong cravings. It must not be used to blame pregnant people. The text itself rejects reliable moral judgement from these particular birthmarks, despite maintaining their imagined astral cause.

Turcis &c. aliisque populis, apud quos homines ad servitia vendi moris est, summo loco habita fuit, & nec apud Christianos penitus extincta est. Cum ipsa tamen multi quoque errores una irrepserunt, hactenus a nemine animadversi, dum quilibet bardus & rudis indiscrete de quolibet iudicandi licentiam sibi sumsit. Ubi admiratione dignum est, errores illos, ex operibus, factis, viribusque hominum nunquam animadversos esse.

English The signs of physiognomy derive their origin from the upper stars. This science of physiognomy was held in the highest esteem by our ancestors, especially by pagans, Tartars, Turks and other peoples among whom it is customary to sell people into slavery; nor has it entirely died out among Christians. Many errors, however, have crept in with it, unnoticed hitherto, since every fool and ignorant person has assumed the licence to judge everyone indiscriminately. It is remarkable that those errors have never been detected from people's works, deeds and powers.⁹³

Original marginal note NTR-B09-M006 1605 p. 251 · GOT-235

Latin *Astra cur alios cogant, alios minime.*

English Why the stars compel some people and not others.

NTR-B09-P017 1605 pp. 251–252 · GOT-235, GOT-236

Latin Quod si quis hoc loco contra nos argumentetur, dicens, Signa Physionomiae ab Astris esse, Astra autem neminem cogendi, compellendi & incitandi potestatem habere: is quidem male non loquitur: sed tamen discrimen aliquod in eo est comprimis notandum, quod alium Astra cogant, alium non cogant. Hic iam sciendum est, quisnam Astra regere ac coercere possit, aut quis ab Astris gubernetur. Itaque pro hoc notandum est, virum sapientem dominari Astris posse, nec vero illis subiectum esse. Astra sapienti subdita sunt, & ei obsecundare coguntur, non ipse Astris. Animalem autem hominem Astra cogunt, compellunt, coercent, ut quo ducunt, sequatur, non secus ac fur patibulum, latro rotam, piscator pisces, auceps aves, venator feras sectatur. Hic quid aliud in caussa est, quam quod homo eiusmodi nec seipsum, nec suas vires aut novit aut impendit, nec cogitat, se minorem mundum esse, ac Firmamentum universum cum suis viribus intra se conditum habere?

English If someone argues against us here that the signs of physiognomy come from the stars, but the stars have no power to force, compel or incite anyone, he does not speak badly. Yet one distinction must especially be observed: the stars compel one person and do not compel another. We must therefore know who can rule and restrain the stars and who is governed by them. Observe that a wise person can rule the stars and is not subject to them. The stars are subject to the wise and are compelled to obey them, rather than the wise obeying the stars. But the stars force, compel and constrain the animal person to follow where they lead, just as a thief follows the gallows, a robber the wheel, a fisherman fish, a fowler birds and a hunter beasts. What else causes this except that such a person neither knows nor employs himself or his

⁹³ The ethnographic generalisations and the supposed ability to infer character from bodily features belong to the historical argument. Physiognomic judgement does not provide a sound basis for assessing a person's morality or worth.

powers, nor considers that he is the lesser world and contains within himself the whole firmament with all its powers?⁹⁴

Original marginal note NTR-B09-M007 1605 p. 252 · GOT-236

Latin Homo dominus omnium creaturarum.

English The human being as lord of all creatures.

Original marginal note NTR-B09-M008 1605 p. 252 · GOT-236

Latin Homo Astris sese subducere & submittere potest.

English The human being can withdraw from and submit to the stars.

NTR-B09-P018 1605 p. 252 · GOT-236

Latin Qua de caussa animalis & insipidus homo vocatur, foedaeque servitutis ac terrenorum omnium mancipium, cum tamen a Deo in Paradiso privilegium acceperit, ut ceteris creaturis universis imperaret & dominaretur, nec eis obediret. Ideo omnium quoque novissime ipsum creavit, ceteris universis iam ante ipsum conditis. Hoc ius postea per lapsum homo perdidit. Ipsa tamen sapientia hominis servilis minime facta est, nec libertatem suam ille manumisit. Unde opus est, Astra ipsum sequi, eique obedire, non ipsum Astris. Et licet is quidem filius Saturni Saturnusque ipsius Ascendens sit: potest tamen seipsum illi subducere, & ita eum vincere, ut soboles Solis fiat, adeoque sese alii planetae subiiciat, ac se eius filium faciat. Et idem fere hic evenit, quod fossori, qui fodinarum domino aliquandiu suam operam elocavit, & cum vitae periculo provinciam suam recte administravit, tandem vero hoc discursu rationem secum init: Ecquid tandem futurum de te sit, si vitam omnem sub terram transigas, & continuis laboribus urgendis insuper etiam corpus ac vitam ipsam in discrimen voces? Dimissione a meo Domino impetrata, herum alium sectabor, ubi mihi vita suavis fluat, ubi cibi potusque copia affluat, ubi vestes niteant, ubi nihil operae, multum mercedis detur, ubi ab incumbente monte nihil oppressionis impendeat, &c. Hoc ille quidem medio seipsum dominum constituere potest, cum alias per omnem vitam servus & mercenarius mansurus fuisset, duris laboribus & victu tenui tabescens, &c.

English For this reason he is called an animal and foolish person, a slave to foul servitude and all earthly things, although in Paradise he received from God the privilege of ruling and commanding all other creatures rather than obeying them. God therefore created him last, after all the others. Through the Fall the human being subsequently lost this right. Yet human wisdom itself has not become servile, nor has the wise person surrendered his freedom. The stars must therefore follow and obey him, rather than he the stars. Even if he is a son of Saturn and Saturn is his ascendant, he can withdraw himself and overcome Saturn so as to become an offspring of the Sun, submitting himself to another planet and making himself its son. Something much the same happens to a miner who has hired out his labour for a time to the owner of mines and performed his task properly at the risk of his life, but at last reasons with himself: "What will become of you if you spend your whole life underground and, besides enduring constant labour, put your body and life at risk? Once I obtain my master's leave, I shall seek another employer, where life flows pleasantly, food and drink abound, clothes

⁹⁴. Animal person translates animalis homo, a theological and philosophical category contrasting unreflective subjection with wisdom. It is not a biological claim that some people are less human.

shine, there is no work and much pay, and no mountain threatens to crush me." By this means he can make himself his own master, whereas otherwise he would have remained a servant and wage labourer throughout life, wasting away in hard work and scant nourishment.

Original marginal note NTR-B09-M009 1605 p. 253 · GOT-237

Latin Sapere nemo damno proprio, sed alieno sapiens.

English The wise learn from another's loss, not their own.

NTR-B09-P019 1605 pp. 252–253 · GOT-236, GOT-237

Latin Porro sicut iam percepistis, hominem sapientem Astris imperare, & maligno planetae sese subducere, ac alii meliori subiicere, ex servitute ad libertatem penetrare, adeoque ex mali planetae carcere sese eruere posse: ita animalis quoque homo, qui filius Solis, Iovis, Veneris aut Mercurii est, benigno sese planetae subducere & Saturno Martive subiicere potest. Huic similis est ille, qui ex religiosorum collegio aufugiens, & vitae mollis impatiens miles fit, aut alias homo nauci, cui postea in dolore & aerumnis omnis vita ducenda est. Talis etiam est vir locuples, qui levitate impulsus, bona sua inique dilapidat & consumit, aleis, comessationibus, scortationibus, &c. quibus inhiat tamdiu, donec universis absorptis, tandem egeat, & cum infami egestate misere conflictatus merito risui & contentui omnibus fiat, ut etiam a pueris in plateis audiendum sit: Ecce, homo nauci & nihili, qui cum dominus esse posset, dominio fastidito, maluit esse servus, mendicus, servorum mancipium, cum ad dominium denuo ne aspirare quidem liceat. Et huc malignum Astrum seu ascendens ipsum adegit. Nisi fatuus & improbus fuisset, Astris tam certum in se dominium non reliquisset, sed illis omnino reluctatus fuisset. Et quamvis per seipsum quidem resistere Astris minime scivisset: potuisset tamen animum ad aliorum exempla intendere, sic apud se cogitans: Ecce, quam opulentus iste vir fuit: sed frivolis & pudendis negotiis, in meram se paupertatem coniecit. Item, iste vel iste splendide vixit, & citra labores corporis insignes cum tantum cibum, tum mercedem amplam adeptus, commoditatis eas ferre amplius non potuit. Iam parce & sordide vivendum, & vini loco potanda aqua est, interim laboribus indies cumulatis, mercede vero imminuta.

English As you have already understood, a wise person can rule the stars, withdraw from an evil planet and submit to a better one, pass from servitude to freedom and escape the prison of an evil planet. So too the animal person who is a child of the Sun, Jupiter, Venus or Mercury can withdraw from a kindly planet and submit to Saturn or Mars. He resembles someone who runs away from a religious community and, unable to bear a comfortable life, becomes a soldier or some other worthless fellow, obliged thereafter to spend his whole life in pain and hardship. The same applies to a rich man who, driven by frivolity, wickedly squanders and consumes his goods in gambling, feasting and whoring, which he pursues until everything is swallowed up. At last he is needy, miserably struggling with infamous poverty, and deservedly becomes everyone's laughingstock and object of contempt. Even children in the streets say: "Look at that worthless good-for-nothing! He could have been his own master, but, despising mastery, preferred to be a servant, beggar and slave of slaves, and cannot now even aspire to mastery again." An evil star or ascendant has driven him to this. Had he not been foolish and wicked, he would not have left the stars such

certain mastery over him but would have resisted them completely. Even if he did not himself know how to resist the stars, he could have attended to the example of others and thought: “See how wealthy that man was, yet through frivolous and shameful pursuits he cast himself into utter poverty. That other man lived splendidly, receiving abundant food and generous pay without great bodily labour, yet could no longer tolerate those comforts. Now he must live meanly and poorly and drink water instead of wine, while his work increases daily and his wages diminish.”

NTR-B09-P020 1605 pp. 253–254 · GOT-237, GOT-238

Latin Eiusmodi sortis homo quoties quaeso secum ita sermones confert: Ecquid feci? quo me praecipitem dedi, rem collectam partamque tam turpiter prodigendo? Quam quis restituet? Si, quod periit, recepero: longe alia vivendi ratio instituetur, adeoque meo damno sapere discam, & male facta consilio saniore recompensabo. Sed scire convenit, neminem damno proprio sapere. Stultum enim ac animale est, damno suo proprio sapere. Qui sapiens est, ab alieno exemplo sapit, non suomet. Qui enim suum prodegit semel, is prodiget etiam denuo. Qui semel periit, perit etiam denuo. Qui semel aleam iecit, iacit eandem & denuo. Qui semel furatus, patibulum effugit, furari conatur etiam secundo. Sic enim is apud se cogitat: Semel atque iterum successit molimen. Cur non & tertio quartove, &c. succedat? Si Deus semel, quod perierat, restituit, restituet etiam secundo, tertio, &c. Si in miseria prima desertus non fui: non ero utique etiam in secunda aut tertia, &c. Haec omnia facit homo animalis, Astrorum servus & mancipium, qui ab astris ceu arundo in undis quoquo versum agitur & impellitur. Haec etiam caussa est, cur in miseria vita ipsi exigenda, adeoque in infamia moriendum sit. Quis ergo foedam illam servitutem sustineat, & se ex tam squalido carcere non extricet? Nam sua propria sapientia accedente sui Astri ope quivis sese inde eripere & liberare potest. Rem sic expendite. Auceps sua prudentia fretus, & Astri sui ope Astrum aliud vincens, ut aves ipse sectetur, opus non habet, sed hae sequuntur ipsum, etiam natura ipsarum reluctante ad loca insueta convoluturae. Sic piscatori suae sapientiae, a Deo datae, vacanti, pisces ultro adnatant, etiam ut manibus capiantur. Venator, sapientiam suam impendens, astro suo feras adeo cogit, ut non ipsas sectari opus habeat, sed ipsae sectentur illum, etiam nullo Naturae dictu ac impulsu. Et sic etiam de ceteris creaturis viventibus, &c.

English How often, I ask, does a person in such a plight speak to himself like this: “What have I done? Into what ruin have I thrown myself by so shamefully wasting the property I gathered and acquired? Who will restore it? If I recover what was lost, I shall adopt a very different way of life. I shall learn wisdom through my own loss and make amends for wrongdoing with sounder judgement.” Yet you should know that nobody gains wisdom through his own loss. To learn through one’s own loss is foolish and animal. The wise learn from another’s example, not their own. Whoever has squandered his property once will squander it again; whoever has been ruined once will be ruined again; whoever has thrown the dice once throws them again; whoever has stolen once and escaped the gallows attempts theft a second time. He thinks: “My attempt succeeded once and twice; why should it not succeed a third and fourth time? If God once restored what was lost, he will restore it a second and third time. If I was not abandoned in my

first misery, neither shall I be abandoned in the second or third.” All this is done by the animal person, the servant and slave of the stars, driven and pushed about by them like a reed in the waves. This is also why he must spend his life in misery and die in disgrace. Who, then, would endure that foul servitude and not disentangle himself from so squalid a prison? Anyone can tear himself out and become free by his own wisdom, aided by his star. Consider it this way. A fowler relying on his own prudence and overcoming another star with the aid of his own need not pursue birds: they follow him, flying to unfamiliar places even against their nature. So fish swim of their own accord to the fisherman who attends to the wisdom God has given him, even allowing themselves to be caught by hand. A hunter employing his wisdom compels beasts by his star so that he need not pursue them; they pursue him, even without nature’s bidding or impulse. So too with other living creatures.

Original marginal note NTR-B09-M010 1605 p. 254 · GOT-238

Latin *Astra sunt duplicia.*

English The stars are of two kinds.

Original marginal note NTR-B09-M011 1605 p. 254 · GOT-238

Latin *Astrorum finis hominem servire non imperare.*

English The purpose of the stars is to serve the human being, not to command.

NTR-B09-P021 1605 p. 254 · GOT-238

Latin *Pro horum ergo captu sciendum est, Astra esse duplicia. Terrena nempe & coelestia: illa stultitiae, haec sapientiae. Et velut mundi duo sunt, maior & minor, minoremque maior regit: sic & astrum Microcosmi Astrum coeleste gubernat & vincit. Nec enim eo consilio Deus Planetas & cetera coeli Astra creavit, ut ipsa homini dominantur, sed ut eadem, ceu creaturae reliquae ipsi pareant ac serviant. Et licet Astra quidem superiora inclinationem dent, hominemque velut, & cetera terrena corpora signis naturalibus pro generationis modo signent: ea tamen potestas aut dominium nullum est, sed praedestinatum tantum mandatum ac officium, quo nihil occultum & absconditum maneat, sed per exteriora signa vis & potestas interior prodatur.*

English To understand these matters, know that the stars are twofold: earthly and heavenly, the former belonging to folly and the latter to wisdom. As there are two worlds, greater and lesser, and the greater rules the lesser, so the heavenly star governs and overcomes the star of the microcosm. God did not create the planets and the other stars of heaven so that they should rule the human being, but so that, like the other creatures, they should obey and serve him. Although the upper stars give inclination and mark the human being and other earthly bodies with natural signs according to their mode of generation, this is no power or dominion, but only a predestined commission and office, so that nothing may remain hidden or concealed and the inward force and power may be disclosed through outward signs.

Original marginal note NTR-B09-M012 1605 p. 254 · GOT-238

Latin Signata sunt duplicia.

English Signs are of two kinds.

Original marginal note NTR-B09-M013 1605 p. 254 · GOT-238

Latin Signata physionomica quae sint.

English What physiognomic signs are.

NTR-B09-P022 1605 p. 254 · GOT-238

Latin Ceterum, ut ad propositum nostrum de Physionomicis signis hominum revertamur, sciendum est, ea duplicia esse, externa quidem specie similia, sed tamen viribus & effectu dissimilia. Alia sunt ex supernis astris coeli: alia ex infernis astris Microcosmi. Quicquid astrum superius signat secundum generationem usque ad aetatem mediam: id signatum est praedestinatum, peculiaribus viribus minime carens. Testatur enim de Natura & conditione hominis. Quicquid autem inferius Astrum Microcosmi a Generatione signat, ortum suum habet a patre & matre, quoties scilicet mater Imaginatione sua, aut Appetitu, timoreve aut terrore per contactum, foetum suum in corpore signis supernaturalibus, quae notae maternae seu uterinae vocantur, affecit, de quibus cum antea nobis dictum sit, iam iterationis labori merito supersedemus, cum nostri instituti sit saltem de signatis physionomicis tradere, ubi praedestinata saltem signata astra superioris proponemus, sub quibus intelligimus signata hominum illa, quae neque pater, neque mater eadem similitudine in corpore suo gestarunt. Huius classis sunt, nigri, caesii, parvi, magnive oculi, longus, curvus & acutus nasus, foveae in malis, maxilla surrecta, simus aut latus nasus, graciles vel vastae aures, promissum collum, oblonga facies, patens ac deductum os, crassi, subtiles, multi seu densi, rari nigri, flavi, rubri capilli, &c. Horum signorum si unum plurave in homine apparent, ea suis indiciis minime carere sciendum est. Opus tamen est, ut secundum scientiam Physionomicam ea consideretis, & certam artis signatae peritiam habeatis, qua per externa signa internum hominem cognoscere possitis.

English Returning to our purpose concerning human physiognomic signs, know that they are twofold, similar in outward appearance but different in powers and effect. Some come from the upper stars of heaven, others from the lower stars of the microcosm. Whatever the upper star marks according to generation up to middle age is a predestined sign, possessing its own particular powers, for it testifies to the person's nature and condition. Whatever the lower star of the microcosm marks from generation has its origin in father and mother, whenever the mother by imagination, desire, fear or terror, through contact, has affected the body of her offspring with supernatural signs called maternal or uterine marks. We have discussed these already and can rightly avoid the labour of repetition. Our purpose is only to teach physiognomic signs, presenting the predestined signs of the upper star alone. By these we mean those human signs which neither father nor mother bore in the same form on their own body: black, grey-blue, small or large eyes; a long, curved or pointed nose; dimples in the cheeks; a raised jaw; a snub or broad nose; slender or large ears; a long neck; an elongated face; a wide, stretched mouth; thick, fine, abundant or dense, sparse, black, blond or red hair. If one or more of these signs appears in a person, know that they are not without their indications. You must, however, consider them according to the science of

physiognomy and possess sure skill in the art of signs, through which you can know the inward person from outward signs.⁹⁵

Original marginal note NTR-B09-M014 1605 p. 254 · GOT-238

Latin *Oculi Nigri quid notent.*

English What black eyes signify.

NTR-B09-P023 1605 pp. 254–255 · GOT-238, GOT-239

Latin *Et ut ad nostri instituti Practicam descendamus, & nonnulla horum signa, velut & significationem eorum ex parte recenseamus: sciendum est, Nigros oculos praeter constitutionem sanam, plerumque etiam indicare constantem animum, minime ambiguum, haud meticulosum, sed vegetum & cordatum, veracem, & virtutis amantem.*

English To descend to practice and recount some of these signs and part of their meaning, you should know that black eyes, besides a healthy constitution, generally indicate a steadfast mind, in no way wavering or timid, but vigorous, stout-hearted, truthful and fond of virtue.

Original marginal note NTR-B09-M015 1605 p. 255 · GOT-239

Latin *Caesii quid.*

English What grey-blue eyes signify.

Original marginal note NTR-B09-M016 1605 p. 255 · GOT-239

Latin *Lusci quid.*

English What squinting eyes signify.

NTR-B09-P024 1605 p. 255 · GOT-239

Latin *Caesii oculi indices sunt hominis dolosi, ambigui, constantis. Imbecilli oculi notant bona consilia, argutas & profundas deliberationes, &c. Lusci, qui sursum, deorsum, & ad utrumque latus versatiles sunt, notant hominem falsum, callidum, decipi nescientem, infidum, laborum fugientem, otii studiosum, victum quaerentem desidia, alea, foenore, scortatione, rapinis, &c.*

English Grey-blue eyes indicate a deceitful, wavering, steadfast person. Weak eyes signify good counsel and subtle, deep deliberations. Squinting eyes which turn upwards, downwards and to either side signify someone false, cunning, not easily deceived, untrustworthy, avoiding work and loving leisure, seeking a livelihood through idleness, gambling, usury, whoring and robbery.⁹⁶

Original marginal note NTR-B09-M017 1605 p. 255 · GOT-239

Latin *Parvi & profundi quid.*

English What small, deep-set eyes signify.

⁹⁵. The distinction between upper and lower astral signs is essential to this argument but does not validate its judgements of character. The following catalogue preserves the historical claims and their inconsistencies; bodily appearance is not reliable evidence of moral disposition.

⁹⁶. The witness prints *constantis*, “steadfast”, alongside *ambigui*, “wavering”. The contradiction is retained rather than silently changing the Latin to *inconstantis*.

NTR-B09-P025 1605 p. 255 · GOT-239

Latin Oculi parvi & profundiores, visum imbecillum & debilem, frequenter autem in senio futuram coecitatem indicant, velut & fortes homines, bellicosos, impavidos, dolosos & agiles, factiosos, patientes fortunae, quorum tamen vitae exitus plerunque tragicus est, &c. notant.

English Small and deep-set eyes indicate weak, feeble sight and often future blindness in old age. They also signify strong, warlike, fearless, deceitful, agile and factional people who endure fortune, but whose lives generally end tragically.

Original marginal note NTR-B09-M018 1605 p. 255 · GOT-239

Latin Magni quid.

English What large eyes signify.

Original marginal note NTR-B09-M019 1605 p. 255 · GOT-239

Latin Nictantes quid.

English What blinking eyes signify.

Original marginal note NTR-B09-M020 1605 p. 255 · GOT-239

Latin Mobiles quid.

English What moving eyes signify.

Original marginal note NTR-B09-M021 1605 p. 255 · GOT-239

Latin Deiecti quid.

English What downcast eyes signify.

Original marginal note NTR-B09-M022 1605 p. 255 · GOT-239

Latin Rubei.

English Red eyes.

Original marginal note NTR-B09-M023 1605 p. 255 · GOT-239

Latin Lucidi.

English Shining eyes.

NTR-B09-P026 1605 p. 255 · GOT-239

Latin Magni notant avarum, voracem, maxime si extra caput promineant. Oculi assidue nictantes, indicant visum debilem, & hominem timidum & sollicitum: oculi, qui velocius huc illuc moventur ad aspectum hominum, indicant cor amatorium, prudens, & expeditae inventionis. Oculi assidue deiecti indicant hominem verecundum & modestum. Oculi rubei hominem audacem, fortem, &c. Lucentes oculi, nec facile mobiles, indicant Heroem, magnanimum, fortem, alacrem, hostibus suis formidolosum, &c.

English Large eyes signify someone greedy and gluttonous, especially if they protrude from the head. Continually blinking eyes indicate weak sight and a timid, anxious person. Eyes which move quickly here and there at the sight of people indicate an amorous heart, prudence and ready invention. Continually downcast eyes indicate a bashful, modest person. Red eyes signify someone bold and brave. Shining eyes which do not move readily indicate a hero, magnanimous, brave, lively and formidable to his enemies.

Original marginal note NTR-B09-M024 1605 p. 255 · GOT-239

Latin Aures magnae quid.

English What large ears signify.

Original marginal note NTR-B09-M025 1605 p. 255 · GOT-239

Latin Depressae.

English Flattened ears.

NTR-B09-P027 1605 p. 255 · GOT-239

Latin Aures magnae indicant probum auditum, bonam memoriam, attentionem, diligentiam, sanum cerebrum & caput, &c. Aures depressae mali augurii sunt. Indicant enim plerunque hominem maliciosum, fraudulentum, iniquum, & malum auditum, malam memoriam, hominem impavidum, & facile sese periculis exponentem.

English Large ears indicate good hearing, good memory, attentiveness, diligence and a healthy brain and head. Flattened ears are a bad omen, generally indicating someone malicious, fraudulent and unjust, with poor hearing and memory, fearless and readily exposing himself to danger.

Original marginal note NTR-B09-M026 1605 p. 255 · GOT-239

Latin Nasus longus quid.

English What a long nose signifies.

Original marginal note NTR-B09-M027 1605 p. 255 · GOT-239

Latin Simus quid.

English What a snub nose signifies.

Original marginal note NTR-B09-M028 1605 p. 255 · GOT-239

Latin Acutus quid.

English What a pointed nose signifies.

Original marginal note NTR-B09-M029 1605 p. 255 · GOT-239

Latin Promissus quid.

English What an extended nose signifies.

NTR-B09-P028 1605 p. 255 · GOT-239

Latin Nasus longus, & deorsum incurvatus boni signi est. Notat hominem strenuum, prudentem, occultum, immitem, & tamen iustum, &c. Nasus simus indicat hominem malignum, falsum, libidinosum, mendacem, inconstantem, &c. Nasus acutus, hominem versipellem, illusorem, &c. Nasus promissus, hominem tardum in omnibus negotiis, &c. odoratu tamen insignem, &c.

English A long nose curved downwards is a good sign. It signifies someone energetic, prudent, secretive and stern, yet just. A snub nose indicates someone malicious, false, lustful, lying and inconstant. A pointed nose signifies a crafty deceiver and mocker. An extended nose signifies someone slow in every business, yet outstanding in sense of smell.

Original marginal note NTR-B09-M030 1605 p. 255 · GOT-239

Latin Buccae foveis excavatae quid.

English What dimpled cheeks signify.

Original marginal note NTR-B09-M031 1605 p. 255 · GOT-239

Latin Mentum oblongum quid.

English What an elongated chin signifies.

Original marginal note NTR-B09-M032 1605 p. 255 · GOT-239

Latin Mentum fissum quid.

English What a cleft chin signifies.

NTR-B09-P029 1605 p. 255 · GOT-239

Latin Buccae, foveis excavatae, loquacem, contemtorem, contentiosum, &c. Mentum oblongum cum facie longa, hominem iracundum, ad labores tardum, &c. Mentum fissum, hominem fidelem, officiosum, abditum & diversi sermonis, iam hoc loquentem, & aliud tamen intelligentem, iracundum, irae paenitentem, ingeniosum, & inventiosum.

English Dimpled cheeks signify someone talkative, contemptuous and quarrelsome. An elongated chin with a long face signifies someone irascible and slow to work. A cleft chin signifies a faithful, dutiful person of concealed and double speech, saying one thing while meaning another, irascible yet repentant of anger, clever and inventive.

Original marginal note NTR-B09-M033 1605 p. 256 · GOT-240

Latin Os magnum & parvum.

English A large and a small mouth.

Original marginal note NTR-B09-M034 1605 p. 256 · GOT-240

Latin Labra attracta quid.

English What drawn-in lips signify.

Original marginal note NTR-B09-M035 1605 p. 256 · GOT-240

Latin Labra inferne magna quid.

English What large lower lips signify.

NTR-B09-P030 1605 p. 256 · GOT-240

Latin Os magnum amplumque, hominem voracem, insipidum, fatuum, impudentem intrepidum, &c. Os parvum, contrarium indicat. Labra attracta, ubi superius inferiore maius est, hominem iracundum, bellicosum, animosum, plerumque tamen crassorum & impudicorum morum, instar porci, &c. Labra inferne magna, crassum, stultum, & bardum, &c.

English A large, wide mouth indicates someone gluttonous, foolish, stupid, shameless and fearless; a small mouth indicates the opposite. Drawn-in lips, where the upper is larger than the lower, indicate someone irascible, warlike and spirited, yet generally of coarse and immodest habits like a pig. Large lower lips indicate someone gross, foolish and dull.

Original marginal note NTR-B09-M036 1605 p. 256 · GOT-240

Latin Pili cur nihil arte designent.

English Why hair does not give a secure indication to the art.

NTR-B09-P031 1605 p. 256 · GOT-240

Latin De crinibus vel capitis vel barbae iudicia non admodum certa fiunt, quoniam usus docet, eos miro modo variari posse, ut vel nigri, vel flavi, vel rubri, vel candidi & cani, vel crispi erumpant. Sic redduntur etiam molles vel duri, prout quisque eos

desiderarit. Et hinc factum est, ut multi, Physionomicae scientiae alias satis gnari, fallerentur turpiter, dum de crinibus iudicium temere facerent, astris imputantes, quae ipsis potius hominibus ascribenda fuerant. Negari tamen minime potest, capillos firmiter in capite defixos, & capitis & totius corporis bonam valetudinem indicare. Haec etiam caussa est, cur equorum emtores caudam illorum vellant, ut hoc modo de sanitate eorum iudicare possint. Sic porci probantur ex setis, pisces ex pinnis & squamis, avis ex pennis, &c.

English Judgements from the hair of the head or beard are not very certain, since experience teaches that it can be altered remarkably, appearing black, blond, red, white, grey or curly. It can also be made soft or hard, as anyone desires. Thus many otherwise well versed in physiognomy have been shamefully deceived by rash judgements about hair, attributing to the stars what should rather have been attributed to people themselves. Yet it cannot be denied that hair firmly fixed in the head indicates good health of the head and whole body. This is why buyers of horses pull their tails, to judge their health. Pigs are likewise tested by their bristles, fish by their fins and scales, and a bird by its feathers.

Original marginal note NTR-B09-M037 1605 p. 256 · GOT-240

Latin Collum procerum quid.

English What a tall neck signifies.

Original marginal note NTR-B09-M038 1605 p. 256 · GOT-240

Latin Lati humeri quid.

English What broad shoulders signify.

Original marginal note NTR-B09-M039 1605 p. 256 · GOT-240

Latin Brachia lacertosa quid.

English What muscular arms signify.

Original marginal note NTR-B09-M040 1605 p. 256 · GOT-240

Latin Manus durae quid.

English What hard hands signify.

Original marginal note NTR-B09-M041 1605 p. 256 · GOT-240

Latin Corpus, &c.

English The body and so forth.

Original marginal note NTR-B09-M042 1605 p. 256 · GOT-240

Latin Venae magnae quid.

English What large veins signify.

NTR-B09-P032 1605 p. 256 · GOT-240

Latin Collum si aequo procerius sit, & naturae limites transcendat, notat hominem sollicitum, prudentem, attentum, &c. Lati humeri & dorsum, hominem robustum ad portandum & emovendum, &c. Brachia lacertosa, hominem validum & robustum in verberando, tundendo, iactando, &c. Manus durae, hominem laboriosum & mercenarium, &c. contra vero molles. Corpus breve, & longa crura, bonum cursorem, cibo potuque facile satiabilem plerumque tamen vitae brevioris hominem notant. Venae Magnae & conspicuae infra medium aetatis, hominem sanguineum & succi plenum, supra vero medium aetatis frequenter aegrotantem, vivacem tamen, &c.

English A neck taller than is fitting, exceeding nature's limits, signifies an anxious, prudent and attentive person. Broad shoulders and back signify strength for carrying and moving things. Muscular arms signify strength and power in striking, pounding and throwing. Hard hands signify a hardworking wage labourer; soft hands, the opposite. A short body and long legs signify a good runner, easily satisfied with food and drink, but generally short-lived. Large, conspicuous veins before middle age signify a sanguine person full of moisture; after middle age, one frequently ill yet long-lived.

Original marginal note NTR-B09-M043 1605 p. 256 · GOT-240

Latin Ex moribus nihil certi iudicari.

English Nothing certain can be judged from manners.

NTR-B09-P033 1605 pp. 256–257 · GOT-240, GOT-241

Latin Quantum vero ad mores & gestus spectat, ex illis homo cognosci tam facile non potest, nec iudicari. Experientia enim docet, hos quovis momento mutari posse, ut Signatori fucum faciant, & ad erroneum iudicium ipsum deducant. Id quod ab Astronomis univrsis quidem hactenus tam accurate observatum non est. Signatoris ergo est, non semper ad mores & facta respicere, sed ad alia potius corporis signa, quae fixa sunt, & nulla arte fucari aut mutari queunt. Nam si rubri crines, commotio frontis & palpebrarum, hilaris, erectus & immobilis vultus, frequens agitatio oris, validus & praemeditatus ingressus, & animus levis, necessario indicarent virum & militem generosum, strenuumque: talem utique sua industria quivis se praestare facile posset, ut in lustratione eo melius staret, & stipendium amplius impetraret. Idem similiter etiam de ceteris moribus, qui sapientiam, stultitiam, veritatem, mendacium, fortunam, victoriam, &c. prae se ferunt, aequae iudicandum est.

English As for manners and gestures, a person cannot be so readily known or judged from them. Experience teaches that they can change at any moment, deceiving the interpreter of signs and leading him to an erroneous judgement. This has not hitherto been observed very carefully by all astronomers. The interpreter should therefore not always look at manners and deeds, but rather at other bodily signs which are fixed and cannot be disguised or changed by art. For if red hair, movement of the forehead and eyelids, a cheerful, upright and unmoving face, frequent movement of the mouth, a strong and deliberate gait and a light spirit necessarily indicated a noble, energetic man and soldier, anyone could easily make himself such by effort, to appear better at a muster and obtain higher pay. The same must be judged of other manners which display wisdom, folly, truth, falsehood, fortune or victory.⁹⁷

NTR-B09-P034 1605 p. 257 · GOT-241

Latin De Astralibus Signis Chiromantiae.

English On the Astral Signs of Chiromancy.

⁹⁷. In this paragraph Signator is used for a reader or judge of signs, although it names a maker of signs in the book's opening. The translation makes that local usage clear. The text's preference for bodily signs over deeds is preserved as an historical position, not adopted by the edition.

Original marginal note NTR-B09-M044 1605 p. 257 · GOT-241

Latin Chiromantia quid.

English What chiromancy is.

Original marginal note NTR-B09-M045 1605 p. 257 · GOT-241

Latin Digni an Planetis assignati?

English Are the fingers assigned to planets?

Original marginal note NTR-B09-M046 1605 p. 257 · GOT-241

Latin Digni qui quibus planetis assignati.

English Which fingers are assigned to which planets.

NTR-B09-P035 1605 pp. 257–258 · GOT-241, GOT-242

Latin De Chiromantiae signis tenendum est, ea ex superioribus Astris septem Planetarum oriri, & ex septem Planetis ea omnia cognosci debere ac iudicare. Est autem Chiromantia scientia, quae non saltem manus hominum inspicit, & ex illarum lineis, locustis & rugis iudicium facit: sed insuper etiam omnes herbas, ligna, silices, terras, & flumina, denique quicquid lineas, venas, rugas, &c. habet, considerat. Sed nec haec scientia suis erroribus, quos Astronomi illi oggesserunt, caret. Dignos enim utriusque manus Planetis & praecipuis Astris assignarunt, cum tamen digitorum in una manu tantum quinque, in utrisque decem sint, Planetae tamen septem saltem numerentur. Quomodo ergo haec inter se convenire possint? Quod si digitorum in una manu septem essent: tunc cuilibet Planetae digitum unum assignari, concedi posset. Sed tamen frequenter etiam hoc accidit, ut quidam in utraque manu septem tantum digitos habeant, ceteris casu quodam detruncatis. Ubi cum trunci adhuc supersint, nec illi tales nati sint: res utique illa huc referri nequit. Et siquidem fieret, ut homo cum septenis digitis nasceretur, sive in una sive utraque id manu esset: id tamen monstrum foret, praeter naturae ordinem productum, Astris minime subiectum. Ideoque nec hic ulla comparatio institui potest. Quod si vero quinque omnino digitos in qualibet manu, & Planetas septem esse, ac haec mutuo inter comparari oporteat. Conveniret utique, ut Planetae sortes in urnam mitterent, ad cognoscendum hoc, quinam duo Planetae decedere debeant. Quod tamen cum fieri non possit, Planetaeque nec tesseras, nec sortes in firmamento habeant: iure admiratio subit, equis hanc sibi potestatem sumserit, ut Planetarum nomine sortiens, Veneri Pollicem, Iovi indicem, Saturno Verpum, Soli Annularem seu Medicum, Mercurio Auricularem assignarit & contulerit, Martem interim & Lunam quasi ex tribu & libertate sua eliminans. Quae si ita se habent: equis iam admiretur, ex indignatione iusta Martem filios suos instigare, ut illi Sortiarium istum occidant, aut alias perpetuas simultates contra ipsum alant? Quis admiretur, cur Luna illi lusori aut cerebrum infirmet, aut rationem omnem elidat? Et hic primus iste error est, quem in Chiromantia committi diximus.

English Concerning the signs of chiromancy, one must hold that they arise from the upper stars of the seven planets, and all must be known and judged through the seven planets. Chiromancy is a science which not only inspects human hands and judges from their lines, joints and wrinkles, but also considers all herbs, woods, flints, earths and rivers: anything having lines, veins or wrinkles. Yet this science too has its errors, introduced by those astronomers. They assigned the fingers of both hands to the planets and chief stars, although there are only five fingers on one hand and ten on both, while only seven planets are counted. How can these agree? If there were seven fingers on one hand, one might allow a finger to each planet. People sometimes have only seven fingers on both hands because others have been cut off

accidentally, but since the stumps remain and they were not born that way, this cannot be brought into the comparison. Even if someone were born with seven fingers on one or both hands, that would be a monster produced outside nature's order and not subject to the stars, so no comparison could be made there either. If each hand has only five fingers and there are seven planets, and these must be compared, the planets ought to put lots into an urn to determine which two should withdraw. Since that cannot happen, and the planets have neither dice nor lots in the firmament, one rightly wonders who assumed the power to draw lots in their name and assign the thumb to Venus, the index to Jupiter, the middle finger to Saturn, the ring or medical finger to the Sun and the little finger to Mercury, meanwhile excluding Mars and the Moon as though from their tribe and liberty. If that is so, who would wonder that Mars in righteous indignation incites his sons to kill that lot-drawer or maintain perpetual hostility against him? Who would wonder if the Moon weakens that player's brain or destroys all his reason? This is the first error we said was committed in chiromancy.⁹⁸

NTR-B09-P036 1605 p. 258 · GOT-242

Latin Error secundus in hoc est. Frequenter accidit, ut originales naturalesque lineae manuum per noxas aut casus fortuitos mutantur, aut maiores minoresve fiant, aut aliis locis appareant. Sicut enim, si via quaedam trita a re quadam obstruitur, aut ab illapso monte obtegatur, aut ab aquarum exundatione corrumpitur, homines viam ei propinquam aliam moliuntur: ita & lineis veteribus manuum accidit, ut interdum post sanationem vulnerum aut ulcerum una cum nova carne, novae etiam lineae enascantur, veteresque penitus deleantur. Eodem modo & propter duos labores lineae obliterantur aut, quae primariae sunt, grandescunt. Ubi idem evenit, quod de arboribus notum est. Si enim adolescens arbor undique frondes multas emittit: tunc praecisis multis, arbor ipsa grandior evadit.

English The second error is this. The original natural lines of the hands are often altered by injuries or accidents, becoming larger or smaller or appearing in other places. Just as, when a well-used road is blocked by something, covered by a fallen mountainside or damaged by flooding, people make another road nearby, so with the old lines of the hands: sometimes after wounds or ulcers heal, new lines arise with the new flesh and the old ones are entirely erased. Hard labour likewise obliterates lines or enlarges the principal ones. The same happens as is known of trees: if a young tree sends out many branches all around, cutting many off makes the tree itself larger.

Original marginal note NTR-B09-M047 1605 p. 258 · GOT-242

Latin Chiromantia herbarum, lignorum &c. a veteribus non tradita. Eius quis usus.

English Chiromancy of herbs, woods and so forth was not taught by the ancients; its use.

⁹⁸ The passage challenges an inherited five-finger allocation within its own astral framework. Verpus names the middle finger. The threatened planetary retaliation is part of the polemic, not the editor's account of causation.

NTR-B09-P037 1605 p. 258 · GOT-242

Latin Sed ut tandem ad practicam huius scientiae Chiromantiae digrediamur, & sententiam nostram brevibus aperiamus: scire vos velim, me quidem, quantum ad manus attinet, nihil quicquam ibi mutare, sed veterum observationibus & descriptionibus acquiescere. Institutum tamen in hac Chiromantiae practica de illis saltem scribere, de quibus veteres nihil commentati sunt, veluti de Chiromantia Herbarum, Lignorum, Lapidum, & similium. Et notari debet primum, herbas omnes, quae unius generis sunt, unius & eiusdem quoque Chiromantiae esse. Si autem lineae illarum dissimiles sunt, & in aliis maiores minoresve apparent: id a senio ipsarum est. Expresse itaque profiteamur, herbarum Chiromantiam ad nihil aliud conferre, quam ut cuiuslibet herbae aut radice aetas sciatur & cognoscatur.

English To turn at last to the practice of this science of chiromancy and explain our view briefly, I wish you to know that, so far as hands are concerned, I change nothing there but rest content with the ancients' observations and descriptions. In this practice of chiromancy, however, I intend to write only of matters on which the ancients offered no account, such as the chiromancy of herbs, woods, stones and the like. Observe first that all herbs of one kind have one and the same chiromancy. If their lines differ and appear larger or smaller in some, that is due to their age. We therefore expressly declare that the chiromancy of herbs serves only to know and recognise the age of each herb or root.

Original marginal note NTR-B09-M048 1605 p. 258 · GOT-242

Latin Spiritus herbarum quae conditio.

English The condition of the spirit of herbs.

NTR-B09-P038 1605 pp. 258–259 · GOT-242, GOT-243

Latin Posset hic arguendo quispiam ita instare, & asserere, nullam herbam quamdiu radici suae adhaeret, adultiorem fieri 4. aut ad summum quinque mensibus, dum a Maio usque ad autumnum supputatio incoatur, quo tempore quaelibet herba interit, & a radice sua deficit. Ad hoc ego respondeo Deo, unicam virtutem in radice exsistere, quae primum Ens & spiritus herbae sit, ex quo herba enascitur & sustentatur usque ad praedestinatum suum tempus, adeoque usque ad seminis productionem exaltatur. Et hoc signo seu indicio est, virtutem illam retro in radicem illam commeare, & herbam ita exarescere. Quamdiu autem spiritus iste, qui herbae summa vis est, in radice remanet, quotannis herba ea renovatur: nisi fiat, ut spiritus iste una cum ipsa herba auferatur & exolescat. Tunc enim herbae illius renovatio nulla est. Radix enim emortua est, nec in se vitam amplius habet. Quo vero modo spiritus ille cum herba a radice, aut cum radice a terra auferatur, ut virtus eius retro, aut in radicem, aut a radice in terram abeat, hoc loco pendendum non est. Id enim sublime Naturae Mysterium est, nec propter Sophisticos Medicos palam proferendum, ut quibus talia arcana non saltem ludo, sed etiam summo contemptui sunt. Hic ergo quod omittimus, in Herbario trademus, &c.

English Someone might object that no herb, while attached to its root, becomes older than four or at most five months, reckoning from May to autumn, when every herb dies and falls away from its root. To this I reply that a single power from God exists in the root, the first being and spirit of the herb, from which the herb springs and is sustained until its predestined time, being raised as far as the production of seed. This is a

sign or indication that the power returns into the root, so that the herb dries up. As long as this spirit, which is the herb's highest force, remains in the root, the herb is renewed every year, unless the spirit is removed and dies away together with the herb itself. Then the herb is not renewed, because the root is dead and no longer has life in itself. How this spirit is removed with the herb from the root, or with the root from the earth, so that its power returns into the root or from the root into the earth, need not be considered here. It is a sublime mystery of nature, not to be made public for sophistical physicians, who regard such arcana not merely as a joke but with the utmost contempt. What we omit here we shall teach in the *Herbarius*.⁹⁹

NTR-B09-P039 1605 p. 259 · GOT-243

Latin Porro, quo herbae iuniores, & minus annosae, eo plus viribus ac facultatibus praestant. Sicut enim per senium homo enervatur, & secundum vires naturales deficit: ita & herbae. Ut vero sciatur, quae herbarum & rerum similium Chiromantia ac aetas sit: Experientia diuturna requiritur, cum annorum numerus illis inscriptus non sit, sed ex sola Chiromantia, ut dictum est, divinetur. Chiromantia autem non numeros, non literas, non characteres, sed lineas tantum, venasque ac rugas &c. pro ratione cuiuslibet aetatis suppeditat. Quo enim quodlibet grandaevius: eo maiores & spectabiliores lineae exhibentur, & virtus ac operatio rei ignavior est. Sicut enim facilius curatur morbus, unius mensis vel anni, quam qui duorum, trium, quatuor, quinque &c. mensium vel annorum est: ita & herba, unius anni morbum suum citius curat, quam quae duae duorum, trium &c. annorum est. Et hac de caussa malis vetustis, herbae iuenculae & minus annosae: recentibus autem, veteres herbae & medicinae debentur. Vetus namque si veteri iungitur, coecus coecum ducit, & uterque in foveam cadit. Haec caussa est, cur multa medicamenta nihil operentur. Sed intra corpus subsistant, & membra occupent, velut lutum adhaeret calceis, unde morbi postea duplicantur, &c.

English The younger and less aged herbs are, the more they excel in powers and faculties. As a human being is weakened by old age and declines in natural strength, so are herbs. To know the chiromancy and age of herbs and similar things requires long experience. The number of their years is not written on them, but must be divined from chiromancy alone, as was said. Chiromancy supplies no numbers, letters or characters, only lines, veins and wrinkles according to each thing's age. The older a thing is, the larger and more conspicuous its lines become, and the weaker its power and operation. Just as a disease of one month or year is cured more easily than one of two, three, four or five months or years, so a herb one year old cures its disease sooner than one two or three years old. For this reason young and less aged herbs are due to old ailments, while old herbs and medicines are due to recent ailments. If old is joined to old, the blind leads the blind and both fall into the ditch. This is why many medicines do nothing but remain

⁹⁹. The witness prints the grammatically awkward *respondeo Deo*. The translation provisionally understands an implied *a Deo*, "from God," with the root's power; it does not treat *Deo* as an unmarked oath. French's 1650 comparison witness also reads "from God", but the Latin is retained without a silent insertion. The promised *Herbarius* is an internal title-reference; this passage alone does not establish which surviving herbal it denotes.

within the body and occupy its parts as mud clings to shoes, so that diseases afterwards are doubled.¹⁰⁰

Original marginal note NTR-B09-M049 1605 p. 259 · GOT-243

Latin Morbis antiquis recentes herbae &c. & contra adhibeantur.

English Fresh herbs are to be applied to old diseases, and conversely.

NTR-B09-P040 1605 p. 259 · GOT-243

Latin Quod quidem ab imperitis Sophistis hactenus minime expensum est, dum per ignorantiam suam multo plures perdiderunt, quam sanarunt. Comprimis autem vos Medicos decet scire, quod perpetuo medicinam morbo iuniorem esse oporteat, ut scilicet felicius vincat, & in expugnando malo robustior sit. Si enim medicina morbo potentior & valentior est, morbus expugnabitur, & ut ignis ab aqua exstinguetur. Si potentior morbus est medicina, medicinam ille in venenum mutat, unde morbi postmodum geminantur & ingravescent. Itaque si morbus ferreus est, oportet medicinam esse Chalybeam. Chalybs enim ferro vinci minime potest. Potentius semper vincit, & ignavius domatur, &c. Etsi ergo instituti quidem nostri ab initio non fuerit, hoc loco de medicina scribere: propter veros tamen ac genuinos Medicos haec silentio praeterire non potui.

English Inexperienced sophists have not hitherto considered this, and through ignorance have destroyed far more people than they have cured. You physicians especially ought to know that a medicine must always be younger than the disease, so that it may conquer more successfully and be stronger in overcoming the ailment. If the medicine is more powerful and vigorous than the disease, the disease will be overcome and extinguished like fire by water. If the disease is more powerful than the medicine, it changes the medicine into poison, so that diseases are afterwards doubled and grow worse. If the disease is iron, therefore, the medicine must be steel, for steel cannot be overcome by iron. The stronger always conquers and the weaker is subdued. Although it was not originally our purpose to write about medicine here, I could not pass over these things in silence for the sake of true and genuine physicians.

NTR-B09-P041 1605 p. 260 · GOT-244

Latin De Signis Mineralibus.

English On Mineral Signs.

Original marginal note NTR-B09-M050 1605 p. 260 · GOT-244

Latin Mineralia quibus observentur.

English By what means minerals are observed.

NTR-B09-P042 1605 p. 260 · GOT-244

Latin Minerae quoque ac metalla extra quidem ignem & effossam materiam vera sua indicia & signa promunt, quae simul & ab Archeo, & ab Astris superioribus acceperunt, quolibet suum genus discretis coloribus & terrae differentiis referente.

¹⁰⁰. These age-based medical claims are preserved as historical theory, not treatment advice. The sentence about one- and two-year herbs is grammatically disturbed in the witness; its numerical contrast is retained. The blind-leading-blind image recalls Matthew 15:14 and Luke 6:39.

Aliud enim est minerale auri, ab argenti minerali. Sic diversum est minerale argenti, a minerali cupri. Diversum est minerale cupri a minerali ferri. Sic etiam ferri a stanni & plumbi. Et sic deinceps. Inficiari nemo potest, quin per Chiromantiam fodinarum mineralia & metallica corpora omnia, quae in terrae abditis latent, ex signis exterioribus cognoscantur. Ea Chiromantia est fodinarum, venarum, & ductuum, &c. ex quibus non ea solum, quae interius condita sunt produntur, sed etiam certa profunditas, & fodinae opulencia, ac metalli copia manifestantur. Et in hac Chiromantia tria scitu necessaria sunt: nempe Aetas, Profunditas, & Latitudo Venarum, sicut paulo ante etiam de herbis dictum est. Quo enim antiquiores Venae, eo fodinae metallis opulentiores & auctiores. De hac philosophandum ita est quod metalla omnia, quae in sua adhuc matrice latent continenter & iugiter crescant. Unde & hoc liquet, rem quamlibet crescentem, etiam extra matricem suam positam, minorem fieri non posse, sed subinde augescere, hoc est, multiplicari, & secundum suam substantiam, mensuram, & pondus usque ad tempus praedestinatum increcere.

English Ores and metals too, outside fire and the excavated matter, disclose their true indications and signs, which they have received both from the Archaeus and from the upper stars. Each displays its kind through distinct colours and differences of earth. Gold ore differs from silver ore; silver ore from copper ore; copper ore from iron ore; and iron ore from tin and lead ore, and so on. Nobody can deny that through the chiromancy of mines all mineral and metallic bodies hidden within the earth are recognised by outward signs. This is the chiromancy of mines, veins and courses, which disclose not only what lies concealed inside but also the precise depth, richness of the mine and quantity of metal. In this chiromancy three things must be known: the age, depth and breadth of the veins, as was said of herbs a little earlier. The older the veins, the richer and more abundant the mines in metals. One must philosophise about this in the following way: all metals still hidden in their own matrix grow constantly and continually. Hence it is clear that any growing thing, even placed outside its matrix, cannot become smaller but continues to increase, that is, multiply and grow in substance, measure and weight until its predestined time.

Original marginal note NTR-B09-M051 1605 p. 260 · GOT-244

Latin Rerum omnium genera summa tria sunt.

English There are three chief kinds of all things.

Original marginal note NTR-B09-M052 1605 p. 260 · GOT-244

Latin Elementorum quis terminus. Infra terram degentia sunt incorruptibilia.

English The limit of the elements; things dwelling below ground are incorruptible.

NTR-B09-P043 1605 p. 260 · GOT-244

Latin Praedestinatum hoc tempus est tertia pars destinatae aetatis omnium mineralium, vegetabilium & animalium, quae omnium rerum terrenarum tria summa genera sunt. Quod autem in sua matrice adhuc versatur, tamdiu crescit, donec matrix in seipsa emoriatur. Nam & matri praedestinatum suum vivendi & moriendi tempus est, si modo illa externis Elementis subiecta est. Illis quod subiectum non est, nullum tempus, nullum terminum habet alium, quam Elementa ipsa habent, cum quibus id etiam in die novissimo (qui illorum terminus est) interibit. Hinc sequitur, omnia, quae infra terram sunt, externis Elementis minime

subiici. Nec enim calorem, nec frigus, nec humiditatem, nec siccitatem, nec ventum, nec aerem, a quibus destrui possint, sentiunt. Eiusmodi itaque corpora non possunt putrescere, situmve & putorem contrahere, aut emori quamdiu infra terram in suo Chao consistunt. Sed & haec iam de metallis & lapidibus dicta sunt: ita sciendum est, hoc modo multos etiam homines in montium Cavernis centenis aliquot annis sese sustentasse, veluti fuerunt Gigantes & pygmei, de quibus singularem libellum conscripsimus.

English This predestined time is one third of the appointed lifespan of all minerals, plants and animals, the three chief kinds of earthly things. Whatever remains in its own matrix grows until the matrix itself dies. For the matrix too has its predestined time of living and dying, provided it is subject to the external elements. What is not subject to them has no time or limit other than the elements themselves; it will perish with them on the last day, their own limit. It follows that everything below the earth is not subject to the external elements, for it experiences neither heat, cold, moisture, dryness, wind nor air by which it might be destroyed. Such bodies therefore cannot rot, acquire mould and stench, or die while they remain below the earth in their own chaos. What has been said of metals and stones must also be understood in this way: many human beings have sustained themselves in mountain caverns for several hundred years, such as giants and pygmies, about whom we have written a separate little book.¹⁰¹

NTR-B09-P044 1605 pp. 260–261 · GOT-244, GOT-245

Latin Ut vero institutum nostrum pertextentes, ad practicam Chiromantiae fodinarum brevissime docendam digrediamur: sciendum est, venas, quo profundiores & latiores, eo vetustiores esse. Ubi vero venarum tractus longissime exporriguntur, & tandem fatiscunt, nec absconduntur, signum id malum est. Sicut enim venarum ductus fatiscunt: ita illarum etiam fodinae fatiscunt, quas profunditate illae indicant. Etsi interdum fodinae bonae inveniantur, quo tamen profundius descenditur, eo subinde magis magisque illae vanescunt, ut labor non nisi cum dispendio urgeri possit. Ubi autem venae illae nobis subinde aliis accessoris augentur, aut alias saepius absconduntur: id tum signum faustum est, indicans, fodinas bonas non in propinquo tantum esse, sed easdem etiam in profunditate augeri & multiplicari, & tandem plerunque fodinae opulentiores redditae metallum purum, adeoque thesaurum amplissimum promant.

English Continuing our purpose and turning to teach briefly the practice of the chiromancy of mines, know that the deeper and broader veins are, the older they are. Where the courses of veins extend a great distance and finally fail without disappearing below ground, that is a bad sign. As their courses fail, so do the mines which they indicate at depth. Although good mines are sometimes found, the deeper one descends the more they dwindle, so that work can continue only at a loss. Where, however, the veins are repeatedly enlarged by other tributaries or frequently cut across by others, that is a favourable sign. It indicates good mines not only nearby but increasing and multiplying at

¹⁰¹. The claim of underground incorruptibility and centuries-long survival is part of the text's cosmology. Giants and pygmies invoke a Paracelsian world of exceptional beings; they are not evidence for ordinary human longevity underground.

depth, until the mines generally become richer and yield pure metal, and thus a very great treasure.

NTR-B09-P045 1605 p. 261 · GOT-245

Latin Extra rem quidem non est, quod multi metallarii laudent illas venas quae in profundum diriguntur, & ab oriente in occidentem vergunt. Tum & ipsa fodinarum ratio experientiaque docet, venas persaepe, quae a Solis occasu versus ortum, aut a meridie versus septentrionem, aut e contra a septentrione in meridiem tendunt, non minus ceteris metallis abundare. Nulla ergo vena alii praeponenda est: nec etiam de hac re longius disquiri convenit, &c.

English It is not irrelevant that many miners praise veins which run downwards and incline from east to west. Yet the condition of mines and experience itself also teach that veins running from sunset towards sunrise, south towards north, or conversely north towards south often abound in metals no less than others. No vein is therefore to be preferred to another on this ground, nor need the matter be investigated further.

Original marginal note NTR-B09-M053 1605 p. 261 · GOT-245

Latin Metalla terrae quibus indicia explorentur.

English By what indications the earth's metals are investigated.

NTR-B09-P046 1605 p. 261 · GOT-245

Latin Quantum ad cetera interioris terrae signa aut mineralium colores attinet, de illis breviter ita constituimus. Quoties fossores in terram argillosam incidunt, qui puri & recentis metalli venam prodit, signum id admodum probum est, certo indicans, metallum id, cuius vena ea est, iam procul inde non abesse. Similiter si terra effossa metallo caret quidem, sed pinguis est, colorisque albi, nigrive, aut lutei, aut rubri, aut viridis aut cyanei &c. tunc id quoque bonum signum est probi ibi latentis metalli. In operis ergo inceptis sedulo pergendum est, nec a fossione desistendum. Metallarii enim comprimis ad nobiles, nitidos & primarios colores respiciunt, ut sunt terra viridis seu Chrysocolla, viride aeris, Lazurium, Cinnabaris, Sandaraca, Auripigmentum, Lithargyron auri & argenti &c. Horum fere quodlibet peculiare plerunque metallum ac minerale indicat. Sic viride aeris, Chrysocolla, terra viridis, plerunque cuprum & cupreum metallum indicat. Sic lazurium, sive Arsenicum album aut Lithargiron argenti, metallum cupri notat. Sic Cinnabaris & Sandaracha, interdum aurum, interdum argentum, aut utraque permixta, produnt. Sic Auripigmentum, Sulphur rubrum seu Lithargyron auri, aurum plerunque portendit. Sic ubi Chrysocolla cum Lazurio, aut Lazurium cum Chrysocolla & Auripigmento commixta & confusa reperiuntur, plerunque minerale praestans & opulentum indicant. Ubi lapides aut terrae reperiuntur, colore ferrugineo, minerale ferreum certo designant.

English As for other signs within the earth or the colours of minerals, we state briefly the following. Whenever miners encounter clayey earth which discloses a vein of pure, fresh metal, this is a very good sign, indicating certainly that the metal to which the vein belongs is not far away. Likewise, if excavated earth contains no metal but is rich and white, black, yellow, red, green or blue, this too is a good sign of sound metal hidden there. The work begun should therefore be pursued diligently and digging continued. Miners look especially to noble,

bright and primary colours, such as green earth or chrysocola, verdigris, lazurium, cinnabar, sandarac, orpiment and litharge of gold and silver. Almost each generally indicates a particular metal and mineral. Thus verdigris, chrysocola and green earth generally indicate copper or copper ore. Lazurium, white arsenic or litharge of silver signifies copper metal. Cinnabar and sandarac disclose sometimes gold, sometimes silver, or both mixed. Orpiment, red sulphur or litharge of gold generally portends gold. Where chrysocola is found mixed with lazurium, or lazurium with chrysocola and orpiment, they generally indicate an excellent and rich mineral. Stones or earth of a rust colour certainly designate iron ore.¹⁰²

NTR-B09-P047 1605 p. 262 · GOT-246

Latin Notandum autem est, fieri etiam interdum, ut Archeus terrae per occultum cuniculum ex terra inferiore metallum quoddam protrudat acervatim. Id signum apparens bonum est. Fossoribus ergo desistendum non est, cum certa ibi insignis metalli latentis spes sit. Quod si insuper etiam tenuia folia ex metallis, Talco similia, lapidibus aut saxis adhaerescant, signum id fidele & probum est.

English Observe also that the Archaeus of the earth sometimes thrusts a metal in heaps from the lower earth through a hidden passage. This visible sign is good. Miners should therefore not desist, since there is sure hope of notable metal hidden there. If thin metallic leaves resembling talc also adhere to stones or rocks, that is a trustworthy and good sign.

Original marginal note NTR-B09-M054 1605 p. 262 · GOT-246

Latin Coruscationes in fodinis quid indicent.

English What flashes in mines indicate.

Original marginal note NTR-B09-M055 1605 p. 262 · GOT-246

Latin Coruscationes sunt triplices.

English There are three kinds of flashes.

NTR-B09-P048 1605 p. 262 · GOT-246

Latin Quantum vero ad coruscationes: sedulo illae ac studiose observandae sunt. Indices enim sunt certissimae latentis alicuius ductus metallici, velut & eiusdem porrectionis, & metalli ipsius generis. Ubi tamen hoc quoque notandum est, eiusmodi metalla ad perfectam maturitatem nondum pervenisse, sed in primo Ente adhuc versari. Et quocunque coruscatio tendit, eodem tendit etiam ductus metalli, &c. Praeterea sciendum et est, coruscationem coloris triplicis esse, veluti candidi, flavi & rubri, instar Lunae scilicet candidae. Unde metalla omnia, quae nobis indicant, cognoscuntur. Coruscatio enim candida, metalla candida indicat, ut sunt stannum, plumbum, argentum &c. Coruscatio rubea, rubra metalla notat, ut cuprum & ferrum, &c. Flava coruscatio, metalla aurea, &c. revelat. Adde, quod coruscatio tenuis & subtilis, optimum signum sit. Nam, veluti etiam in arbore videtis fieri, ut quo flores pauciores sunt, eo maiores, meliores & sapidiore fructus enascantur: ita & parvae subtilesque coruscationes subtilia & praestantia metalla

¹⁰². The mineral-colour associations are those of the 1605 witness. Its text says copper in the lazurium, white-arsenic and silver-litharge sentence; this is not silently replaced by silver. Historical names such as sandarac and litharge of gold/silver are contextual material labels, not promises of elemental content.

indicant, ut contrariae contraria. Ad haec sciendum est, quod quamdiu effulgentiae illae apparent sive magnae, sive parvae, huius aut illius coloris sint, metalla id in sua minera perfectum nondum sit & maturum, sed in primo adhuc Ente consistat, non aliter ac sperma viri in matrice mulieris.

English Flashes must be observed diligently and attentively, for they are most certain indicators of a hidden metallic course, its direction and the kind of metal itself. Yet observe also that such metals have not reached perfect maturity but remain in their first being. Wherever the flash tends, the course of the metal tends too. Know also that flashes have three colours: white, yellow and red, the white being like the white Moon. From these all the metals they indicate are recognised. A white flash indicates white metals such as tin, lead and silver; a red flash indicates red metals such as copper and iron; a yellow flash reveals golden metals. A thin and subtle flash is an excellent sign. As you see in a tree that fewer flowers yield larger, better and tastier fruit, so small, subtle flashes indicate subtle and excellent metals, and their opposites indicate the opposite. Know further that as long as these gleams appear, whether large or small and of whatever colour, the metal in its ore is not yet perfect and mature, but remains in its first being, like a man's sperm in a woman's womb.

Original marginal note NTR-B09-M056 1605 p. 262 · GOT-246

Latin Coruscatio seu Scintillatio quid.

English What flashing or scintillation is.

NTR-B09-P049 1605 p. 262 · GOT-246

Latin Ceterum, ut, quidnam coruscatio sit, hoc et loco a nobis expediatur: sciendum est, eam in fodinis noctu apparere instar scintillati ignis non secus, ac pulvis pyrius secundum longam seriem sparsus ac anteriore parte accensus, ignem protractum exhibet. Eodem enim modo & coruscatio seu scintillatio tractu suo fertur, iam ab Oriente in Occidentem aut vicissim ab Occidente in Orientem, a Meridie in septentrionem aut e converso, &c. adeoque a qualibet hora aut parte compassi montani directa linea versus horam proximam oppositam, compassum, qui in 24. horas seu partes divisus est, discindit.

English To explain here what a flash is, know that it appears by night in mines like sparkling fire, just as gunpowder spread in a long train and ignited at one end displays an extended fire. In the same way flashing or scintillation travels along its course, east to west or west to east, south to north or the reverse, and thus cuts across the miner's compass, which is divided into twenty-four hours or parts, in a straight line from any hour or point towards the nearest opposite hour.¹⁰³

Original marginal note NTR-B09-M057 1605 p. 262 · GOT-246

Latin Deus nihil occultum reservavit.

English God has kept nothing hidden.

¹⁰³. The miner's compass is a twenty-four-part directional instrument. The flashes are described as travelling lights indicating immature ores; the text's interpretation is retained without supplying an unverified modern physical explanation.

Original marginal note NTR-B09-M058 1605 p. 263 · GOT-247

Latin Chaldaei, &c. quo thesauros defoderint. Sciomantia quid.

English Where the Chaldeans and others buried treasures; what sciomancy is.

NTR-B09-P050 1605 pp. 262–263 · GOT-246, GOT-247

Latin Coruscationes hae omnes utcunque appareant, ductuum metallicorum certissima indicia praebent, ut ex illis cognoscantur, & metalla, ceu certa Dei Dona, ex terra eruuntur. Quicquid enim Deus in hominum usum creavit, id certae proprietatem in natura ei ingessit, ut nec absconditum maneret. Et licet illud quidem absconditum fecerit: peculiaria tamen quoque externa signa addidit, ad investigationem ducentia. Ex quo praedestinatio eius mira cognosci debet. Eodem modo ipsi et homines, si thesauros defodiunt certis notis additis, locum signant, & vel ad limites, vel statuas, vel fonticulos, vel aliud quid eosdem sepeliunt, ut si opus sit, ipsos rursus invenire & eruere possunt. Veteres Chaldaei ac Graeci, si bellorum temporibus, expugnationis & eiectionis metuentes thesauros suos defoderunt, locum istum aliter non designarunt, quam ut certam diem, horam, & minutiam anni sibi praeponerent, & quonam Sol aut Luna umbram iactaret, attenderent, ac eo thesauros conderent seu defoderent. Hanc artem Sciomantiam, hoc est, artem umbrae vocitarunt. Ex umbrabilibus illis multae artes exortae, & res occultae multae revelatae sunt, utpote quibus omnes spiritus & sydereae corpora cognoscuntur. Haec enim sunt signata Cabalistica, fallere nescia: itaque diligenter observanda.

English All these flashes, however they appear, give most certain indications of metallic courses, so that these may be recognised and metals dug from the earth as assured gifts of God. Whatever God created for human use he endowed with a particular property in nature so that it should not remain hidden. Although he made it hidden, he also added particular outward signs leading to its discovery. From this his wonderful predestination should be recognised. People likewise mark places where they bury treasures, adding certain signs and burying them near boundaries, statues, little springs or something else, so that when needed they can find and dig them up again. When the ancient Chaldeans and Greeks buried treasures in wartime, fearing conquest and expulsion, they marked the place by appointing a certain day, hour and minute of the year, observing where the Sun or Moon cast its shadow, and hiding or burying their treasures there. They called this art sciomancy, that is, the art of the shadow. From such shadow practices many arts arose and many hidden things were revealed, by which all spirits and sidereal bodies are known. These are cabalistic signs which cannot deceive, and must therefore be diligently observed.

Original marginal note NTR-B09-M059 1605 p. 263 · GOT-247

Latin Virgulae divinatoriae incertae.

English Divining rods are uncertain.

NTR-B09-P051 1605 p. 263 · GOT-247

Latin Sedulo ergo opera danda est, ut ne vos per divinationes artium incertarum seduci patiamini. Ea enim vana & irrita sunt, comprimis virgulae divinatoriae, quae multis metallariis fucum fecerunt. Semel enim si quid recte ostendunt, decies utique vicissim fallunt. Similiter & aliis fraudulentis diaboli signis, quae noctu & inconvenienti tempore contra omnem naturam fiunt ac apparent, velut spectra, visiones &c. fidendum minime est. Scire enim vos velim, diabolus quoque signa

edere, sed ex mera fraude & dolo. Sic nullum templum exstruitur, ad quod sacellum suum diabolus non colloctet. Sacellum nullum exstruitur, cui ille arulam non inferat. Semen bonum nullum seminatur, cui ille lolium non interserat. Eadem omnino et condicio est visionum & apparitionum supernaturalium, in Crystallis, Berillis, speculis, undis, &c. sicut illis hactenus praeter omne mandatum Dei & ipsius naturae luminis potentiam ceremoniales Nigromantes foede abusi sunt.

English Take care, therefore, not to let yourselves be led astray by divinations of uncertain arts. They are vain and ineffective, especially divining rods, which have deceived many miners: if they show something correctly once, they deceive ten times in return. Nor should one trust other fraudulent signs of the devil appearing by night or at an unsuitable time against all nature, such as ghosts and visions. I wish you to know that the devil too produces signs, but from sheer fraud and deceit. No temple is built beside which he does not place his chapel; no chapel is built into which he does not bring his little altar; no good seed is sown among which he does not sow darnel. The same applies to supernatural visions and apparitions in crystals, beryls, mirrors and waters, which ceremonial necromancers have hitherto shamefully abused against every command of God and the power of nature's own light.

Original marginal note NTR-B09-M060 1605 p. 263 · GOT-247

Latin Magicae & Cabaliae Christianorum quod fundamentum sit.

English The foundation of Christian magic and cabala.

NTR-B09-P052 1605 pp. 263–264 · GOT-247, GOT-248

Latin Visiones quidem non absolute reiiciendae sunt. Suum enim locum habent, sed si processu alio fiant. Nec enim iam amplius in prima, verum in secunda Generatione versamur. A nobis ergo Christianis in regeneratione, Ceremoniae & coniurationes adhibendae amplius non sunt, sicut illas usurparunt veteres in testamento veteri, qui in prima generatione vixerunt. Illae enim praefigurationes tantum fuerunt pro nobis, qui in novo testamento futuri eramus. Quaecunque ergo veteres in veteri testamento, seu prima generatione constituti per ceremonias coniurationes, &c. confecerunt ac impetrarunt, ea nos Christiani, qui generationis secundae sumus, in novo testamento agentes, per orationem, hoc est, orando, pulsando & quaerendo, universa per fidem sollicitare & impetrare debemus. In hisce tribus punctis primariis consistit fundamentum omne Magicae & Caballisticae scientiae, per quam quicquid optamus, impetrare possumus, ita, ut Christianis nobis nihil impossibile sit. Sed plura de his in libello de visione & ceteris cabaliae monumentis traditis docere hic desistimus. Eo vos amando, ut videatis, quam mirabiliter Christus Dei filius per suos Angelos in nobis Christianis & fidelibus operetur, & quam fraterne nobiscum conversetur. Unde & nos veri Angeli ac membra Christi sumus, sicut ille nostrum caput est, ut, sicut ille in nobis est, ita nos in ipso vivamus, sicut in libris de Coena Domini traditur.

English Visions are not to be rejected absolutely. They have their place, if they occur through another process. We no longer live in the first generation, but in the second. We Christians in regeneration should therefore no longer use ceremonies and conjurations as the ancients did in the Old Testament, when they lived in the first generation. Those were only prefigurations for us who were to live in the New Testament.

Whatever the ancients in the Old Testament or first generation accomplished and obtained through ceremonies and conjurations, we Christians of the second generation, living in the New Testament, must seek and obtain through faith by prayer: by praying, knocking and seeking. In these three principal points lies the whole foundation of magical and cabalistic science, through which we can obtain whatever we desire, so that nothing is impossible for us Christians. We cease teaching more of these matters here, since they are handed down in the little book on vision and the other writings of cabala. I direct you there to see how wonderfully Christ the Son of God works through his angels in us Christians and faithful people, and how fraternally he associates with us. Hence we too are true angels and members of Christ, as he is our head, so that, as he is in us, we may live in him, as is taught in the books on the Lord's Supper.¹⁰⁴

Original marginal note NTR-B09-M061 1605 p. 264 · GOT-248

Latin *Tinctura physicorum qua vi ac facultate.*

English The power and faculty of the tincture of the natural philosophers.

Original marginal note NTR-B09-M062 1605 p. 264 · GOT-248

Latin *Tinctura Physic. quomodo astralis fiat.*

English How the tincture of the natural philosophers becomes astral.

Original marginal note NTR-B09-M063 1605 p. 264 · GOT-248

Latin *Auri, &c. tincturati supra naturalis praestantia.*

English The superiority of tintured gold and so forth over natural gold.

NTR-B09-P053 1605 p. 264 · GOT-248

Latin Sed ut ad institutum nostrum de signis mineralibus, & praecipue de coruscationibus venarum metallicarum regrediamur: sciendum est, quod velut metalla, quae in primo adhuc Ente versantia coruscationem suam, hoc est, signa exhibent, sic etiam Tinctura Physicorum, quae imperfecta omnia metalla in probum argentum aurumve commutat (ceu metalla alba in argentum, rubra in aurum) peculiaria sua signa, coruscatione similia exserat, si astraliter perfecta & praeparata sit. Quamprimum enim exigua illius moles in fluxile metallum coniicitur, ita ut duo illa in igne convenient: coruscatio seu fulgor naturalis exoritur, non secus ac finum aurum argentumque in testa sive capella fulgurat, quod tum demum indicio est, aurum argentumve illud ab omni ceterorum metallorum additamento liberum & expurgatum esse. Qui vero nostra tinctura Physicorum astralis fiat, hoc modo cognoscendum est. Primo sciendum est, metallum quodvis, quamdiu in primo Ente adhuc latet conditum, peculiaria sua Astra habere. Ita Aurum habet Astra Solis: Argentum Astra Lunae: Cuprum Astra Veneris: Ferrum Astra Martis: Stannum Astra Iovis: Plumbum Astra Saturni: Hydrargyrum, Astra Mercurii. Quamprimum autem ad suam perfectionem venerunt, & in fixum Metallicum corpus coagulantur, ab illorum quolibet sua Astra recedunt, & corpus suum relinquunt mortuum. Hinc iam consequitur, corpora eiusmodi omnia deinceps mortua & inefficacia esse, & invictum Astrum metallorum ea omnia vincere, inque suam naturam convertere, & sic universa Astralia facere. Qua de caussa etiam aurum & argentum nostrum, quod tinctura nostra tingitur & praeparatur, multo nobilius, & ad Arcanorum

¹⁰⁴. The first and second generations here are Old- and New-Testament conditions; the third was the final judgement in Book Eight. Praying, knocking and seeking recall Matthew 7:7–8. These Christian magical claims are the source's own theology. Referenced cabalistic and eucharistic writings are not silently identified with secure surviving works.

medicinalium praeparationem praestantius est ipso naturali, quod natura ipsa in fodinis generat, ac postmodum a metallis ceteris segregatur. Sic etiam Mercurius corporis, ex metallo alio factus astraliter, multo nobilior & fixior est Mercurio communi. Et sic etiam de ceteris metallis iudica: Affirmo ergo, quemlibet Alchimistam, qui Astrum auri habet, rubra metalla omnia in aurum tingendo vertere. Ita Astro Argenti metalla omnia alba in argentum mutantur: Astro cupri in cuprum: Astro Argenti vivi, in Mercurium corporis; Et sic deinceps. Haec vero Astra omnia quomodo secundum artem spagyricam praeparentur, hoc loco declarare instituti nostri non est: sed pertinet ea explicatio ad libros de transmutationibus metallorum.

English To return to our subject of mineral signs, especially the flashes of metallic veins, know that just as metals still in their first being display their flashes, that is, their signs, so too the tincture of the natural philosophers, which changes all imperfect metals into good silver or gold, white metals into silver and red into gold, displays its own particular signs resembling flashes if it has been perfected and prepared astrally. As soon as a small quantity is cast into molten metal and the two meet in the fire, a natural flash or brilliance arises, just as refined gold and silver flash in the test or cupel. This indicates that the gold or silver is freed and purified from every admixture of other metals. How our tincture of the natural philosophers becomes astral is to be understood in this way. First, every metal, while still lying concealed in its first being, has its own particular stars. Gold has the stars of the Sun; silver, those of the Moon; copper, Venus; iron, Mars; tin, Jupiter; lead, Saturn; and quicksilver, Mercury. As soon as they reach perfection and coagulate into a fixed metallic body, their stars withdraw from each and leave its body dead. It follows that all such bodies are thereafter dead and ineffective, and the unconquered star of metals overcomes them, converts them into its own nature and makes them all astral. For this reason our gold and silver, tintured and prepared with our tincture, is much nobler and better for preparing medicinal arcana than natural gold and silver generated by nature in mines and subsequently separated from other metals. Likewise mercury of the body, made astrally from another metal, is much nobler and more fixed than common mercury. Judge the other metals in the same way. I therefore affirm that every alchemist possessing the star of gold changes all red metals into gold by tinturing. By the star of silver all white metals are changed into silver; by the star of copper, into copper; by the star of quicksilver, into mercury of the body; and so on. It is not our purpose to explain here how all these stars are prepared according to spagyric art; that explanation belongs to the books on the transmutations of metals.¹⁰⁵

¹⁰⁵. Astrum here is an operative astral power attributed to a metal, rather than merely a visible heavenly object. Tinctura Physicorum is the alchemical tincture of natural philosophers. Its claimed transmuting and medicinal powers are preserved as historical assertions, not demonstrated results.

Original marginal note NTR-B09-M064 1605 p. 265 · GOT-249

Latin Tincturae rubrae quae conditio.

English The condition of the red tincture.

Original marginal note NTR-B09-M065 1605 p. 265 · GOT-249

Latin Tincturae albae quae conditio.

English The condition of the white tincture.

Original marginal note NTR-B09-M066 1605 p. 265 · GOT-249

Latin Astrum cupri quale.

English The nature of the star of copper.

Original marginal note NTR-B09-M067 1605 p. 265 · GOT-249

Latin Astrum stanni quale.

English The nature of the star of tin.

Original marginal note NTR-B09-M068 1605 p. 265 · GOT-249

Latin Astrum Ferri quale.

English The nature of the star of iron.

Original marginal note NTR-B09-M069 1605 p. 265 · GOT-249

Latin Astrum plumbi quale.

English The nature of the star of lead.

Original marginal note NTR-B09-M070 1605 p. 265 · GOT-249

Latin Astrum argenti vivi quale.

English The nature of the star of quicksilver.

NTR-B09-P054 1605 p. 265 · GOT-249

Latin Quantum autem ad vera illorum signa attinet, scire vos velim, tincturam nostram rubram, quae in se Astra auri continet, esse substantiae supra omnem constantiam fixae, penetrationis expeditissimae, summaeque rubedinis, pulvere quidem croci, integro vero corpore Rubini colorem referente, tincturam inquam esse resinae instar fluxilem, & instar crystalli pellucidam, vitri instar fragilem, pondere vero gravissimam. Tinctura autem alba, quae Astra Lunae continet, eodem modo est substantiae fixae, incrementi immutabilis, summi candoris, resinae instar fluida, pellucida ut crystallus, ut vitrum fragilis, pondere cum Adamante conveniens. Praeterea Astrum cupri coloris citrini summi est, simile smaragdo, ut resina fluxile, suo autem metallo multo gravius. Astrum stanni albissimum ut resina est, subobscurum, luteo colore perfusum. Astrum Ferri rubedinis insignis est, Granati instar pellucidum, ut Resina fluxile, fragile ut vitrum, substantiae fixae, suo metallo multo ponderosius. Astrum plumbi cobalti instar, nigrum, transparens tamen, resinae modo fluidum, fragile instar vitri, pondere auro aequale, plumbo alio gravius. Astrum Argenti vivi insigniter candidi & coruscantis coloris est, simile nivi in summo frigore, valde subtilis, penetrantis, & corrosivae acrimoniae, crystalli specie pellucidum, facile ut resina diffluens, summi ad tactum frigoris, interius autem summi caloris, quasi ignei, insuper volatile, & in igne substantiae admodum fugacis.

English As for their true signs, I wish you to know that our red tincture, which contains the stars of gold, is a substance fixed beyond every steadfastness, penetrating with the greatest readiness and intensely red. In powder it resembles saffron in colour, but as a whole body it resembles a ruby. It melts like resin, is transparent like crystal, brittle like glass and very heavy. The white tincture, containing the stars of the Moon, is likewise a fixed substance, unchangeable in increase, intensely

white, fluid like resin, transparent like crystal and brittle like glass, corresponding in weight to diamond. The star of copper is intensely citron-coloured, like emerald, melting like resin yet much heavier than its metal. The star of tin is very white like resin, somewhat opaque and tinged with yellow. The star of iron is remarkably red, transparent like garnet, melting like resin, brittle like glass, of a fixed substance and much heavier than its metal. The star of lead is black like cobalt, yet transparent, fluid like resin, brittle like glass, equal in weight to gold and heavier than other lead. The star of quicksilver is brilliantly white and flashing, like snow in extreme cold, of a very subtle, penetrating and corrosive sharpness, transparent like crystal, readily flowing like resin, extremely cold to touch yet inwardly intensely hot, as though fiery; it is also volatile and of a very fugitive substance in fire.¹⁰⁶

NTR-B09-P055 1605 p. 265 · GOT-249

Latin Secundum descriptionem hanc cognoscenda vobis metallorum Astra sunt, & una intelligendum, ad utriusque tincturae, rubrae scilicet, & albae praeparationem initio non corpus Auri & Lunae, sed primum Ens Auri & Lunae assumi debere. Si enim in principio error committatur, de opera & labore omnia actum erit.

English You must recognise the stars of metals according to this description and understand at the same time that preparing either tincture, red or white, requires taking at the beginning not the body of gold or the Moon but their first being. If an error is committed at the beginning, all the work and labour will be ruined.

NTR-B09-P056 1605 p. 265 · GOT-249

Latin Sic praeterea de metallis etiam tenendum est, quod ipsorum quodlibet peculiare quoque in igne signum promat, ex quo cognoscatur. Huius generis sunt, scintillae, flammae, fulgur, coloris ignis, odor, sapor, &c. Sic in auri argentique super testa sive capella reverberatione genuinum signum est fulgur. Eo apparente, certum est, plumbum & cetera metalla accessoria per fumum secessisse, adeoque aurum & argentum plene expurgata esse, &c. Ferrum, quod in furno summe candefit, signa promit limpidas & pellucidas scintillas in sublime evolantes. Illis apparentibus, nisi ferrum continuo ex igne eximatur, straminis instar comburitur, &c.

English Concerning metals, one must also hold that each discloses in fire a particular sign by which it is recognised. Such signs are sparks, flames, flashing, the colour of the fire, smell and taste. Thus in the reverberation of gold and silver on a test or cupel, the genuine sign is a flash. When it appears, it is certain that lead and the other accessory metals have departed in fumes and the gold and silver are fully purified. Iron heated intensely white in the furnace discloses clear, transparent sparks flying upwards as its signs. When these appear, unless the iron is immediately taken from the fire, it burns like straw.

¹⁰⁶ The source's citron colour compared with emerald and the white yet yellow-tinged star of tin are retained. These are historical descriptions of prepared astra and tinctures, not modern analytical specifications.

Original marginal note NTR-B09-M071 1605 p. 265 · GOT-249

Latin Signa utrum ex tribus primis metalla plurimum copia habeant.

English Signs of which of the three first principles metals contain most abundantly.

NTR-B09-P057 1605 pp. 265–266 · GOT-249, GOT-250

Latin Eadem etiam ratione quodlibet terrenum corpus peculiaria & discreta sua in igne signa exhibet, an aliquid habeat Mercurii, sulphuris aut salis, & cuiusnam ex his tribus principiis plus habeat. Si enim effumat antequam cum flamma ardeat, signum est, plus Mercurii quam sulphuris ibi contineri. Si autem illico cum flamma ardet, & sine omni fumo deflagrat, signum est, multum sulphuris, nihil autem vel quam minimum Mercurii ibi delitescere. Id fieri videtis in pinguedinosis substantiis, velut adipe, oleo, resina & similibus. Si autem citra flammam omnem per fumum abeat, signum est, multum Mercurii, & nihil vel parum sulphuris inexistere. Id evenire videtis in herbis, floribus, &c. & aliis vegetabilibus substantiis ac corporibus volatilibus, ut sunt Mineralia ac Metalla, in primo ente adhuc constituta, nec dum cum corporeo sulphure permixta, quae fumum tantum & nihil flammae emittunt. Mineralia & metalla, quae in igne nec fumum nec flammam emittunt, hoc est, nec effumant, nec deflagrant, ea Mercurii & sulphuris aequalem permixtionem & fixationem ac perfectionem supra omnem constantiam vehementem indicant.

English In the same way every earthly body displays its own distinct signs in fire, showing whether it contains mercury, sulphur or salt, and which of these three principles it contains most abundantly. If it smokes before burning with a flame, that signifies more mercury than sulphur. If it immediately burns with a flame and is consumed without any smoke, that signifies much sulphur and no mercury, or very little, concealed within it. You see this in fatty substances such as fat, oil, resin and the like. If it passes away in smoke without any flame, that signifies much mercury and little or no sulphur. You see this in herbs, flowers and other vegetable substances and volatile bodies, such as minerals and metals still in their first being and not yet mixed with bodily sulphur, which emit only smoke and no flame. Minerals and metals which emit neither smoke nor flame in fire, neither smoking away nor burning, indicate an equal mixture of mercury and sulphur and a fixation and perfection of strength beyond all steadfastness.

NTR-B09-P058 1605 p. 266 · GOT-250

Latin De peculiaribus nonnullis signis Naturalium & Supernaturalium.

English On Some Particular Signs of Natural and Supernatural Things.

Original marginal note NTR-B09-M072 1605 p. 266 · GOT-250

Latin Signatura quid sit.

English What signature is.

Original marginal note NTR-B09-M073 1605 p. 266 · GOT-250

Latin Adam signator primus.

English Adam the first signator.

Original marginal note NTR-B09-M074 1605 p. 266 · GOT-250

Latin Hebraica Lingua naturae.

English Hebrew as the language of nature.

Original marginal note NTR-B09-M075 1605 p. 266 · GOT-250

Latin Hebraeis quid significet equus, vacca, ursus, vulpes, canis, ovis.

English What horse, cow, bear, fox, dog and sheep signify in Hebrew.

NTR-B09-P059 1605 p. 266 · GOT-250

Latin Dicendum etiam deinceps est de peculiaribus nonnullis signis, de quibus hactenus quidem nihil traditum est. Quo in tractatu vobis, qui scientiae signatae peritiam iactatis, & signatores vos appellari expetitis, opus praecipue erit, ut nos recte intelligatis. Nec enim Theorice hoc loco, sed Practice scribemus, & sententiam nostram paucis verbis comprehensam, brevissime intelligendam proponemus. Sciatis autem primum, signatam artem docere, quomodo vera & genuina nomina rebus omnibus indenda sint, quae Adam Protoplastus vere & integre omnia scivit. Illico enim post creationem cuilibet rei proprium suum nomen imposuit, tam animalibus quam arboribus, herbis, radicibus, lapidibus, mineralibus, metallis, aquis, &c. & ceteris fructibus terrae, aquae, aeris, ignis, &c. Et quae nomina ille his omnibus imponebat, ea Deo rata & probata erant. Ex vero enim & intimo fundamento, ea desumebantur: non ex opinione, sed ex praedestinata scientia, ex arte scilicet signata. Ideo Adam Signator primus exstitit. Negari quidem non potest, quod etiam ex lingua Hebraica genuina nomina profluant, & cuilibet rei pro sua natura & conditione imponantur. Quae enim ex Hebraica lingua nomina imponuntur, illa eadem opera etiam rei istius virtutem potestatem & proprietatem indicant.

English We must next speak of some particular signs about which nothing has yet been taught. In this treatment it is especially necessary for you who boast of skill in the science of signs and wish to be called signators to understand us correctly. Here we shall write practically, not theoretically, setting out our thought briefly in a few words. Know first that the art of signs teaches how true and genuine names are to be given to all things. Adam, the first-formed human, knew all these truly and completely. Immediately after creation he gave each thing its proper name: animals, trees, herbs, roots, stones, minerals, metals, waters and the other fruits of earth, water, air and fire. The names he gave were ratified and approved by God, for they were taken from a true and inward foundation, not opinion but predestined knowledge, namely the art of signs. Adam was therefore the first signator. Nor can it be denied that genuine names flow from the Hebrew language and are given to each thing according to its nature and condition. Names given from Hebrew simultaneously indicate the thing's virtue, power and property.¹⁰⁷

NTR-B09-P060 1605 pp. 266–267 · GOT-250, GOT-251

Latin Sic cum dicimus, Hic est porcus, Equus, vacca, ursus, canis, vulpes, ovis, &c. Porci nomen una foedum & impurum animal indicat. Sic equus indicat animal forte & patiens: vacca animal vorax & insatiabile: ursus, robustum, victoriosum & indomitum animal: Vulpes versutum & callidum animal: Canis, suo generi infidum animal: Ovis placidum & utile, neminique noxium animal. Hinc est, quod interdum etiam homo porcus vocetur, ob sordidam & porcinam vitam: & equus, ob

¹⁰⁷. The Adamic naming argument develops Genesis 2:19–20 through a historical theory of a natural language. Its ensuing animal examples are given in Latin, without a demonstrated Hebrew derivation for each name.

tolerantiam, qua prae ceteris insignis est: & vacca, quod cibo potuque insatiabilis sit, nec ventris modum sciat: Et ursus, quod aliis hominibus vastior & robustior exsistat: & vulpes, quod versipellis & dolosus sit, omnibus sese accommodans, nec quem facile offendens: & canis, quod non nisi ori proprio fidelis sit, & inofficiosum infidumque se omnibus praebeat: & ovis, quod non nisi sibiipsi noceat, omnibus autem potius, quam sibiipsi usui sit, &c.

English Thus when we say, "This is a pig, horse, cow, bear, dog, fox or sheep," the name pig indicates a foul and unclean animal; horse, a strong and enduring animal; cow, a greedy and insatiable animal; bear, a powerful, victorious and untamed animal; fox, a shrewd and cunning animal; dog, one unfaithful to its own kind; and sheep, a gentle, useful animal harmful to nobody. Hence a person is sometimes called a pig because of a filthy, swinish life; a horse because of exceptional endurance; a cow because of insatiable eating and drinking and an unrestrained stomach; a bear for being larger and stronger than others; a fox for being crafty and deceitful, adapting to everyone and not readily offending anyone; a dog for being faithful only to his own mouth and showing himself undutiful and untrustworthy towards everyone; and a sheep for harming only himself and being useful to everyone rather than himself.

Original marginal note NTR-B09-M076 1605 p. 267 · GOT-251

Latin Signatura in quibus herbis sit.

English In which herbs signature is found.

NTR-B09-P061 1605 p. 267 · GOT-251

Latin Hoc modo multae etiam herbae radicesque, &c. sua nomina adeptae sunt. Sic Euphrasia seu Ocularis herba ita dicitur, quod aegris & offensis oculis medeatur. Sic radix sanguinaria ita appellatur, quod prae ceteris radicibus sanguinem sistat. Sic scrophularia (chelidonium minus) ita vocatur, quod prae ceteris herbis mariscas sanat. Idem censendum etiam de aliis quamplurimis herbis, quarum classem ingentem recensere possem, quae universae a virtute & facultate sua ita appellatae & indigetatae fuerunt: sicut in nostro Herbario latius traditur. Praeterea multae herbae ac radices, non a sola virtute & facultate congenita, sed etiam a sua figura, forma & imagine, denominatae sunt, ut Morsus Diaboli, Pentaphyllum, Cynoglossum, Ophioglossum, Hippuris, Hepatica, Buglossum, Dentaria, Calcarippa (consolida regalis) Perforata, Satyrion vel Orchis, Victorialis, Syderica, Perfoliata, Prunella, Heliotropium, & aliae plures, non hic, sed seorsim in Herbario recensendae.

English In this way many herbs and roots have also acquired their names. Euphrasia, or eyebright, is so called because it heals sick and injured eyes; sanguinaria, the blood-root, because it stops blood better than other roots; and scrophularia, lesser celandine, because it heals haemorrhoids better than other herbs. The same should be understood of many other herbs, an immense class of which I could recount, all named and designated from their virtue and faculty, as is taught more fully in our Herbarius. Many herbs and roots are named not only from their inborn virtue and faculty but also from their figure, form and image, such as devil's-bit, cinquefoil, hound's-tongue, adder's-tongue,

horsetail, liverwort, bugloss, toothwort, calcarippa or royal comfrey, perforata, satyrion or orchis, victorialis, syderica, perfoliata, prunella, heliotrope and many others, to be listed separately in the Herbarius rather than here.¹⁰⁸

Original marginal note NTR-B09-M077 1605 p. 267 · GOT-251

Latin Signatura quid sit in animalibus.

English What signature is in animals.

Original marginal note NTR-B09-M078 1605 p. 267 · GOT-251

Latin Hepar principium sanguinis.

English The liver is the source of blood.

NTR-B09-P062 1605 pp. 267–268 · GOT-251, GOT-252

Latin Idem tenendum etiam est, de signis rerum animalium, quod similiter etiam ex sanguine & ipsius circulo, ex lotio & ipsius circulo, morbi omnes, in homine latentes, &c. cognoscantur. Ex hepate mactati animalis caro omnis cognoscitur, an esu salutaris sit, vel non sit. Nisi enim hepar clarum, & coloris rubri sit, sed lividum & flavum, ac asperum & foraminosum, &c. animal aegrum, & ob id carnem eius insalubrem esse, coniicitur. Epar autem naturalibus suis signis id indicare, mirum non est. Sanguinis enim origo est in hepate, & hinc per venas in universum corpus exundat, & in carnem coagulatur. Hac de caussa ex aegro & male affecto hepate, sanus & recens sanguis nullus produci, sicut & ex morbidus sanguine caro nulla salubris coagulari potest. Sed tamen & sine hepate caro, velut & sanguis, cognosci potest. Si enim utraque sana sunt, verum & naturalem suum colorem habent, qui est purpureus, lucidusque nullo extraneo colore (ut flavo aut livido) perfusus. Illi enim extranei colores morbos & aegritudines omnino indicant.

English The same must be held concerning the signs of animal things: all diseases hidden in a human being are likewise known from the blood and its ring, and from urine and its ring. From the liver of a slaughtered animal all its flesh is judged, whether it is wholesome to eat or not. If the liver is not clear and red but livid, yellow, rough and full of holes, the animal is judged sick and its flesh therefore unwholesome. It is not surprising that the liver indicates this by its natural signs, for blood originates in the liver, flows from there through the veins into the whole body and coagulates into flesh. Thus a sick and disordered liver cannot produce healthy fresh blood, nor can wholesome flesh coagulate from diseased blood. Flesh and blood can nevertheless also be judged without the liver. If both are healthy, they have their true natural colour, purple and shining, without any foreign colour such as yellow or lividness. Those foreign colours always indicate diseases and infirmities.¹⁰⁹

¹⁰⁸. The 1605 text expressly pairs scrophularia with chelidonium minus and mariscae, haemorrhoids. Historical plant names may cover different species from modern names. Several Latin names are retained to avoid unsupported exact botanical identifications. The healing explanations are historical claims, not recommendations.

¹⁰⁹. Circulus means the ring or visible peripheral zone examined in historical blood inspection and uroscopy, not circulation of blood in the modern physiological sense. The liver-origin account belongs to premodern physiology; the passage is not a food-safety or diagnostic guide.

Original marginal note NTR-B09-M079 1605 p. 268 · GOT-252

Latin Umbilici infantum nodi quid indicent.

English What knots in infants' umbilical cords indicate.

NTR-B09-P063 1605 p. 268 · GOT-252

Latin Sed insuper alia quoque signa sunt, admiratione certe dignissima, quando nimirum Archeus signator est, & signat in foetu umbilici nodulis, ex quibus quodnam mater foetus aut ediderit, aut adhuc editura sit, conici potest.

English There are other signs too, certainly worthy of great wonder, when the Archaeus is the signator and marks the offspring with little knots in the umbilical cord, from which one can conjecture what offspring the mother has borne or will yet bear.¹¹⁰

Original marginal note NTR-B09-M080 1605 p. 268 · GOT-252

Latin Rami cornu cervi annos eius notant.

English Branches of a stag's antler signify its years.

Original marginal note NTR-B09-M081 1605 p. 268 · GOT-252

Latin Circuli cornua vaccae, &c.

English Rings on a cow's horns, and so forth.

Original marginal note NTR-B09-M082 1605 p. 268 · GOT-252

Latin Dentes equi, &c.

English A horse's teeth, and so forth.

NTR-B09-P064 1605 p. 268 · GOT-252

Latin Signator idem cervi cornua signat ramis, ex quibus aetas eiusdem cognoscitur. Quot enim cornu ramos habet: tot annos cervus natus est. Cumque quotannis novi unius cornu accessio fiat: cervi aetas ad 20. aut 30. annum dignosci potest. Sic & Signator vaccae cornua circulis notat, ex quibus, quot vitulos gestarit, cognoscitur. Quilibet enim circulus vitulum unum indicat. Idem Signator primos dentes equi extrudit, ut primis septenis annis illius aetas ex dentibus certo cognosci queat. Primum enim equo nato 14. dentes enascuntur, de quibus quotannis geminos perdit. Et sic septem annorum decursu universi excidunt. Hac de caussa etiam septimum annum egressus equus, non nisi a peritissimo & exercitatissimo cognosci potest.

English The same signator marks a stag's antlers with branches from which its age is known: the stag is as many years old as the antler has branches. Since one new branch is added each year, its age can be recognised up to twenty or thirty years. The signator also marks a cow's horns with rings, from which the number of calves she has carried is known, each ring indicating one calf. The same signator pushes out a horse's first teeth so that its age can be known certainly from them in its first seven years. Fourteen teeth first grow in a newborn horse, of which it loses two each year, so that all fall out over seven years. For this reason a horse older than seven can be judged only by someone highly skilled and practised.¹¹¹

¹¹⁰. The umbilical-knot prediction is a historical claim, not an established method of knowing past or future births. Quodnam ... foetus is rendered "what offspring"; the Latin does not explicitly ask "how many." This passage explicitly identifies the Archaeus as a signator, completing the opening book's threefold scheme.

Original marginal note NTR-B09-M083 1605 p. 268 · GOT-252

Latin *Rostrum & ungues, &c. avis.*

English *The beak and claws of a bird, and so forth.*

NTR-B09-P065 1605 p. 268 · GOT-252

Latin *Idem Signator signat volucris rostrum & ungues peculiaribus signis, ut auceps peritus quivis annos & aetatem illius ex illis censi queat. Idem Signator aegrorum porcorum linguas exanthematis notat, ex quibus impuritas eorum cognoscitur. Et velut impura lingua est, ita & in universum corpus. Idem Signator coloribus discretis nubes signat, ex quibus tempestates coeli praenosci possunt. Sic etiam Lunae circulum distinctis coloribus, quorum quilibet peculiaris interpretationis est, signat. Sic rubedo plerunque futurum ventum indicat. Viriditas, nigredoque, pluviam. Haec duo commixta, ventum cum pluvia: quod in mari signum est, cum plerunque saevas tempestates & procellas portendat. Claror & candor lucidus bonum signum est, cumprimis in Oceano. Plerunque enim tempestatem placidam, quietam & serenam praesagit. Quicquid ergo suis signis ita Luna portendit, id sequenti die eventurum est.*

English *The same signator marks a bird's beak and claws with particular signs from which any experienced fowler can assess its years and age. He marks the tongues of sick pigs with eruptions which disclose their impurity: as the tongue is impure, so is the whole body. He marks clouds with distinct colours from which the weather can be foreknown, and likewise the Moon's halo with colours, each having its own interpretation. Redness generally indicates coming wind; greenness and blackness, rain; and these two mixed, wind with rain, a sign at sea generally portending fierce storms and tempests. Brightness and shining whiteness are a good sign, especially on the ocean, generally foretelling calm, quiet and clear weather. Whatever the Moon thus portends through its signs will happen on the following day.*

Original marginal note NTR-B09-M084 1605 p. 268 · GOT-252

Latin *Astronomiae Magicae species quae.*

English *The kinds of magical astronomy.*

NTR-B09-P066 1605 pp. 268–269 · GOT-252, GOT-253

Latin *Et haec hactenus de signis Naturalibus tradita sint. Quantum vero porro ad supernaturalia attinet, ea res singularis scientiae & experientiae est, velut est Astronomia Magica, &c. & similes. Hic opus est, in illis certam scientiam comparari. Hinc enim multae aliae quoque artes prodeunt, ut Geomantia, Pyromantia, Hydromantia, Chaomantia, & Necromantia, quarum quaelibet sua peculiaria astra habet, quae astra modo supernaturali ita signant. Et sciendum est, astra Geomantiae signa sua signare seu imprimere in terrena corpora universi orbis, multis quidem ac variis modis. Nam & terram mutant, & terraemotus, ac hiatus pariunt, gignunt colles & valles, multa nova crescentia parturiunt, proferunt Gamaheos nudis figuris & imaginibus, insignes vires & potentias habentes, quas quidem a septem Planetis accipiunt, non secus ac orbis seu scopus glandem aut telum accipit a iaculatore. Quomodo vero signa ea & imagines Gamaheorum seorsim cognosci, & quid Magice*

¹¹¹. The antler, horn-ring and tooth rules are the text's historical generalisations, with its original numbers retained. They should not be used as exact modern methods of ageing animals.

notent, sciri queant: magnae experientiae & Naturae rerum cognitionis id opus est, quod quidem perfecte hic tradi nulla ratione potest.

English Let this suffice for what has been taught about natural signs. Supernatural signs require a special knowledge and experience, such as magical astronomy and similar sciences. Here one must acquire certain knowledge of them. Many other arts arise from this, such as geomancy, pyromancy, hydromancy, chaomancy and necromancy. Each has its own particular stars, which sign in a supernatural manner. Know that the stars of geomancy sign or impress their marks on earthly bodies throughout the world in many different ways. They change the earth, produce earthquakes and chasms, generate hills and valleys, bring forth many new growths and produce gamahei with plain figures and images possessing notable forces and powers. These they receive from the seven planets as a target receives a bullet or missile from a shooter. To recognise separately the signs and images of gamahei and know what they signify magically requires great experience and knowledge of the nature of things, which cannot be taught completely here.¹¹²

Original marginal note NTR-B09-M085 1605 p. 269 · GOT-253

Latin Gamaheorum vis unde & qualis.

English The source and nature of the power of gamahei.

NTR-B09-P067 1605 p. 269 · GOT-253

Latin Hoc autem probe notandum est, quod lapis seu Gamaheus quilibet non nisi unius Planetae proprietate & virtute pollere, adeoque ab uno saltem Planeta dotari possit. Et licet quidem duo pluresve Planetae in terrenis corporibus, velut in superiore Firmamento coniungantur: unus tamen ab altero opprimitur. Sicut enim una domus geminos dominos minime fert, sed alter alterum extrudit: ita hic quoque. Unus manet dominus: alter servit. Aut, quemadmodum custodientem domum quandam, superveniens alius, per vim eiicit, & se dominum constituit, omnia pro nutu & arbitrio suo disponens, altero interim ad servitia redacto: sic etiam astrum unum expellit alterum, unus Planeta alterum, unus Ascendens alterum, una Influentia alteram, una Impressio alteram, unum Elementum alterum. Sicut enim aqua ignem exstinguit: ita Planeta unus alterius proprietatem elidit, & suam invehit. Idem eodem modo etiam de eorum signis intelligendum est, quae multiplicia sunt, & non Characteres tantum, veluti multi arbitrantur, sed universa ea, quae in tota Mappa Planetarum inveniuntur, hoc est, quaecunque Planetis illis cognata & subiecta sunt.

English Observe carefully that each stone or gamaheus can possess the property and virtue of only one planet, and therefore be endowed by only one. Although two or more planets may join in earthly bodies as in the upper firmament, one is nevertheless overcome by another. Just as one house cannot bear two masters, but one drives the other out, so here: one remains master, the other serves. Or as someone arriving by force ejects the keeper of a house, makes himself master and orders

¹¹². Gamahei are naturally figured stones or comparable marked objects credited with astral powers in this tradition; the word is retained rather than equated with every engraved talisman. "Plain figures" renders nudis figuris, figures presented without added adornment, not necessarily human nudity.

everything according to his pleasure while reducing the other to servitude, so one star expels another, one planet another, one ascendant another, one influence another, one impression another and one element another. As water extinguishes fire, one planet destroys another's property and introduces its own. The same must be understood of their signs, which are manifold: not characters alone, as many suppose, but everything found in the whole map of the planets, that is, whatever is related and subject to those planets.

Original marginal note NTR-B09-M086 1605 p. 269 · GOT-253

Latin Subiecta quae sint SOLI.

English Things subject to the Sun.

Original marginal note NTR-B09-M087 1605 p. 269 · GOT-253

Latin LUNAE.

English To the Moon.

Original marginal note NTR-B09-M088 1605 p. 269 · GOT-253

Latin MARTI.

English To Mars.

Original marginal note NTR-B09-M089 1605 p. 269 · GOT-253

Latin Mercurio.

English To Mercury.

Original marginal note NTR-B09-M090 1605 p. 270 · GOT-254

Latin Iovi.

English To Jupiter.

Original marginal note NTR-B09-M091 1605 p. 270 · GOT-254

Latin Veneri.

English To Venus.

Original marginal note NTR-B09-M092 1605 p. 270 · GOT-254

Latin Saturno.

English To Saturn.

NTR-B09-P068 1605 pp. 269–270 · GOT-253, GOT-254

Latin Ut autem ex addito exemplo me planius intelligatis: scire vos velim, Planetæ Soli subiici Coronam, Sceptrum, Solium, omnemque regiam potestatem & maiestatem, omnem dominationem, omnes divitias, thesauros, ornatus & apparatus huius mundi. Lunæ Planetæ subiecta sunt, omnis agricultura, navigatio, peregrinatio & peregrinatores, & quæ alia huc spectant. Planetæ Marti subiiciuntur, Munitiones (ut vocant) omnes, bracteae, Loricae, tormenta, hastilia, denique omnia arma, & quæ ad bellum pertinent. Planetæ Mercurio subiiciuntur omnes literati, omnia instrumenta Mechanica, & quæ ad artes requiruntur. Planetæ Iovi subiiciuntur omnia iudicia & iura, ordo universus Leviticus, omnes Ecclesiarum ministri, templorum ornatus, clenodia, & si qua alia huius classis sunt. Planetæ Veneri subiiciuntur, quaecunque ad Musicam referuntur, Musica instrumenta, & exercitia venerea, amores, scortationes, &c. Planetæ Saturno subiiciuntur, quicunque in & infra terram operantur, ut metallarii, cunicularii, Vespillones, fontium effossores, velut & omnia his familiaria instrumenta, &c.

English To make myself clearer through an example, know that the crown, sceptre, throne, all royal power and majesty, all dominion, riches, treasures, ornaments and display of this world are subject to the

planet Sun. All agriculture, navigation, travel and travellers, and related matters, are subject to the Moon. All munitions, as they call them, plates of armour, breastplates, artillery, spears, and every weapon and thing belonging to war are subject to Mars. All learned people, all mechanical instruments and things required for the arts are subject to Mercury. All courts and laws, the whole Levitical order, all ministers of churches, the adornment and treasures of temples and things of this kind are subject to Jupiter. Whatever concerns music, musical instruments, sexual exercises, loves and whoring is subject to Venus. All who work in or below the earth, such as miners, tunnellers, gravediggers and well-diggers, together with all the instruments associated with them, are subject to Saturn.¹¹³

Original marginal note NTR-B09-M093 1605 p. 270 · GOT-254

Latin Pyromantia qualia signa.

English The signs of pyromancy.

NTR-B09-P069 1605 p. 270 · GOT-254

Latin Pyromantia signa sua per Astra Ignis promit, in igni communi, per singulares scintillas, flammas, crepitus, &c. In fodinis per coruscationes: in firmamento, per Stellas, Cometas, & fulgur, & fulmen, & Nostoch ac similia: in spectris per Salamandrinus, Ethnicos & similes spiritus, ignis specie apparentes.

English Pyromancy discloses its signs through the stars of fire: in ordinary fire through particular sparks, flames and cracklings; in mines through flashes; in the firmament through stars, comets, lightning, thunderbolts, nostoch and the like; and among apparitions through salamandrine, ethnic and similar spirits appearing in the form of fire.¹¹⁴

Original marginal note NTR-B09-M094 1605 p. 270 · GOT-254

Latin Hydrom. qualia signa.

English The signs of hydromancy.

NTR-B09-P070 1605 p. 270 · GOT-254

Latin Hydromantia signa sua dat per astra aquae, per fluctus, exundationes, defectus, decolorationes, Lorindos, nova fluenta, rerum terrenarum ablutiones: In Magica & Nigromantia per Nymphas, visiones, & monstra supernaturalia in aquis & mari.

English Hydromancy gives its signs through the stars of water: waves, floods, shortages, changes of colour, lorindi, new streams and the washing away of earthly things; in magic and necromancy, through nymphs, visions and supernatural monsters in waters and the sea.¹¹⁵

¹¹³. This is the source's planetary catalogue. It groups occupations, objects and institutions within a cosmological correspondence system, rather than establishing empirical planetary control. The "map of the planets" is invoked in prose; no actual map or diagram is printed here.

¹¹⁴. Nostoch names a substance or phenomenon treated as a falling astral product in this tradition. The unusual Ethnici is retained as "ethnic" spirits rather than silently identified with a modern category.

¹¹⁵. Lorindi is an obscure source term, retained without an asserted modern identification.

Original marginal note NTR-B09-M095 1605 p. 270 · GOT-254

Latin Chaomant. signa qualia.

English The signs of chaomancy.

NTR-B09-P071 1605 p. 270 · GOT-254

Latin Chaomantia signa sua exhibet per astra, aeris & venti, per discolorationem, perditionem & vastationem omnium tenerarum & subolium rerum, quibus ventus adversus est, excutiendo & denudando flores, folia, frondes, caules. Si astra chaomantiae moventur, Necrocomicae ex superiore aere decidunt, & frequenter voces ac responsa audiuntur: Item arbores cum radicibus ex terra evelluntur, & aedes prosternuntur. Conspiciuntur Lemures, Penates, Undenae, Sylvani, &c. Sic etiam Tereniabin, Tronossia, & Manna, super arbores & herbas decedit.

English Chaomancy displays its signs through the stars of air and wind: through the discolouring, destruction and devastation of tender things and new growths harmed by wind, which shakes off and strips flowers, leaves, foliage and stalks. When the stars of chaomancy move, necrocomicae fall from the upper air and voices and answers are often heard. Trees are torn from the earth with their roots and buildings are thrown down. Lemures, penates, undenae and sylvans are seen. Tereniabin, tronossia and manna also fall upon trees and herbs.¹¹⁶

NTR-B09-P072 1605 p. 270 · GOT-254

Latin Necromantia signa sua promit per astra mortis, quae nos etiam Euestra vocamus, signantia corpus aegroti & moribundi hominis, maculis rubeis, lividis & purpureis, quae certa mortis, tertia die insulturae, indicia sunt. Signant etiam hominum manus & digitos maculis luteis, quae certa signa fortunae instantis sunt, sive bona ea sive mala sit. Quando ergo Necromantiae Astra moventur, tunc mortui miracula & signa edunt, & defuncti cruentant, res mortuae conspiciuntur, &c. voces ex sepulcris audiuntur: tumultus & trepidationes in Ossorii surgunt, & mortui viventium forma & habitu apparent, & conspiciuntur in visionibus, speculis, Berillis, lapidibus & undis, specie varia: Evestrum & Trames signa dant pulsando, percutiendo, tundendo, cadendo, iaciendo, &c. Ubi tumultus seu sonus tantum auditur, sed nihil videtur: quae omnia certa sunt indicia mortis, praesagentia ipsam ei, cuius habitu apparent, aut quo loco audiuntur, &c.

English Necromancy discloses its signs through the stars of death, which we also call euestra. They mark the body of a sick and dying person with red, livid and purple spots, certain indications of death arriving on the third day. They also mark human hands and fingers with yellow spots, certain signs of approaching fortune, whether good or bad. When the stars of necromancy move, the dead produce wonders and signs: corpses bleed, dead things are seen, voices are heard from graves, commotions and tremors arise in ossuaries, and the dead appear in the form and dress of the living. They are seen in various forms in visions, mirrors, beryls, stones and waters. The evestrum and trames give signs by knocking, striking, pounding, falling and throwing, where only commotion or sound is heard but nothing seen. All these are certain

¹¹⁶ Necrocomicae, tereniabin and tronossia are retained as uncertain historical terms for alleged aerial products. Lemures, penates, undenae and sylvans are named classes of spirits. Their appearance is asserted by the text, not independently verified.

indications of death, foretelling it for the one in whose form they appear or in the place where they are heard.¹¹⁷

NTR-B09-P073 1605 p. 271 · GOT-255

Latin De his signatis praeter iam dicta multa adhuc recenseri possent. Sed cum illa, malas, damnosae & periculosae phantasiae, Imaginationes, & superstitiones secum afferant, quae non infortunii tantum, sed etiam mortis causa fieri possent: ea silentio transilimus. Revelari enim nobis prohibita sunt, cum ad arcanam scholam & potestatem divinam pertineant. Iam ergo libello huic colophonem imponamus.

English Much more could be recounted about these signs beyond what has already been said. But since they bring with them evil, harmful and dangerous phantasies, imaginations and superstitions which could cause not only misfortune but death, we pass over them in silence. We are forbidden to reveal them, since they belong to the secret school and divine power. Let us therefore now bring this little book to its close.

¹¹⁷. The Latin shifts between Euestra and Evestrum, with Trames as another named apparition or power. The alleged spots and noises are historical death-omens, not reliable medical predictions. Their promised three-day interval is retained as part of the source.

Keyword Essays

Nature and the Work of Art

The opening distinction between natural and artificial generation is a distinction of agency, not a simple division between real and unreal things. Art works with materials, heat, moisture and time. The work's confidence in that intervention is reinforced by its account of the human place in creation: the reader is invited to understand a world whose processes can be assisted or redirected. Such confidence explains the argument; it cannot by itself establish every alleged product.

Book 2 makes ordinary rain and solar warmth examples for thinking about increase and ripening. The comparison supports the possibility of artificial assistance by treating an operation in the vessel as analogous to a process outside it. Book 7 then includes recognisable crafts among transmutations: wood into charcoal, clay into a hardened product, and other changes in the condition of useful materials. These examples show why art must be read more widely than the single ambition to make gold.

A good reading therefore asks what role art is assigned in each case. Does it supply a condition, speed a process, separate constituents, preserve a body, or claim to produce a different thing? Maintaining those questions makes it possible to recognise both continuities and differences among the work's examples.

Generation through the End of an Earlier State

Book 1 gives putrefaction a productive role: it is a change through which an earlier state ends and another can arise. The description draws together agriculture, bodily processes and operations in a vessel. The seed is a persuasive image because the disappearance of its former appearance can accompany a new growth. The image does not make every kind of destruction equivalent to fertile generation.

The account of death in Book 5 complicates any assumption that a living or crude thing is necessarily the best form of a material. A preparation may be praised because the earlier condition has been overcome. Book 6 considers resuscitation, but its language of renewed natural things should be followed through its own examples rather than taken as a single promise about bodily resurrection. These books repeatedly shift the scale at which life and change are being described.

The recurring problem is identity. If form, colour, power or use changes, in what respect is the thing the same? The book does not supply one abstract answer before every procedure. Its examples carry the distinctions. Reading generation, death and renewed activity

together is more informative than collecting the most dramatic claim from each book.

Body Spirit and the Three Principles

The account of metals in Book 1 relates mercury, sulphur and salt to spirit, soul and body. The relationship is explicit enough to serve as a local map, but it should not become a substitute for the work's descriptions of actual materials. The sulphur spoken of as a soul is distinguished from ordinary combustible sulphur. That qualification prevents a casual substitution of one familiar substance for the whole philosophical function.

Book 4 extends life beyond visibly moving animals. A body can contain a concealed spiritual principle; the account of metals appeals to their capacity to flow in fire. Here spiritual describes an operative and often imperceptible aspect of a corporeal thing. Rendering every such use as either a modern gas or a wholly immaterial mind would remove the work's particular account of bodies.

The principles are most useful to a reader when attached to the jobs they perform in a passage. A term may explain continuity, combustion, cohesion, mobility or the bond between other constituents. The contextual lexicon keeps those jobs visible and refers back to the actual words, so that a schematic correspondence does not overrule the source.

Separation as a Way of Knowing and Making

Book 8 begins on a cosmological scale and proceeds into the division and preparation of natural things. Separation is therefore more than throwing away an unwanted residue. It concerns how things that are mixed become distinct, which parts are retained, and what an operation makes available for another use. The work moves among kingdoms and materials while preserving the need for different procedures.

The relation to knowledge is practical. A substance does not become intelligible only because a reader knows its name; it can also be examined through what it yields or retains under an operation. Yet a process described as separating a pure or useful part is still an assertion that must be assessed. The book's praise of a product and the evidence for that product must remain distinguishable.

Read this book beside the account of transmutation in Book 7. One asks what a thing becomes; the other emphasises what can be distinguished from a mixture or body. They overlap in practice without being identical definitions. Their examples make the order of actions and the condition of the material important to interpretation.

What a Signature Is Asked to Reveal

Book 9 opens by distinguishing makers of signs. Human beings mark objects and authenticate documents. The Archaeus and the stars are assigned other kinds of marking. The initial ordinary examples explain why an external mark might be read as evidence of an internal condition or an authorised status. The subsequent movement into the reading of bodies and the heavens enlarges that analogy considerably.

The book's range is wider than the familiar idea that a plant's shape resembles a part of the body. Physiognomic judgements, craft knowledge, natural appearances and predictive claims belong to its discussion. A reader should identify who is said to make a mark, what exactly is visible, what hidden thing is inferred, and what is offered as the warrant for that inference. The answers vary within the book.

Its judgements about character from bodily features can stigmatise people, and they are not reliable present-day tests of honesty, worth or disposition. Preserving them in translation makes their historical reasoning available for examination. It does not require accepting the conclusion. The final caution about harmful fantasies also belongs to the source's own attempt to draw a limit around disclosure.

Experience Secrecy and the Address to a Reader

The dedication offers the book as a personal trust. The recipient is expected to possess judgement, experience and loyalty, and is asked to keep the work within the family. The letter both promises clarity and reserves further explanation for private correspondence. These moves construct a particular kind of reader: someone already prepared to understand, rather than a stranger who can demand an explicit explanation of every operation.

The letter distinguishes things tried personally from things received and tested through others. Its marginal summary nevertheless announces tested matters. That difference is worth preserving. Experience is an important source of authority within the text, but the word does not tell a present-day reader how each claim was established or independently repeated. Nor does the letter's first-person assurance settle the authorship of the composite work.

Secrecy also shapes the rhetoric of failure and misunderstanding. A reader may be blamed for incompetence or hostility rather than granted access to a test that resolves the dispute. The most useful response is to read the conditions closely: who is allowed to understand, what is promised, and what remains to be supplied? These questions illuminate the work without assuming that every obscurity conceals one correct modern procedure.

Short Glossary

Alchemy

The art of preparing and transforming natural things. The work applies it to living materials and ordinary crafted products as well as to metals.

Aquafortis

Strong water, a historical name for corrosive preparations. The name alone does not specify one modern formulation; the local process determines what the text describes.

Arcanum

A hidden or concentrated power, secret, or preparation. The plural arcana can name valued preparations or knowledge, rather than merely information that has not been shared.

Archaeus

An internal formative or operative agent. In Book IX it is distinguished from human makers of signs and from the stars; it should not be silently replaced by a modern organ.

Astrum

A star or stellar agency. The work can speak of an inward relation to stars as well as the heavens; English context determines the particular sense.

Balsam

A preserving power or preparation associated with resistance to corruption. It is not necessarily the particular aromatic material a modern reader may first imagine.

Calcination

A preparation by heating a material into a changed, often powdery condition. Its function depends on the body and sequence described.

Cementation

A treatment in which a body is exposed to the action of surrounding material, often under heat. The historical term should be read through the specified operation.

Coagulation

The bringing of something into a thicker, congealed or more settled condition. The contrast with dissolution does not establish a single modern chemical reaction.

Corruption

The ending or breakdown of an earlier condition. It can make a thing useless, but can also be valued as part of a preparation that yields another condition.

Digestion

A sustained action of warmth or preparation likened to the working of a stomach. The vessel, duration and material give a particular passage its sense.

Distillation

An operation involving the raising and collecting of material through heat and condensation. The work also uses natural processes such as rising moisture as analogies.

Element

One of the four elements of the inherited natural philosophy. An elemental description is not a claim that a material consists of modern chemical elements in the same sense.

Essence

What a thing is, or its operative substance and character in a given discussion. Changes of essence are described alongside changes of form, colour, power and use.

Fixation

The rendering of something stable or resistant to being driven off under the conditions described. A fixed tincture is contrasted with a preparation that fails in fire.

Generation

The arising of a natural thing. Book I distinguishes generation through nature from generation through art and makes putrefaction central to its account.

Homunculus

The small artificial human claimed in Book I. The passage belongs to historical speculation about generation through art, and is not a demonstrated method of producing a person.

Imagination

A power to which the work assigns effects in bodily formation. Its historical claims, especially about pregnancy and appearance, should not be treated as present-day biological explanations.

Imbibition

The moistening or soaking of a material. Rain upon the earth provides one analogy for interpreting repeated moistening in an artificial operation.

Matrix

A receptacle or generative place in which a thing can be formed. The term's scope is broader than the anatomical uterus when used of other natural bodies.

Mercury

A named material and one of the three principles. In the local correspondence of Book I it is related to spirit; the work's operative details still matter.

Mortification

The ending of a material's earlier life, activity or condition through preparation. It needs to be distinguished from an unqualified modern claim about killing a living organism.

Mummia

A historical term associated here with the preservation and powers of bodily material. Its meaning is not exhausted by the modern word mummy or by a single kind of embalmed object.

Putrefaction

A change through moist warmth in which an earlier condition is broken down. The work treats it both as decay and as a possible beginning of generation.

Quintessence

A specially prepared or purified condition associated with concentrated powers and resistance to corruption. The local account is more informative than simply translating it as fifth element.

Reverberation

A mode of heating used in preparation. The word names an operation or its arrangement, and should not be reduced to the ordinary modern meaning of an echo.

Resuscitation

The restoration or renewed activity of a natural thing after an earlier condition has ended. The book's examples determine the scope of this revival.

Salt

One of the three principles and also the name of particular materials. Its relation to body in Book I does not make all historical salts identical to common table salt.

Separation

The distinguishing or removing of constituents from a mixture or body. Book VIII develops it across the elements, minerals and other natural materials.

Signature

An outward mark read as a sign of something inward or otherwise concealed. Book IX distinguishes signs made by people, by the Archaeus and by stars.

Sublimation

A preparation in which material is raised and collected above its earlier position. Its historical uses require attention to what is raised, what remains and what is collected.

Sulphur

A named material and one of the principles. The soul of metals is distinguished from ordinary combustible sulphur, so the term cannot always be read as the familiar substance.

Tincture

A preparation credited with penetrating and changing another body. The work gives it conditions of stability and activity; it is not simply any coloured liquid.

Transmutation

A change through which a thing loses its previous form or condition and receives another. Book VII includes ordinary crafts as well as claims about metals.

Virtue

A thing's power, capacity or effect. Historical claims about medicinal virtue remain claims of the text, not a modern clinical evaluation.

Contextual Lexicon

Each entry gives a connected explanation, an exact whole sentence from this translation, and places to read. The quoted passage remains evidence of what the work says; the explanatory paragraphs are modern editorial interpretation.

Generation

Generation is the arising of a thing, considered through the agents and conditions that make it possible. The opening distinction between nature and art is central: the work allows art to intervene in processes whose materials and powers are natural. Its account therefore does not treat an artificial product as automatically outside nature.

Putrefaction is assigned a generative role because the earlier condition can end as another begins. Read the examples of seeds, bodily materials and metals separately before making them instances of one identical process. The homunculus claim is a conspicuous part of this discussion, but it does not stand for the entire meaning of generation.

Passage NTR-B01-P001: “All natural things have a twofold generation: one occurs naturally without art; the other occurs through art, namely alchemy.”

Source forms: generatio.

Read in context: Book 1. Compare growth in Book 2 and resuscitation in Book 6.

See also: Art, Putrefaction, Homunculus.

Art

Art names skilled intervention in natural things. The work’s examples include recognisable craft transformations, so the term is broader than a secret technique for making precious metals. Knowledge of a material, a suitable operation and the condition one wants to obtain are joined in its account of making.

The ordinary examples matter because they offer a familiar basis for a larger argument. They demonstrate that materials can change under human operations; they do not establish every further transmutation that the work claims. A careful reader can distinguish the force of an example from the full conclusion it is asked to support.

Passage NTR-B01-P001: “All natural things have a twofold generation: one occurs naturally without art; the other occurs through art, namely alchemy.”

Source forms: ars.

Read in context: Book 7. Read artificial ripening in Book 2 beside separation in Book 8.

See also: Transmutation, Growth, Separation.

Putrefaction

Putrefaction is the breakdown or alteration of an earlier condition through moist warmth. The book gives it both destructive and productive consequences. Something valued can become harmful, while something initially harmful may be claimed to become useful through preparation. The direction of the change must therefore be read in each example.

The grain placed in earth makes the idea of productive decay intelligible, and the work adds religious authority to that image. This does not make ordinary decomposition a guarantee of regeneration. Putrefaction is best read as one named condition in an argument about change, rather than as a universal instruction to let a substance rot.

Passage NTR-B01-P001: "Putrefaction is the highest stage and the first beginning of generation."

Source forms: putrefactio.

Read in context: Book 1. Compare the definition of death in Book 5.

See also: Generation, Heat and Moisture, Death.

Homunculus

The homunculus is the small artificial human claimed in the discussion of generation. The episode intensifies the work's wider question about what art can accomplish under conditions borrowed from nature. Its details belong to the historical claim and are preserved in the translation, rather than replaced by a modern account of reproduction.

The passage is often detached from the book because of its strangeness. Reading it in context makes the issues more precise: a claimed generative power, an artificial receptacle, nourishment, time and the relation between a small product and ordinary human development. None of this amounts to a demonstrated means of making a human being.

Passage NTR-B01-P009: "Through art they obtain their life; through art they obtain body, flesh, bones and blood; through art they are born."

Source forms: homunculus.

Read in context: Book 1. Read the opening account of generation in Book 1 before isolating this episode.

See also: Generation, Art, Imagination.

Imagination

Imagination is assigned formative power in the work's account of bodily generation. The text can therefore use it as a causal explanation for an unusual birth or appearance, rather than merely as the private representation of something absent. Its relation to inward stars belongs to that historical understanding of the person.

These assertions can carry blame or stigma, especially when applied to pregnancy. They are not reliable biological explanations and should not be used to judge a parent or child. Preserving the historical argument allows a reader to examine the power assigned to thought without endorsing its supposed bodily consequences.

Passage NTR-B01-P005: "A pregnant woman's imagination is so effective that, when she conceives seed within her body, she can transform the fetus in various ways, because her inner stars are directed so strongly toward it that they produce an impression and influence."

Source forms: imaginatio.

Read in context: Book 1. Compare the different work performed by signs in Book 9.

See also: Homunculus, Astrum, Signature.

The Three Principles

Mercury, sulphur and salt are presented as principles through which the generation and condition of metals can be explained. The text connects them to spirit, soul and body. The value of this correspondence lies in the roles assigned within a specific explanation, rather than in an automatic translation of every mention of the words.

The work's explicit distinction between the soul of metals and common combustible sulphur prevents an easy substitution of the familiar substance for its philosophical function. Particular preparations remain material operations even when they are described through these principles. Keep the account of a material beside the account of what it is said to do.

Passage NTR-B01-P010: "To understand those three substances—spirit, soul and body—clearly and correctly, know that they signify nothing but the three principles, Mercury, Sulphur and Salt, from which all seven metals are generated."

Source forms: tria principia.

Read in context: Book 1. Read the discussion of metallic life in Book 4 and preparation in Book 5.

See also: Mercury, Sulphur, Salt.

Mercury

Mercury can be a named material and a principle related to spirit. That range is part of the difficulty of the text: a statement about mercury in the three-principle correspondence need not have exactly the same scope as a description of a particular preparation. A familiar name does not remove the need to follow the action and its object.

The account of preparation in the book on death is especially useful for comparison. It asks the reader to value a changed condition rather than a crude material simply because of its name. The medicinal effects asserted there remain historical claims; the principle correspondence does not establish their efficacy.

Passage NTR-B01-P010: “Mercury is spirit, Sulphur soul and Salt body.”

Source forms: mercurius.

Read in context: Book 1. Compare the preparations in Book 5.

See also: The Three Principles, Life, Death.

Sulphur

Sulphur is associated with soul in the account of metals, and it also appears as a material to be prepared. The source itself distinguishes the philosophical function from ordinary combustible sulphur. That distinction is a reason to retain the word and explain it, rather than decide that every occurrence names one modern substance.

The association with ripening, fatness and the bond between other constituents helps explain its work in different passages. These relations should be compared without erasing their local conditions. The present volume’s use of sulphur is also its own historical account, rather than a definition imported from another author’s treatise.

Passage NTR-B01-P010: “What lies in the metal between spirit and body, of which Hermes also speaks, is soul, namely Sulphur, which unites those two contraries, body and spirit, and changes them into a single essence, and so forth.”

Source forms: sulphur.

Read in context: Book 1. Compare metallic life in Book 4.

See also: The Three Principles, Fire, Life.

Salt

Salt is linked to body in the three-principle correspondence. Its role concerns the constitution of a thing, while other passages can speak of particular salts as materials in an operation. A philosophical

correspondence and a material name belong to related discussions but should not be treated as identical kinds of statement.

Reading salt as common table salt throughout would make many passages misleadingly familiar. The more useful questions are what body is being discussed, which part is retained or separated, and what the preparation is meant to make available. The historical name can remain visible while those questions determine its local sense.

Passage NTR-B06-P009: "Everything which fumes and evaporates in fire is Mercury; what flames and burns is Sulphur; every ash is Salt."

Source forms: sal.

Read in context: Book 1. Compare the separations described in Book 8.

See also: The Three Principles, Separation, Elements.

Heat and Moisture

Heat and moisture are conditions through which the work explains growth, ripening and change. Rain and solar warmth give an ordinary example: the earth receives moisture and is then acted on by warmth. The book uses that pattern to make the assistance of art appear continuous with processes in nature.

The same pair also appears in the account of putrefaction, so its presence does not identify one outcome by itself. The material, duration and condition make a difference. Following the analogy carefully means noticing both what it explains and where the text moves beyond the observable example to a further claim.

Passage NTR-B02-P001: "It is sufficiently evident and known to everyone that all natural things grow and mature through heat and moisture, as rain and the sunshine that follows it sufficiently demonstrate."

Source forms: caliditas, calor and humiditas.

Read in context: Book 2. Read moist warmth and putrefaction in Book 1.

See also: Growth, Putrefaction, Fire.

Growth

Growth is treated together with increase and ripening. The work uses the fertility of earth and the maturing of fruits to argue that suitable conditions can bring a natural thing towards a more developed state. Human skill is allowed a role in supplying or directing those conditions.

Its extension from plants to minerals is an important argumentative step. The work asks a reader to regard an imperfect metal as something that may be brought to maturity, but that comparison should be

recognised as a claim about metals, rather than taken as a direct observation of plant growth. The local passage makes the proposed continuity visible.

Passage NTR-B02-P001: “It is sufficiently evident and known to everyone that all natural things grow and mature through heat and moisture, as rain and the sunshine that follows it sufficiently demonstrate.”

Source forms: *crescere* and *augmentatio*.

Read in context: Book 2. Compare artificial transformation in Book 7.

See also: Heat and Moisture, Generation, Art.

Balsam

Balsam belongs to the vocabulary of preservation. Its importance lies in the power attributed to it to hold a body against decay or corruption. It can therefore name a preserving preparation or function more broadly than a particular fragrant material known to a modern reader.

The book does not reduce preservation to one method. Different examples appeal to different conditions and treatments, and some contrast an ordinary preserving substance with another way of maintaining the body. The term should be read within those comparisons. The claimed permanence or medicinal value of a preparation remains part of the historical account.

Passage NTR-B04-P001: “Know therefore that spirit is most truly the life and balsam of all corporeal things.”

Source forms: *balsamum*.

Read in context: Book 3. Compare life in Book 4 and corruption in Book 5.

See also: *Mummia*, Quintessence, Life.

Mummia

Mummia appears within the discussion of bodily material, preservation and the powers assigned to it. It should not be flattened into a single modern image of an embalmed corpse. The work’s comparisons distinguish an ordinary material bearing the name from the effects claimed for other preparations.

The historical setting includes ways of understanding flesh and blood as bearers of natural power. A translation can retain this unfamiliar conception without certifying its medical claims or converting the description into a present-day practice. Read what is being preserved, which condition is supposed to be prevented, and what benefit the authorial voice infers.

Passage NTR-B04-P016: "The life of bones is the liquor of mummia."

Source forms: mumia or mummia.

Read in context: Book 3. Read the surrounding preservation argument in Book 3.

See also: Balsam, Quintessence, Life.

Life

Life is not confined here to visible movement. The work assigns life or a concealed spirit to bodies beyond animals, including metals. Its account asks what makes a thing active in its own way. The term therefore needs a contextual translation rather than a simple equation with the modern category of an organism.

In the discussion of metals, the capacity to flow under fire is related to a hidden fatness associated with sulphur. That example shows how an ordinary material behaviour can be incorporated into a more expansive account of life. The historical explanation should be distinguished from the phenomenon it seeks to explain.

Passage NTR-B04-P001: "To know specifically what the life of each thing is and what kind it is, understand that the life of things is nothing but a spiritual essence, an invisible and intangible thing, a spirit and spiritual thing."

Source forms: vita.

Read in context: Book 4. Compare the change of powers called death in Book 5.

See also: Sulphur, Fire, Death.

Death

Death is described through alteration, loss of former powers and the ending of a previous nature. In a work concerned with preparations, that ending can make possible another useful condition. The term is therefore not limited to the event of an animal ceasing to live, though bodily death also supplies examples and analogies.

The book's judgement is local. Some things are valuable while alive and lose their power when dead; others are praised after a crude or earlier condition has been overcome. This allows preparation to be represented as a productive mortification. It does not prove that every dead or altered material is beneficial.

Passage NTR-B05-P001: "The death of all natural things is nothing but the alteration and overthrow of their forces and virtues, the predominance of badness and goodness, the suppression and destruction of the former nature, and the generation of a new and different nature."

Source forms: mors.

Read in context: Book 5. Read renewed activity in Book 6 and putrefaction in Book 1.

See also: Life, Putrefaction, Resuscitation.

Resuscitation

Resuscitation concerns the renewed condition or activity of natural things. Its elevated language gives this renewal religious as well as natural significance. A reader should nevertheless follow each example before deciding what kind of restoration is being asserted.

The relation to the preceding book is central: if death can mean the ending of a material's former powers, renewed activity can be described on a corresponding scale. This does not permit an unqualified transfer of every claim to the restoration of a dead human body. The work's terminology is broad, and its particular objects remain decisive.

Passage NTR-B06-P001: "The resuscitation and reduction of natural things is no small matter in nature, but a profound and great secret, something divine and angelic rather than human and natural."

Source forms: resuscitatio.

Read in context: Book 6. Read the account of death immediately before it in Book 5.

See also: Death, Generation, Transmutation.

Transmutation

Transmutation is defined through a loss or alteration of former form and the reception of another condition, essence, colour, power or nature. Its examples reach beyond metals. This is why an ordinary craft product can be included in the same book as a more ambitious claim about a tincture.

The breadth of the definition makes the argument accessible, but also makes discrimination necessary. A familiar change in the appearance and use of a material does not establish every alleged change of kind. Read both the definition and the examples: the first tells the reader what range the term is given, while the examples show what support is offered.

Passage NTR-B07-P001: "Transmutation occurs when a thing loses its form and is so altered that it is wholly unlike its former substance and form, assuming another form, essence, colour, virtue, nature or property: when metal becomes glass or stone; stone becomes coal; wood becomes coal; clay becomes stone and brick; skin becomes glue; cloth becomes paper, and many similar things."

Source forms: transmutatio.

Read in context: Book 7. Compare the related work of separation in Book 8.

See also: Art, Fire, Separation.

Fire

Fire is an operative agent in preparation, not only a symbol detached from materials. The work connects heating with changes such as ripening, calcination, flowing and transformation. Its different uses cannot be reduced to one degree of heat or one kind of apparatus.

The conditions demanded of a tincture show why fire can also serve as a test within the work's reasoning: a product must retain the qualities claimed for it under the conditions of use. The historical assertion of successful testing is still distinct from evidence available to the modern reader. Follow what is heated and what is supposed to remain or change.

Passage NTR-B07-P014: "Fire can be graduated and intensified in many ways; every degree has its particular operation and produces a different effect, as any skilled alchemist knows through daily experience and practice."

Source forms: ignis.

Read in context: Book 7. Compare metallic life in Book 4 and heat in Book 2.

See also: Transmutation, Life, Heat and Moisture.

Quintessence

Quintessence is associated with a specially prepared condition of a thing, often credited with concentrated powers or exceptional preservation. The phrase can carry a larger philosophical history, but its immediate meaning should be established from what this work says is done to a particular material.

In the account of bodily materials, its relation to resistance against putrefaction is especially important. The work distinguishes a body merely kept in a condition from a preparation said to be made into a

quintessence. Such distinctions should survive translation even when the claimed effect is not accepted as a modern fact.

Passage NTR-B01-P013: "In truth it is nothing other than the quintessence of Sulphur, extracted from reverberated sulphur by spirit of wine, red in colour and transparent like a ruby."

Source forms: quinta essentia.

Read in context: Book 3. Compare the preparations and divisions of natural things in Book 8.

See also: Balsam, Mummia, Separation.

Separation

Separation is developed from the cosmological distinction of elements into operations on natural materials. Its scope includes what is divided from a mixture, what is retained, and how the resulting parts can be used. It should not be understood only as the removal of something called impure.

The work's practical examples make the condition of the material important. A named operation is not interchangeable with every other means of dividing a body. Reading separation beside transmutation clarifies the difference between distinguishing constituents and obtaining another form, while allowing that the same preparation can involve both.

Passage NTR-B08-P005: "To understand what separation is, observe that it is simply the setting of one thing apart from another, whether two, three, four or more have been mixed."

Source forms: separatio.

Read in context: Book 8. Read transformation in Book 7 beside this account.

See also: Elements, Transmutation, Quintessence.

Elements

The four elements supply a language for the constitution and differentiation of natural things. The opening of Book VIII places separation within an account of the world emerging from chaos. This makes division an event in the ordering of nature before it becomes a task for a practitioner.

These elements are not the entries of a modern periodic table. Their importance is seen in the relations and qualities the work assigns to materials, and in its account of how different bodies become distinct. The historical model should remain recognisable while particular material observations are considered on their own terms.

Passage NTR-B08-P002: "From that chaos God established the greater world, separated into four distinct elements: fire, air, water and earth."

Source forms: elementa.

Read in context: Book 8. Compare the three-principle account in Book 1.

See also: Separation, The Three Principles, Heat and Moisture.

Signature

A signature is an outward mark considered as evidence of something otherwise concealed, and a signator is the agent said to make it. The work begins with marks made by human beings, including practices of authentication. It then extends the account to formative and stellar agencies.

The important question is the relation asserted between mark and meaning. An authorised seal, a bodily feature and a portent do not acquire equal reliability because all can be called signs. The book's physiognomic judgements can be studied as historical reasoning while being rejected as tests of a person's character or worth.

Passage NTR-B09-P002: "As we philosophise in this book about the signature of things, we must first explain by whom things are signed, who the signator is, and how many kinds of signs there are."

Source forms: signatura and signator.

Read in context: Book 9. Read the opening distinction of signators before the later examples in Book 9.

See also: Archaeus, Astrum, Imagination.

Archaeus

The Archaeus is distinguished as a formative or operative agent within the account of signatures. The distinction from human mark-making matters: a natural body's appearance is not being explained as though someone merely stamped an external label on it. The mark is connected to the making and condition of the body itself.

It is tempting to translate this agent into a familiar modern function, but doing so would settle questions that the source explains differently. The name is therefore retained. Read its particular action beside the other signators and ask what kind of evidence a mark is supposed to provide.

Passage NTR-B09-P002: "In this way there are three signators: the human being, the Archaeus and the stars."

Source forms: Archeus (also Archaeum in Book 1).

Read in context: Book 9. Compare the accounts of natural generation in Book 1.

See also: Signature, Astrum, Generation.

Astrum

Astrum and its plural astra belong to the work's vocabulary of stars and stellar powers. Their sense is not exhausted by the visible object in the night sky: the work also assigns stellar relations to bodies and their formation. The immediate argument determines whether a passage concerns the heavens, an inward power, or their supposed correspondence.

In the account of signatures, stellar marking is distinguished from both human signs and the Archaeus. That distinction should be preserved even when the inferred effects are not accepted. The passage is evidence of how this historical text organises causes and signs, rather than proof that a person's disposition can be read from an astrological relation.

Passage NTR-B09-P053: "First, every metal, while still lying concealed in its first being, has its own particular stars."

Source forms: astrum and astra.

Read in context: Book 9. Compare imagination and inward stars in Book 1.

See also: Signature, Archaeus, Imagination.

Relations within the Text

A Sequence of Questions

The nine-book order can be read as a sequence of questions. What generates a thing? How does it grow? How is it preserved? In what does its life consist? What counts as its death? How can it be renewed? What is transmutation? How are constituents separated? What can a sign disclose? The sequence is an aid to reading, not a claim that every operation must pass through nine identical stages.

The nine books and their principal questions

Book	Principal concern	A useful comparison
I	Generation through nature and art	II on conditions of growth
II	Growth and increase	VII on artificial transformation
III	Preservation	V on loss and corruption
IV	Life in natural bodies	I on the three principles
V	Death and the ending of powers	VI on renewed activity
VI	Resuscitation and renewal	I on generation
VII	Transmutation	VIII on separation
VIII	Separation	IX on the interpretation of what appears
IX	Signatures	The dedication on knowledge and judgement

Editorial reading map based on the complete translated sequence; it is not an additional historical table.

Principles and Material Names

The correspondence of mercury with spirit, sulphur with soul, and salt with body is stated in Book 1. Read the qualification about ordinary combustible sulphur with it. The scheme can guide attention to a function, but it cannot decide every later occurrence of the same words. The accounts of preparation and metallic life supply necessary comparisons.

What an Analogy Can Establish

A seed's change, a field's fertility, a body's digestion and a craftsperson's work can make an unfamiliar process seem intelligible. Ask which relation is being carried across: receptacle, warmth, nourishment, division, permanence or a new use. An analogy supplies a way of understanding a claim; whether the claimed process occurs requires additional evidence.

From Making a Thing to Reading Its Mark

Book 9 follows the books on transmutation and separation, but should not be reduced to a universal test of whether a preparation has succeeded. Its marks concern different objects and agents. Read the human examples before the formative and stellar ones, and keep the source's assertion distinct from the editorial assessment of that assertion.

Reading Routes

A First Reading

Begin with the dedication, then read Book 1 and Book 2 together. Continue through preservation, life, death and resuscitation before going on to transmutation and separation. Read Book 9 last in its transmitted place. On this first circuit, keep a short list of places where the same word changes its object or function. Use the glossary only when needed; return to the contextual lexicon after seeing a term work in more than one passage.

Art and Material Change

Read Book 2 on artificial assistance, Book 7 on transmutation and Book 8 on separation. Compare the ordinary craft examples with the more ambitious claims. For each, identify the starting material, the action, and the change the work says has occurred. Then return to Book 1 and ask whether the same role for art is maintained in the account of generation. The essays on art and separation give a connected guide to these comparisons.

Life Death and Preservation

Read Book 3, Book 4, Book 5 and Book 6 in order. Keep the material named by each passage visible: an animal body, a plant, a mineral or a preparation need not be described as alive in the same sense. Compare what is preserved with what is said to end. Use the entries on balsam, mummia, life, death and resuscitation to trace the relations without assuming that every revival is a claim about a human body.

Signs and Historical Judgement

Read the first part of Book 9 carefully before the physiognomic and predictive examples. Write down the distinctions among human beings, the Archaeus and the stars as signators. Choose one example of each and identify the visible mark and inferred condition. End with the closing limit placed on disclosure. Then reread the dedication's account of a qualified reader: compare the grounds on which trust and competence are assigned in the two places.

Discussion Guide

1. How does the distinction between natural and artificial generation affect the role assigned to a practitioner?
2. What does the account of putrefaction preserve, and what does it say has come to an end?
3. When the work compares plant growth with the ripening of metals, what exactly is offered as support for the comparison?
4. Which uses of mercury, sulphur and salt are names of materials, and which explain a principle or function?
5. How does the account of metallic life differ from the account of visibly moving animals?
6. Why can a prepared or mortified condition be valued above a crude or living one?
7. Which ordinary craft transformations are included in transmutation, and what do they establish about the more ambitious claims?
8. How do separation and transmutation overlap, and where does the text distinguish them?
9. What changes when the maker of a signature is a human being, the Archaeus, or the stars?
10. How does the dedication's demand for secrecy shape the relationship between experience, authority and the reader's ability to question a claim?

Selected Annotated Bibliography

The governing witness, comparison texts and modern research have different roles. A source identified for its catalogue or abstract is not represented as a fully collated historical witness or a fully read modern monograph.

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The Scholarly Work Catalogue

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The English is a later comparison witness. The Getty copy records missing Nature preliminaries, and its body retains a page-number jump after 104. <https://archive.org/details/newlightofalchym00sedz>

The English Title and Dedication

Text Creation Partnership, A92903, the 1650 Nature text with title, dedication and nine books. Preserves English preliminaries omitted from the Getty/Gutenberg presentation. A transcription aid compared with the historical printing, not a Latin source or a modern English reading text. <https://github.com/textcreationpartnership/A92903>

The Readily Available English Collection

Project Gutenberg, *A New Light of Alchymie*, ebook 61112. A convenient historical-English transcription that must be used with awareness of its rearrangement, missing Nature preliminaries and normalised later pagination. It is not the source of this new English translation. <https://www.gutenberg.org/ebooks/61112>

Source and Editorial Credits

Governing Latin: the complete nine-book text with dedication and original marginal notes in the Frankfurt Palthenian collection of 1605, SUB Göttingen PPN578052199, pp. 198–271, scans 182–255. The library’s digitisation and catalogue are credited for access and provenance. The historical text is in the public domain. The library’s IIF record carries Public Domain Mark 1.0:

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Modern attribution research and descriptive catalogues are acknowledged in the bibliography. The edition distinguishes the historical text and margins, translation choices in annotations, and the modern introduction and supporting essays. Every reading passage has a stable identifier and source locator. The nine-book scope does not include the preceding or following treatises in the 1605 collected volume, Sendivogius’s works, or the separate chymical dictionary.

Subject Index

Links lead to whole books or supporting discussions. Stable passage identifiers in the reading text provide finer references across the four formats.

Air

life and spirit, elements.

Alchemy

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Animals

generation, death.

Arcana

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Archaeus

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Art

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Astrum

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Attribution

Composite authorship; Gantenbein.

Balsam

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Chaos

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Fire

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Generation

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Gold

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Heat

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Homunculus

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Imagination

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Imbibition

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Life

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Marginal Notes

Source presentation; how to read the notes.

Matrix

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Mercury

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Metals

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Mortification

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Preservation

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Resuscitation

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Salt

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Separation

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Signatures

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Spirit

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Transmutation

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Virtue

activity, changed powers.