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A few typographical errors have been corrected. They have been marked with [popups](#).

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## HIERONYMI DAVIDIS GAUBII

ORATIO

I N A U G U R A L I S

QUA OSTENDITUR

CHEMIAM ARTIBUS ACADEMICIS JURE ESSE  
INSERENDAM

**HABITA XXI. MAJI MDCCXXXI.**

QUUM PUBLICUM CHEMIAM PRAELEGENDI MUNUS IN ACADEMIA  
LUGDUNO-BATAVA AUSPICARETUR.



HIERONYMUS DAVID GAUBIUS

Medicinae Doctor.  
Ejusdem et Chemiae et Collegii Practico-Medici  
in ACADEMIA BATAVA, quae LEIDAE est,  
PROFESSOR ORDINARIUS  
[script unclear]

Ejusdem et Chemiae et Collegii Practico-Medici  
in ACADEMIA BATAVA, quae LEIDAE est,  
PROFESSOR ORDINARIUS.  
Williamus van der Meer, Batavae Leidae ex aede

*Illustrissimis et Nobilissimis Viris*  
ACADEMIAE LUGDUNA-BATAVAE  
CURATORIBUS,

JOHANNI HENRICO, COMITI DE WASSENAER, Domino de Opdam, Hensbroek, Spierdyk, Zuydwyk, Kernchem, et lage etc. etc.

Equiti ordinis Johannitici, in equestrem nobilium Hollandiae ordinem adlecto, ad supremum foederati belgii senatum delegato etc. etc.

JOHANNI TRIP, J. U. D. Toparchae in Berkenrode, civitatis Amstelaedamensis senatori, cum maxime consulum praesidi, Societatis Indiae Orientalis moderatori. etc. etc.

ARENTIO BRUNONIS, VAN DER DUSSEN, J. U. D. Reipublicae Delphensis senatori et consulari, delegatis praepotentium ordinum Hollandiae adscripto, etc. etc.

*EORUMQUE COLLEGIS*  
*Amplissimis, Gravissimisque Viris*  
*Civitatis Lugdunensis Consulibus.*

ABRAHAMO HOOGENHOUCK, J. U. D. Consulum praesidi.

DANIELI VAN ALPHEN, J. U. D.

HENRICO VAN WILLIGEN, J. U. D.

GERHARDO EMILIO VAN HOOGEVEEN, J. U. D.

*Nec Non Viro Spectatissimo*

DAVIDI VAN ROYEN, J. U. D. Urbis Leidensis Graphiario, Illustriss: Curatoribus et Ampliss. Consulibus a Secretis.

L. M. Q. D.  
Hanc Orationem  
Virtuti et Gloriae Eorum  
Devotissimus  
HIERONYMUS DAVID GAUBIUS.

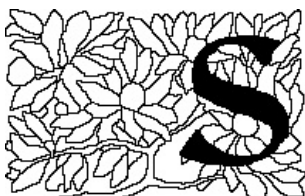
HIERONYMI DAVIDIS GAUBII

ORATIO

INAUGURALIS,

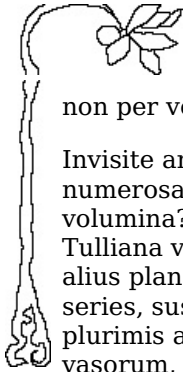
QUA OSTENDITUR,

CHEMIAM ARTIBUS ACADEMICIS JURE ESSE INSERENDAM.



i quae unquam, in scena vitae meae, magna mihi et peregrina obvenit mearum rerum vicissitudo, ea sane est, quam hic nunc subeo. Locus insolitus; inusitata hominum frequentia, horumque omnium conversa in me ora atque oculi; munus inconsuetum; nova prorsus sunt omnia: omnia alienam subito adepta faciem, pari et stupore et sollicitudine percellunt animum.

Scilicet in Academica panegyri perorare jubeor Chemicus, et quidem, dum officii ita poscit ratio, de Chemia. An vero majus uspiam, quam quod Mercurium inter et Vulcanum est, datur



discrimen? An Artium ulla ab Oratoriae elegantis abest longius, quam Chemia? Chemia, inquam! quae aspera, laboriosa, styli incuria politioris, Eloquentiae lenociniis nec studens, nec accommoda, tota in opere versatur, et cultores suos non per verba, sed per ignem sapere, per experimenta Philosophari docet.

Invisite animo saltem, si libet, officinam Chemicam! Ecquid putatis ibi inventuros? An numerosam librorum congeriem, et suis pulchre ordinata forulis sexcenta Autorum volumina? An priscae monumenta Eloquentiae, Rhetoribus tam exoptata; aut suggestum Tulliana voce resonantem? Nihil profecto horum: alia omnino est, quae hic occurrit, supellex; alius plane apparatus: variae nimirum furnorum alia atque alia ratione constructorum, series, sustentando cuilibet ignis gradui appropriatae; erecta tecto tenus loculamenta, quam plurimis artis operibus, ad praeparanda nova mox rursus inservituris, adimpleta; innumerae vasorum, materie et figura discrepantium, species; carbonum cespitumque acervus nunquam defecturus; praesto ad usum cola, cribra, spathulae, folles, forcipes, et si quae alia vel alendo igni, vel regendo requiruntur. Haec inter artificem videbitis, non otiose ad pulpita desidentem; sed atras carbone manus, taciturna attentione, admoventem operi: fumo, cineribus, fuligine obsitum, jam igne intensissimo durissima liquare metalla; jam vivis urere flammis vegetabile; hinc cautissime opposita committere corpora, flammivomos mox in conflictus ruitira; illinc, calore moderato, rerum virtutes, exacto ad numerum stillicidio, elicere; electas alibi, tepore naturali, unire arctius et digerere; verbo: totum inter furnos defixum, excitando, applicando, moderando igne occupatissimum, hujus in corpora efficaciam modis omnibus explorare. Hoc opus est, hic labor ejus unicus.

Vane heic quaesiverit quispiam limatas Augustaei Seculi locutiones: vanus amoena Rhetorices illectamenta. Non aures hic demulcentur, sed oculi: nec verbis conciliatur adsensus; sed rerum testimoniis extorquetur.

Quid ergo animi putatis esse Chemico? Ubi a sordida Vulcani officina in spectatissimum protractus locum, a furnis evocatus in suggestum, solis sacratum politissimis sermonibus, Oratoris sustinere cogitur provinciam? Quid materiei creditis suppetere? Dum coram Principibus in republica Viris, in consessu sapientissimorum Professorum, in conspectu denique hominum in omni scientiarum genere perfectissimorum, de Arte, plerisque horum ignota, disserendi incumbit necessitas? Sane si aqua haeserit trepido, facilem merebitur veniam.

Haec vero me sors, hoc meos hodie humeros premit onus: nec, quibus fulciar, ulla domi praesidia mihi nascuntur. Quin probe nota virium mearum tenuitas, et naturalis mihi, utut agendis rebus publicis inepta prorsus, verecundia id etiam animi dejicit, quod audax omnia aggredi juvenus forte addidisset.

Undequaque igitur circumspicienti, unica demum superest, quae locum refugii praebet, singularis Vestra, A.O.O. benevolentia, toties experta iis, quos hoc e suggestu dicendi arduum pressit munus. Facit haec, Vos ea esse iudicii lenitate, suo ut quemque modulo metiti, majora viribus nequaquam exigatis: quod quidem aliis dum generose adeo exhibuistis, quidni a Vobis et mihi pollicear ego, pro quo tot intercedunt majoris etiam momenti rationes? Justa certe petitio repulsam ab aequo tulit nemine.

Quo fretus ipsi me accingo operi, cui Thema erit ex eo, quod auspicio, officio desumptum, et Vestra non indignum celebritate. Conabor nimirum ostendere, *Chemia Artibus Academicis jure esse inserendam*. Quod dum ago, faciles in audiendo pariter et judicando Vos praebentis mihi, enixe obsecro: uterque enim seu felix fuerit, seu sinister Orationis meae eventus, Vestrum me semper ad favorem allegabit, huic ut vel referam gratias, vel veniam impetraturus, supplicem.

Academiae ea, qua hodie constitutas lege videmus, loci sunt publici, docendis discendisque scientiis et artibus nobilioribus dicati, iisque hinc conditionibus et mediis instructi, quibus propositus iste finis potest obtineri. Non ergo arti aut scientiae cuilibet sua in his schola conceditur; sed ultra vulgi captum elevata, *Nobilitatis* quodam emineat splendore necesse est, in Academiis quae pedem figere voluerit disciplina.

Quodsi igitur vera hujusce *Nobilitatis* insignia, palam exposita, Arti Spagyricae competere certis adstruxero documentis, nonne propositi hodie mei constabit ratio et veritas?

Virtus sola atque unica, si Poetae habenda fides, *Nobilitate* impertit hominem: nec unius haec diei dos est; nec vera, quoties praeterquam ex natalibus, aliunde probari nequit. Idem vero et eadem ratione obtinet in disciplinis, modo, quod ibi datum virtuti est, heic detur usui. Laureolam certe quaerunt in mustaceo, qui artis ostensuri dignitatem, pulchre hoc sibi agere videntur, primis ubi a seculis deductam ejus originem, objective et operum miram jucunditatem, aut quot numeraverit, quantosque sui cultores exponunt, parum interim de utilitate solliciti, qua sine tamen sordent omnia, antiqua fuerint, dulcia, aut quibusvis clara sectatorum nominibus: externa enim isthaec sunt, et veram potius ornant *Nobilitatem*, quam constituunt. Utile mensura est, illam qua metitur, verum qui rebus pretium statuere solus novit, sapiens.

Quaecunque hinc usum adfert eximium vel homini in se seorsum spectato, vel humanae societati, ea demum disciplina jure *Nobilis* habetur. Quum vero pars hominis melior, mens sit, hanc quae recti bonique facit studiosam, aut veri auget perspicientia, utique aliis omnibus antecellit. Neque tamen hac multo inferior, quae corporis curat sanitatem: ea namque magis optabile quidquam vix datur mortalibus; deficiens una praegravat animum et deprimit. Hoc quae opus sibi sumsit

excolendum, ars dicitur Medica: priori studet cum caeteris Philosophia; una sui parte moderandis occupata affectibus, alteram extendendis humanae intelligentiae limitibus in cognitione rerum existentium dedicans: utramque ergo *Nobilissimam* suo recepere gremio Academiae, et jure civitatis donarunt, ne ipso quidem livore contradicente.

Habent autem ambae hae objectum patens quam latissime, et varias hinc sub se complectuntur disciplinas, quae partesne dicendae an ministrae? opera singulae inter se diversissima, ad eundem tamen ultimum finem, cum principe, sub qua militant, scientia communem, omnes collineant. Quum itaque et has sunt quamlibet commendet usus, et summa ad priorum perfectionem necessitas, hinc *Nobiles* etiam ab Eruditis jure habitae, debitum in Academiis locum obtinere.

Nonne vero talis est Ars Chemica? Cur ergo duram adeo haec experta sortem, nonnisi post plurimas agitatas lites, liberam sui culturam in scholis Sapientum impetrare potuit? Sane, rigoris hujus justo acrioris causam vix determinaverim: si tamen, quod vero est simillimum, dicam, videntur ipsius Artis in se spectatae ignari, Artificum duntaxat habuisse rationem judices, quorum ex arbitrio tum pendebant Academiae.

Nata nimirum inter Metallarios et Pyracmonas Chemia; ab illiterato hoc rudique hominum genere primum exercita; deturpata dein et obscurata ab impostoribus; in se horrida, laboribus plena, plena periculis; ab otiosis speculationibus aliena; ignem, fumos, cineres, sordes spirans, vix ulla amoenitatis specie cuiquam se commendare potuit, nisi, qui penitius eam introspicere dignaretur: atqui externam ejus faciem monstrosam adeo deformem reddiderat cultorum et ruditas et malitia, ab interioribus ut perlustrandis deterrerentur Eruditi, eodem haec, si non pejori de luto esse conficta, rati. Frustra ergo suam oravit causam Chemia talibus coram Arbitris qui praejudicata obcaecati opinione, et usus ejus eximios, et summam necessitatem praetervidentes, sententiam prius tulerant, quam cognovissent. Factum hinc, a publico ut Sapientum commercio exclusa, privatorum exerceret manus atque ingenia, varias sub variis passa fatorum vicissitudines, nec forte unquam Academicos in suggestus emersura, nisi, quem nacta tandem est, causae patronum, an rabulam potius? Eremitam fortuna major quam prudentia secundasset: hic enim coeco gementis hujus disciplinae amore, captus, quod autoritate rationali et luculentis rerum testimoniis agendum fuisset, bullato id verborum nugacissimorum apparatu, mox vero, qua erat morum insolentia, igne etiam et armis tentare non dubitavit, successu certe adeo felici, ut ausu hocce temerario intrusa in Academiae Chemia sede potiretur, vel ipsi contradicentium cineribus inaedificata. Hanc autem quamvis vi partam, infirmoque hinc nixam pede, repressa paulo post fundatoris ejus tyrannide, rursus pessum dederit impatiens cogi, litteratorum gens liberrima; id tamen inde Chemiae boni accesserat, quod durante isthac statione sua, propior Eruditis posita, nonnullos horum, vividissimis quibusdam radiis, per offusas sibi quisquiliarum tenebras evibratis, latentis intus foecundissimi luminis sui potuerit commonefacere: quo equidem animadverso illi mox excitati, ulterius ad scrutinium se accinxere, demtaque sensim imposturarum larva, perruptisque, quibus obvolvebatur, ignorantiae nebulis, nudam tandem salutantes, Erudito Orbi produxere intuendam. Tum ergo propriis jam refulgens radiis Chemia, tum demum, quae personata displicuerat tantopere, nativae suae reddita faciei, adeo pellexit Sapientes, dignam ut reputaverint, ipsorum quae in scholas adoptata, strenue coleretur.

Nec sane, si fateri vera velimus, alia Chemiae opus est hedera, nisi, ut libero a praejudiciis oculo nuda, prout in se est, adspectetur: tam necessariis enim pollet usibus, tot jucundissimis arridet oblectamentis, Naturae ut curiosum sui facillime pertrahat in amorem pertractumque ullo sine taedio detineat. Utique, si sola contempler bona, quibus quascunque fere artes manuales, humanae vitae commodis inservientes, perfundit Chemia, quot, quaeso, et quanta sunt! Dies deficeret enumerantem: minima tamen haec, et pro parergis tantum aestimanda. Nobilior est, quam menti, utilior, quam corpori praestat, opera primaria: huic namque illibatam tuetur sanitatem, amissamque restituit; illi vero brevissimam monstrat in adyta Naturae viam, latentisque in profundo veri mira felix aperit, Philosophiae hinc et Medicina conjunctissima, nec sine detrimento inde separanda.

Id vero ne precario Vobis obtrudere velle videar, evidentis nunc rationes proferam, quibus asserti constet veritas: est enim palmarium hocce argumentum, quod si evicero, proposito Orationis meae Themati satisfactum arbitrabor.

Qui corporum naturalium proprietates, vires et effectus per suas quaeque causas sciunt aut rimantur, Physici dicuntur; et haec eorum scientia appellatur Physica, Philosophiae generatim sumtae pars non minima. Ejus hinc objectum est, quidquid conceptum corporis ingreditur, aut eo reduci potest, sive illud commune sit omnibus corporibus, sive peculiare singulis: quum enim Materia indefinita, solis gaudens proprietatibus corporeis generalibus, in rerum natura non detur, nec dari possit; sed tantum sit idea intelligentiae, clarioris doctrinae gratia effecta; corpora autem, quae re existunt, omnia individua sint, id est, adeo limitata et determinata, ut, praeter universalem illum Materiae conceptum, involvant peculiare etiam alias affectiones, quibus singula a singulis distinguuntur, et quae faciunt, ut corpus sit hoc praecise corpus, et non aliud: inde clarissime liquet, communes illas Materiae dotes non modo, sed et imprimis cuilibet corpori singulari proprias Physicae esse considerationis, utpote, quae corpora naturalia, prout vere existunt, vel existere possunt, contemplatur.

Proprietates corporum, quatenus certis quibusdam actionibus producendis sunt idoneae, dicuntur vires: ex his autem, tanquam ex causis, fluunt, quoscunque observamus, effectus corporei, qui hinc determinatam suarum quilibet causarum naturam sequentes, si singularibus a

viribus emanarunt, et ipsi necessario erunt singulares, et contra generales, si a generalibus.

Quodsi igitur ea hic daretur simplicitas, ut peculiarium quorumvis corporis attributorum sufficiens ratio in communi ejus natura fundaretur; jam equidem, praeter solam Mathematicorum operam, nil opus esset Physico ad finem suum obtinendum: hi enim ideam corporis universalem dedere omnium verissimam, et methodum simul exactissimam, quaecunque in illa continentur, eliciendi. At vero quam procul abest, haec quin ita sese habeant! Detegit attentior observatio innumera certe in corporibus adeo penitus peculiaria, ut cum generali illorum indole vix quidquam commune videantur habere, nisi solum, cui inhaerent utraque, subjectum: talia autem incognita si quis ex universali illo Geometrarum conceptu, utut accuratissimo, a priori eruere, aut cognitorum etiam ex hoc rationem exsculpere postulet, nae is et operae simul et olei jacturam sero doleat!

Atqui maximopere tamen expedit eorundem scientia Physico; quum in his potissimum haereat id, quo corpora a se mutuo intrinsecus distinguuntur. Ea itaque ut evolvantur, non illa certe, quae a data causae idea ad intellectum effectus progreditur, sed prorsus alia incedendum via est. Nimirum quidquid de corporibus vere concipit mens, id omne vel Phoenomena sunt ipsi per sensus communicata, vel formata inde judicia: proprietates autem et vires corporeae in se primitus imperceptibiles latent; effectus tamen producunt sensibus apparentes, qui determinatae ipsarum naturae proportionales, hujus hinc cognitionem simul exhibent, adeo, ut quo ditior fuerit observatorum cujusque rei effectorum supellex, eo de ejus indole plus certi rescitur. Haecque adeo sola superest indagandis corporum singularibus via retrograda; dum alteram illam, quae a priori haec investigat, humano ingenio imperviam prorsus Natura fecit et inaccessam. Sedulus hinc rerum scrutator experimentis prius quam ratiociniis insudat, sensuum adminiculo sua examinat objecta, horum peculiare animadvertit effectus, quos sponte sua vel praevio tentata consilio ediderint; corpora corporibus adplicat, rursusque ab invicem removet, ut, qui e solis, quique e conjunctis fluant motus, experiatur; tum vero ex hisce gnaviter collectis, sibique mutuo collatis quaesitam corporum naturam propriam et singulares dotes a posteriori demum determinare haud infelix praesumit. Nec sane ullo unquam tempore patuere clarius Naturae interiora, quam quo huic institum est tramiti: parum in Physicis proficere, hunc qui vel ignorarunt, vel neglexere scientes.

Sed ecce! dum Physicis totus inhaereo, lenissimo ipsius materiae quasi flexu, in intima Artis Spagyricae viscera me devolutum sentio: reducit me in Chemiam, quae inde diverterat Physica; hoc ipso docens affatim, quam sit propinqua ambarum cognatio, quam indissolubilis nexus.

Nonne enim totum hoc, quod modo diximus, unius prope est Chemiae opus? Nonne haec corpora singularia fere omnia, quae Physicae sunt considerationis, speciatim evolvenda sibi sumit? Imo vero vix aliud est Chemiae propositum, quam corporum particularium examen. Quidquid Fossilium in imis terrae visceribus excoquitur; quidquid protrudit Vegetabilium, divite de sinu, foecunda tellus; quidquid denique Animantium ubivis fovet alitque alma parens Natura; id fere omne, modo vel sensibus manifestari vel capi vasis queat, suo Chemia sistit examini, rimatur, penetrat: penetrat, inquam, usque eo, ut quaecunque in illis vulgaria, facillime obvia, aut extus adhaerentia despiciens, tanquam se indigna, aliis relinquat Artibus; sibi vero magis ardua quaerens, sublimiora, abstrusiora, intimas rerum virtutes, ultima principia, prima elementa perscrutetur, hoc tantum, nec alio venditura pretio suos labores.

Toto sane die hoc agunt strenui Artis hujus cultores: corpora alia aliis adponunt, rursus ab invicem separant, soluta coagulant, coagulata solvunt, motus inde obortos observant, mutant, novos excitant instrumentis efficacissimis, variata in omnes modos encheiresi. Igne utuntur, Elemento mobilissimo, validissimo: Menstrua praesto sunt efficacissima, juxta solvendi naturam appropriata. Quid autem his arduum? Quid inaccessum? Haereant particulae corporis Adamantino inter se vinculo; sint ejus viscera aere vel triplici praemunita; lateant in profundissimo vires; talium profecto arietum impetu dissilient, effringentur, patebunt.

Quidquid vel agunt corpora vel patiuntur, solo id omne motui venit tribuendum; per hunc et omnis eorum sese exserit efficacia, et vicissitudines quaecunque producuntur: hisce igitur disquirendis si navat operam Philosophus, quanam brevior poterit via, aut potentior quonam adminiculo sui se voti reddere compotem, quam captis per Ignem experimentis? Cujus equidem adeo mobilis est natura, ut praeter motum aliud esse nihil, Viri Sapientes crediderint. Est vero et Ignis, quo pollet ipse, motum aliis communicare corporibus paratissimus; et vis ejus, per plures gradus intermedios, intendi arte vel minui pro lubitu potest: unde certe quam optatissima nascitur Physiologo opportunitas, ejus ope abditissimas quasque corporum affectiones enucleandi. Istitis enim applicatus, simul ea in motum ciet, in agilitatem propriam sollicitat, medullitus concutit, vires eorum evocat, auget, mutat, partes constituentes a se mutuo separat, separatas sigillatim combinat, proprias rursus harum virtutes in actum lucemque deducit, adeoque nudis usurpanda sensibus praebet, quae alia quacunque arte adjuti attingere potuissent nunquam. Quid autem hoc jucundius Naturae scrutatori? Quid utilius? Quid magis necessarium?

Supersedeo horum in fidem rerum adducere testimonia, ne in immensam mea excrescat Oratio. Latent illa neminem, nisi qui misere adeo deperierit vetustatem, recentiorum ut in scriptis hospes sit. Omnium instar sint bina illa fulgentissima Magnae Britanniae Lumina, *Boyleus* et *Newtonus*: quibus certe haud perspicaciores Naturae Mystas nostra agnoscunt secula; an vero videre retroacta? Hi tamen in detegenda singularium corporum indole, in eruendis propriis viribus, vix alio quam ad Chemiam recurrunt. Quidquid fere inventum est solidi et pulchri circa naturam ignis, caloris, lucis, frigoris; quidquid innotuit de vera colorum, saporum, odorum indole;

quidquid de motuum terrae, igniumque subterraneorum causis; quidquid de Magnetismo corporum, et vi attractili, id omne Chemicis debetur experimentis.

Est ergo Chemia extendendis Physicis praestantissima: est Philosophiae experimentalis tam arcte copulata, ut, qui praeceptis ejus mentem non formaverit, ineptus sit videndis Naturae arcanis. Utrique litem movet de jure Academico, qui uni movet.

At videor mihi audire nonnullos Vestrum objicientes: Eho! Hancine tu Artem tot laudabilia praestare ais opera, et tam felicem esse in detegendis corporum virtutibus? Hancine absconditarum veritatum cognitione ornare animum adseris? Quae gerris anilibus, historiis fabulosis, confictis turbati cerebri somniis ad nauseam usque offerata, suos his cultores impraegnat; nec aliud quid, praeter arcana crepat nunquam visa, saepe impossibilia, et sicubi vera, non tamen nisi denso involuta peplo exhibet; adeo, ut auram quamvis fide Chemica tutiorem esse, verissime cecinerit Poeta.

Hisce equidem haud repugno; nec inficior: pleni sunt talibus libri, plenae Chemistarum voces, quorum pars magna servulo illi Terentiano simillima, quae vera audire, tacent et continent optime; sin falsum, aut vanum, est, continuo palam faciunt. At enim vero ecquis imprudens adeo, aut tam corruptus sederit ad hanc rem iudex, Arti ut imputet errores, delira quos et fraudulenta horumce Pseudochemicorum turba dispersit? His quia turpe videtur errasse solos, fucata hinc verborum specie allectos quoque alios iisdem implicant erroribus, et, dum propria primi periere ignorantia, sequentes in commune secum trahunt exitium; id saltem adsecuti, quod, sub coacervata aliorum supra alios strage, primae tegatur ruinae causa et autor. Non sane hi, praeter nomen, quidquam de Chemia possident; ne hoc quidem digni: quum suorum duntaxat sensuum cupiditatibus, aut malesano natis in cerebro, hypothesium monstris obsequiosi, veras Artis regulas nec sciunt, nec ad illas conformentur.

Longissime profecto abest Chemia, inanibus quin credat speculationibus: aurium ipsarum sublesta illi fides est; solo acquiescit oculorum testimonio. Hinc quicumque caste eam colunt, in singularibus primo corporibus, juxta praescriptum Artis, summa exactitudine, et accuratissima omnium phaenomenorum observatione, Naturam ducem secuti, varia instituunt experimenta; horum dein singulos quosque eventus sensibiles, bona fide, notant, et ex his demum liquidissime perspectis, et sibi invicem collatis, severitate Mathematica eliciunt, quae clara et individua sequela inde deduci possunt: haecque tandem sunt, non alia, quae pro veritatibus et Theorematis agnoscunt veri Chemiae cultores. Quid vero est, si non haec certitudo est?

Quae cum ita sint, neminem jam Vestrum dari putem, qui perneget, rationali Chemiae exercitio mire adaugeri humanae mentis intelligentiam. Reliquum est, ut paucis, quos corpori adfert, usus exponamus, Arti dum Medicae, hujus quae curam gerit, artissime sociata, utilissimam pariter ac maxime necessariam praestat operam, non aliunde, nisi e Chemiae penu derivandam.

Physicae Medicinam firmissime conjungi, utriusque docet contemplatio: haec itaque, quo cum illa cohaeret vinculo, eodem et Chemiae nectitur; nec hujus demonstratio plura exigeret, nisi propior adhuc ambarum daretur affinitas.

Ars Medica objectum sibi primum habet corpus humanum, vivens, hinc individuum, singularissimum, cui definitas aliorum corporum singularium vires, determinatis sub conditionibus applicando, requisitas in fine suo mutationes imprimit: tota ergo versatur in singularibus, et si ulla alia, certe haec virtutes corporum peculiares, et in se invicem actiones, quam distinctissime perspectas postulat: quum autem hisce indagandis, prae reliquis quibuscunque Artibus, Chemia potissimum omnem suam et unice et felicissime impendat operam; hac sine mancam fore mutilamque quis non videt Medicinam? Hinc est, quod mox, ac plebi erepta, Litteratos inter coepit vigere, nativo suo tum splendore fulgens, Chemia, adeo in sui amorem et culturam omnes pertraxerit Medicinae filios, horum ut praeprimis facta fuerit opus, horum deliciae. Quid? Quod in ipsam quoque dein Artem Salutarem introducta, communem sibi cum hac finem adoptaverit, novo tum nomine Jatro-Chemices, pro parte sui longe maxima, insignita: quo quidem sibi placuit tantopere, omni ut ilico conatu totam se promovendis sociae suae pomoeriis indefessam dederit. Nec profecto, nisi ignarus rerum, pauca ea dixerit, aut flocci aestimanda, quae inde in Medicinam redundarunt, bona: quamcunque enim hujus partem, seu speculatione quae absolvitur, seu ipsa quae in operis versatur exercitatione, percurras; utraque innumeros clamat Chemiae usus; utraque consortium ejus ad sui perfectionem summe necessarium exemplis docet infiniris.

Physiologiam primo Medicam, si libet, contemplemur. Undenam, quaeso, constitit, firmarum corporis humani partium Elementum ultimum et basin esse Terram Virginem, simplicissimam, constantissimam, medio glutine oleoso, pariter fixissimo, adunatam? Eo certe non progreditur subtilitas Anatomica: sola id liquido docet Chemia. Undenam vero fluidorum ejus singularis indoles et propriae innotescunt vires? Excepta enim generaliori liquidorum idea, aliud illis simile frustra quaesiveris extra regni Animalis terminos: imo sunt ipsa etiam inter se quam diversissima. Deficit heic Hygrostatica: Chemia sola opitulatur; haec est, cui, quantum fere in his sapimus, debemus: Sanguinis naturam mediam nec Acidam nec Alcalinam; Seri ejus, ad calorem naturali majorem, facile coagulum; Bilis indolem saponaceam; Salivae, succi Pancreatici, Lymphae temperiem, facultates, et innumera alia nesciremus, abfuisset Chemia. Quid nunc functiones memorem, hujus adminiculo pulcherrime evolutas? Intimam alimentorum in primis viis solutionem; succi inde Chylosi et Lactei proventum; cibi potusque necessitatem, appetentiam; originem salium et partium sulphurearum ex ingestis fere insipidis; insignem humorum per vires

circuitus mutationem (ut alia praeteream) parum apposite explicuere, quibus clarior Chemiae lux nondum adfulserat.

Quodsi nunc pedem promoveamus ad partem Medicinae Pathologiam; innumeri, iique impeditissimi occurrunt, circa morborum causas, naturam et symptomata, nodi, quibus solvendis unica par est Chemia. Quis miros salium morbosorum in Scorbuto, Arthritide, Lue Venerea ortus, variam indolem, alia ex aliis effecta unquam pervidisset? Quis fontem Acidi aut putridi oleosi, in primis viis, Hypochondriacis tam molesti? Quis Calculorum in Cysti Fellea, Renibus, et Vesica Urinaria proventum? Quis cariei ossium, adjunctique foetoris causam? Quis tetras stagnantium humorum degenerationes in tenacitatem corneam, aut summam putredinem, acrimoniavam corrosivam? Quis denique caloris et frigoris, circulationis auctae vel diminutae varias in permutandis humoribus vires tam pulchre in lucem ponere potuisset, nisi Chemia praetulisset facem?

Ex binis prioribus Medicinae partibus doctrina de Signis maximam partem derivatur: redundant ergo in hanc etiam, quos in illas confert Chemia, usus. Exempli in promptu sunt uberrima: Sanguis de vena missus nonne luculentum internae dispositionis praebet indicium? At veram ejus indolem, nisi examine Chemico, perspicere nemo distincte potest. Latet vera Lactis nutricum natura, quem Chemia latet. At quanti est, exactum de hoc iudicium fere posse! Dum toties miseris illud infantibus, veneni instar, infinitorum cruciatuum, mortisque fit causa, dulcem quod vitae fomiteae, sanitatem et incrementum debebat addere. Si solis Medicis Medicus nunc loquerer, plurima hic de Sputis, de Sudore, de Urinis et Alvi excrementis dicenda superessent, quae satius tamen est involvere silentio; ne his audiendis minus adsuetosprehendat nausea.

Offerunt se denique posteriores duae Medicinae partes, Hygieine et Therapeutice; quae uti inter alias nobilissimae, propius jam fini accedunt Medico; ita in has prae reliquis benefica Chemia, quidquid fere utilis, quidquid habet boni, sincero adeo affectu, congressit, ut ne sic quidem satisfacisse sibi visa, majora viribus tentaverit, ipsos Naturae, ne dicam Artis limites vanis transgressa pollicitationibus. Ortum hic error ab artificum duxit ignorantia, qui miram videntes complurium suorum inventorum energiam, incitabantur eoque, finitae ut arti inesse crederent infinita. Hi igitur, quae commiserere, sua ipsi delicta luant; nec debita ideo Chemiae laus denegetur, collata quam ad sanitatis tutelam, morborumque propulsionem opera meruit. Quid enim? Nonne ejus artificio esculentorum et potulentorum, aquarum, Vinorum, Cerevisiarum natura, virtutes et vitia cognoscuntur optime? Nonne Therमारum illa, Acidularum, aliorumque fontium, vi Medicata insignium, elementa, compositionem et facultates tam liquido manifestat, ut vel imitetur, et naturalium defectum arte factis suppleat, haud minoris fere efficaciae? Medicamentorum principia, vires, agendi modus, et quidnam in unoquoque id sit, cui maxima insidet potentia, perspicacissimum quemque, sine analysi Chemica, fugiunt. Quid nunc commemorem plurimas illas Mortalium aegritudines, quarum legitimam medendi methodum sola suggerit Chemia? Quid sexcenta enumerem selectissimae virtutis medicamina, quorum inventionis gloriam illa sibi vendicat? Taceo benignissimam ejus operam, qua lethalem nonnullorum corporum ferociam, laudabili adeo eventu, cicuravit, e venenis ut remedia evaserint tutissima aequae ac efficacissima. Praetereo singularem ejus, in Medicamentorum viribus acuendis, extrahendis, in compendium reducendis, et sub alia et alia gratiori forma exhibendis, dexteritatem: si enim singula, pro dignitate, nunc prosequi susciperem, dies dicentem deficeret. Videte, quae illustris Boyleus, quae Bellinus, Bohnius, Stahlius, Hoffmannus, aliique laboribus suis Chemicis in Medicina praestitere: verum quid ad externos provocare opus? Immortalia Vestrum omnium in manibus versantur scripta, nunquam periturae credidistis memoriae acta praestantissima Viri vere Magni, quem fortunato coram hic contuemur vivum O diu! sospitemque: volvite haec atque revolvite, dictorum testimonia inventuri omni exceptione majora.

Ex hisce igitur constat affatim, quanti sint usus, quot probatissima inventa, quam innumera beneficia, quibus Chemia quascunque Medicinae partes cumulat largissime: patuit, quam amplam, quam necessariam ab hac mutuetur Philosophia experimentorum supellectilem. Nec quis jam porro inficiatur minime segregandam illam esse a numero Artium Academicarum, quae binis harum tam arcto vinculo cohaeret.

Ne tamen ullus relinquatur dubitationi locus, addendum aliud adhuc est argumentum, illos convicturum, qui forte oggesserint, alias complures dari artes ministras, quarum licet egeant adminiculo disciplinae nobiliores, ea tamen non est dignitas, harum ut albo inserantur.

Id equidem si in Chemiam quis contorserit, sciat is, non servile esse ejus ministerium, sed tale, ut quam Academicis scientiis praestat operam, eandem ab his exigit vicissim, et mutuetur reciprocam. Quemadmodum enim, ut perfectum quis in Physicum evadat, bonus sit Chemicus oportet; ita non minus bonum decet esse Physicum, ad plenam qui Chemiae notitiam adspirat: ultra vulgus sapiat, emunctis accedat naribus, et imbutam artibus ingenuis habeat mentem necesse est, qui in Chemia laudabile praestare quidquam, et verus ejus cultor audire gestit.

Quid enim? Nonne saltum facit maxime absonum scientiae cujusdam addiscendae cupidus Tyro, si generalibus illius regulis nondum cognitis, ad singularia mox pedem promovet? Nonne a simplicioribus ad magis composita, a facillime obviis ad abstrusa, Naturae ipsius ordo commonstrat viam? Cuinam igitur tam parum nota sunt bonae praecepta methodi? ad corporum ut singularium descendere examen, horum investigare occultas vires, affectiones proprias, effecta peculiariter attentet, antequam universalem objecti sui ideam sibi comparaverit. Addiscat prius, quid sit corpus? Quenam ejus natura generalis? Quantum a mente differat? Virium praemittat et proprietatum communium indaginem; et superficiem ante contempletur, quam in



viscera penetrat: Artem calleat ea, qua decet, accuratione instituendi experimenta: denique nec legum sit ignarus, quae ex datis, justo ratiocinio, legitimas docent elicere conclusiones et Theoremata: hocque demum apparatu instructus, operi sese accingat Chémico, fructus inde non poenitendos adsecuturus.

Qui vero aliter se hac in re gerunt, nae illi oleum perdant et operam! Andabatarum enim more procedentes, impingunt undique; et emendato intelligentiae destituti lumine, quo in Chémiae adyta irrumpunt profundius, eo hallucinantur magis; nubemque tandem pro Junone amplexi, finem laborum omnium, erroribus, ignorantia, paupertate coronatum vident sero et dolent. Hi sunt, quorum illotis olim manibus dum tractabatur Chémia, foedissimis deturpata errorum et fabularum maculis, adeo sorduit, invisae ut Sapientibus et suspecta esset. Hi sunt, a quibus dein Eruditus Orbis, una cum Arte nobilissima, detestandas illas accepit falsissimarum opinionum pestes, inde in omne fere Scientiarum genus propagatas, contagio vix non indelebili. Verificatum hic tritum illud: Optimarum rerum abusus pessimi.

Non tamen isthaec Artis sunt sed artificum: hos enim quamprimum contigit tales esse, quales sibi postulat Artis sublimitas, viros Mathematicae doctos, qui sprete magistrorum auctoritate, Naturam ducem secuti, res ipsas, uti in se sunt, contemplari, et de iis judicare, quam praepostere credere maluerunt, mox sordibus deterisis, aliam adeptam faciem Chémia, et quibus scatebat ipsa, et qui inde in alias irrepserant scientias, errores non expunxit solum; sed horum etiam locum amplissimis supplevit inventis, solidissimis veritatibus.

Verum desino exhibendis veri Chémici requisitis immorari diutius; ne, horum plurima mihimet ipsi desse nimis perspicere, tantillum etiam, quod mihi restat, animi, quo aliqualem adhuc in munere hocce meo speraveram successum, prorsus abjiciam, et, nedum facti virium tentamine, palaestra fugiam imbellis.

Ex dictis autem abunde innotescit, Chémiam capti vulgi superiorem, cultores exigere, praeliminari scientiarum Academicarum supellectile instructos: nec jam ulterius urgent, quae modo posse objici videbantur.

Quare, nisi vana me eventus spes fefellit, est, cur proposito paratam fidem suspicer: constitit enim, Artem Chémicam praeclarissimis, quos animi pariter et corporis culturae praestat, usibus insignem, Philosophiae et Medicinae maxime proficuum, summe necessariam, indissolubili haerere vinculo, utrinque firmissimo, hae ut illius opera utantur, et vice versa. Quid demum impedit, quo minus concludam, *Chémiam, Artem Nobilem, Artibus Academicis jure esse inserendam?*

Vestra igitur, ILLUSTRISSIMI ACADEMIAE BATAVAE CURATORES, una cum NOBILISSIMIS VESTRIS COLLEGIS, AMPLISSIMIS HUIUS URBIS CONSULIBUS, Vestra, inquam, sapientissima est cura, quod in celeberrima hac, cui tanta cum gravitate, et inusitata adeo vigilantia praestis, Academia, huic quoque disciplinae, largo firmatam pretio, sedem statueritis, et officinam, ejus exercitio aptissimam; nec hanc volueritis diu frigere, postquam impetrata, quam petiverat, missione honorificentissima, inde exivit Vir, ob sociatum stupendae eruditioni plusquam Herculeam laborum tolerantiam, eo certe proventus in Arte, verus ut Chémiae Restaurator merito laudetur omnibus.

Quod autem Viro huic incomparabili, nec ambientem me, nec promeritum subadjungere Vobis visum fuerit, Atlanti Pigmaeum; id equidem quoties attenta mente perpendo toties immensum, quo Vestra meritis meis praeponderat clementia, momentum attonitus miror, veneror humillimus. Juvenem namque, alienigenam, nullo dum ingenii dato specimine notum, tanto quod condecorare honore, gratiosissime sitis dignati, cuiam magis rei adscribam, quam immensae Vestrae benevolentiae et favori inaudito?

Temerarius equidem videri possem, quod nulla tenuitatis meae ratione habita, hanc amplexus sim provinciam, in qua exequenda, post tantum Praedecessorem, ne mediocris quidem applausus spes mihi affulget. At enim inglorius plane sit oportet, animoque nimis abjecto, qui hinc dignitate, illinc liberalissimo excitatus honorario, torpeat, nascentis fortunae suae incurius. Me sane, ut ut exiguas probe agnoverim vires, hi tamen stimuli haud pupugere insensilem: novum insuper admovit calcar favoris plenissima Vestra, de me meisque studiis concepta, opinio: animum denique addidit consueta Vobis et propria generosae mentis indoles, qua ultra, quam juveniles pertingunt vires, a juvene nil exigitis. His adductus conditionibus accepi munus: his fretus illud nunc auspicor.

Faciet insculpta animo meo sempiterna hujus Vestrae in me munificentiae memoria, omnem ut moveam lapidem, ea ne plane indignus videar. Industria pensabo vires, ingenium assiduitate, labore indefesso aetatem, animo denique fulciam corpus, et quidquid in utroque est vigoris, totum id promovendis Academiae commodis unice sacrabo.

Sic, spero, fiet, ut beneficii, a Vobis apud me collocati, Vos non poeniteat, nec me pudeat accepti. Quod agentem juvet bonorum omnium scaturigo inexhausta, Deus! A quo et Vobis, ILLUSTRISSIMI ACADEMIAE PROCERES, perpetuam salutis omnigenae et felicitatis intaminatae abundantiam, toto ex animo, apprecor.

Ad vos me converto, CELEBERRIMI PROFESSORES! Vos alloquor, Clarissima hujus Academiae Lumina! Miramini enim, dubio procul, juvenem, plurimis Vestrum incognitum, nonnullis autem, sexennio vix elapso, inter discipulos numeratum, eo procedere temeritatis, haec ut conscendat subsellia,



Vestris sacra doctissimis vocibus, Vestris oraculis. At temeritatem ne putate, quae justa tantum aemulatio est, studiorum commodis inservitura. Quid quisque possit, nisi tentando, non didicit. Probabitur itaque ausum huncce meum, meimet ipsius notitiam mihi exhibiturum, nec sane a fastu, a quo merito sum alienissimus, sed a latente in praecordiis honestae gloriae igniculo profectum. Juvat magnorum Virorum ad exempla componi. Vos igitur praeceuntes, a tergo conspicabor, et, dum nunquam dabitur assequi, saltem ex intervallo sequar. Quo ipso Vestram non praepediens viam, certa tamen reperero vestigia, quae gressus dirigent meos, nec aberrare sinent. Hujus interim beneficii ea erit apud me vis, ut omni vos honoris et observantiae cultu, pro ea, qua estis, dignitate, venerabundus suspiciam.

Vobis praesertim, qui Philosophiae et Medicinae sacra, tanto cum omnium applausu, panditis, VIRI FAMIGERATISSIMI! Vobis, dum et publica me et privata voce formavistis, omnibus et singulis, jubente ita pietate Praeceptoribus debita, sigulari ut reverentia totum me in aeternum devoveam, pertinax faciet acceptorum memoria.

Est hinc, cur Tibi, VIR ACUTISSIME, PERSPICACISSIME 'S GRAVESANDE! publicas hic nunc persolvam grates, quod et privato me labore inconcussis Mathematicae Tuae Philosophiae praeceptis imbuere non sis dedignatus.

Tu quoque, ANATOMICORUM DEXTERRIME, SUBTILISSIME ALBINE! Qui, pari opera, necessariam adeo fabricae humani corporis cognitionem per aures mihi et oculos infudisti solertissime, animum Tibi meum longe obstrictissimum nunquam non comperies.

Te vero, CELEBERRIME BOERHAVI! Te cumprimis ni sigillatim hic compellem, mortalium ingrattissimus jure habebor: si quid enim est in me ingenii, si qua artis Medicae peritia, si qua in Chemicis exercitatio, Tibi ego id omne soli debeo. Tres alias frequentaveram Tyro Academias, antequam prospera huc advectus fortuna, Tuo ab ore pependerim. Solam Te penes addiscere praxim animus erat, studiisque meis Academicis imponere coronidem: sed vixdum primis gustaveram labiis defoecatissimae Tuae doctrinae nectar, cum summa ejus dulcedo me mox tantopere rapuit, ut quidquid vel publicis vel privatis in lectionibus, ad quamcunque pertinens Medicinae partem, mellifluo ab ore Tuo prodiit, haurire sategerim avidissimus. Dolens nimirum vidi, fore per temporis mihi relictis angustiam, ut ablactarer citius, quam satiatus a Te recederem. Sive itaque vernam dici speciem, amabilissimis horti divitiis mira suavitate exponendis, dicares, jucundo Botanices studio discipulorum animos tanto redditurus alacriores ad laborum magis arduorum tolerantiam; seu inter furnos desudans, ad secretissimos Chemiae recessus viam monstrares, certo castigatissimae methodi filo tutissimam pariter ac facillimam; seu exacta ad normam Mathematicam stabilires Theoriae Medicae fundamenta, quibus mox inaedificares immota Praxeos dogmata, medendi methodum felicissimum; Te ego secutus undique, illam potissimum diei partem optime a me collocatam credidi, quam Tibi consecraveram. Totum ergo Tuum est, si quid isthac mea industria profeci: Tu ejus omnem fructum, jure Tuo, a me repetis: quod dum gratus agnosco, poterat id solum Tibi me mille modis in aeternum devincire.

Tu vero, VIR MAXIME! cujus immensa eruditione non minor est singularis humanitas, hocce beneficium majore alio cumulasti: dum eo quoque tempore, quo post exactum vitae Academicae curriculum vel exteris visurus regiones, peregre profectus eram; vel praxeos exercendae gratia, in aliis hujus Belgii urbibus morabar; quoties aut literis, aut praesenti Te colloquio sollicitavi audax, miro semper favore mihi vacare, et saluberrima suppeditare consilia non es dedignatus.

Imo ne hic quidem substitit summa Tua in me benevolentia: nam Tibi etiam debeo, quo nunc impertior, laboris mei praemium. Tu, quod benignum adeo apud Procures de me iudicium tuleris, effecisti, ut huic admotus muneri, hoc sim honore ornatus. Dum igitur pluribus Tibi obstringor nominibus, quam quibus unquam dissolvendis ulla me aetas parem faciet, accipe gratissimam horumce agnitionem, et sempiternum, quam publice hic nunc tanquam in tabella suspendo, memoriam in qualiscunque locum Charisterii; et certus crede, omnibus me nervis eo adnissurum, Tibi ut monstrem, quam procul absim ab ingrati animi crimine! Plura adjicere Tua vetat modestia, meusque pudor.

Antequam tamen Te dimittam, jubet nota mihi mearum tenuitas virium, et operis, quod suscipio, difficultas, Te ut enixe obtester, velis eodem, quo me huic admovisti, favore, id aggressurum sublevare, et Tuis, quoties imploravero, sapientissimis mihi consiliis adesse. Tibi, at quanto Viro! succedo: Tu viae, quam toties trivisti, peritissimus, nisi praeiveris, omnem despondeo animum: manu igitur me prehendere juvenem, haud aequis passibus Te secuturum; dumque, quo Tua Te divino ingenio sociata decumana industria provexit in arte, eo eniti insanientis est, id saltem fac ut laudis consequar, Tuis quod vestigiis reptabundus quidem, at non indecorus tamen, inhaeream.

Vos denique, PRAESTANTISSIMI JUVENES! Vos, sacrata Philosophiae et Medicinae Pectora, alloquor! Vestris enim usibus totam se dedicat Chemia; vestris arctissime copulata studiis haeret. Si quo igitur ejus amore capti, doluistis, aliquo illam tempore siluisse, erigite nunc animos! Patet rursum officina: ardebunt furni: accedite, et mecum ad hos desudate! Suprahumano labore, sedulitate indefessa, sexcentis periculis, viam ante difficillimam expedit Chemiacorum Summus BOERHAVIUS, et, quo ipse usus est filo probatissimo, idem bona nobis fide porrigit: hujus ergo tenaces, illum sequamur duces, tuti et felices in artis adyta penetraturi. Vobis ego me offero comitem, et, si placet, adhortatorem. Si quid in me est virium, officii, aut consilii, utamini eo pro lubitu; Vobis id omne dico: Vestris enim prodesse studiis, ea demum est votorum mihi summa, is laborum finis erit unicus.

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