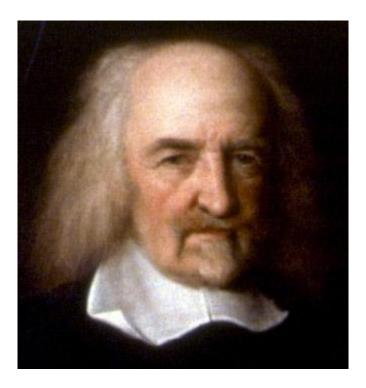
TOMAE HOBBES MALMESBURIENSIS

VITA CARMINE EXPRESSA, AUTHORE SEIPSO,

SCRIPTA ANNO MDCLXXIII



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Felix qui potuit rerum cognescere causas, Atque metus omnes et inexorabile Fatum Subjecit pedipus strepitumque Acherontis avari. VIRGILII Georgica Happy, who knows the causes of all things, who treads beneath his feet all fear of Fate resistless and of roaring, hungry Acheron. Vergil, Geo. II, 490-2

Birth (on 5 April 1588, Good Friday)

Natus erat noster servator Homo-Deus annos
Mille et quingentos, octo quoque undecies.
Stabat et Hispanis in portubus inclyta classis
Hostilis, nostro mox peritura mari:
Primo vere; dies et quintus inibat Aprilis:
Illo vermiculus tempore nascor ego,
In Malmesburia; baptisma a patre ministro
Accepi, et nomen mi dedit ille suum.
Oppidulum parvum est, habuit sed multa relatu
Digna, atque imprimis coenobium celebre,
Et castrum, melius nisi sint duo castra vocanda,
Colle sita, et bino flumine cincta fere.

Our savior God-in-man had been born one thousand & five-hundred & eighty-eight years, and in Spanish ports stood the illustrious fleet of the enemy soon to perish in our sea in early spring, and the fifth day of April was beginning,* when I a little worm was born, in Malmesbury. Baptism from my father, a minister, I took and he gave me his name.

The town was little but it had many things worthy of report, and especially a famous monastery and a castle, unless they should be called two castles, sited on a hill & nearly girdled by two rivers.

Concilium regni binis burgensibus auget; Nunc quoque priscus honor permanet ille loci. Hic et Athelstani conduntur nobilis ossa, Atque super tumulum saxeus ipse jacet Praemia virtutis populo dedit ille, propinquos Sanguine Danorum qui madefecit agros: Huc et ab Aldhelmo deducta est musa Latina, Hic habuit primam lingua Latina scholam. Non est ut patriae pudeat ; sed tempus iniquum Conqueror, et mecum tot quoque nata mala. Fama ferebat enim diffusa per oppida nostra, Extremum genti classe venire diem. Atque metum tantum concepit tunc mea mater, Ut pareret geminos, meque metumque simul. Hinc est, ut credo, patrios quod abominor hostes, Pacem amo cum musis, et faciles socios.

Oxford (1603-1608)

Disco loqui quatuor, totidem legere, et numerare, Non bene praeterea fingere literulas. Sex annis ad verba steti Graecae atque Latinae, Et decimo quarto mittor ad Oxonium. huc Magdalenae veniens admittor in aulam, Inque ima logicae classe locatus eram. Et praelectori cum primis sedulus adsum; Is licet imberbis cum gravitate legit, Barbara, celarent, darii, ferio, baralypton, Hos, dicebat, habet prima figura modos. Caesare, camestres, festino, baroco, darapti, Haec etiam totidem stat variata modis. Felapton, disamis, datisi, bocardo, ferison, Sunt rursus totidem legitimique modi. Quos tarde disco, disco tamen, abjicioque, Admittorque meo quaeque probare modo. Admoveor physicae, conflataque cuncta magister Materia et forma, ut partibus, esse docet; Et species rerum, volitando per aera, formas Donare hinc oculis, auribus inde sonos. Multos effectus tribuit syn- et antipathiae, Et supra captum talia multa meum. Ergo ad amoena magis me verto, librosque revolvo, Queis prius instructus, non bene doctus eram. Pascebamque animum chartis imitantibus orbem, Telluris faciem, et sydera picta videns: Gaudebam soli comes ire, et cernere cunctis Terricolis justos qua facit arte dies. Quoque Dracus filo Neptunum, Candisiusque

To the Parliament it sends two burgesses: even now that ancient honor of the place remains. 15 Here also are buried the bones of noble Athelstan and above his tomb he himself lies in stone. He first gave the people the prizes of virtue, since he bedewed nearby fields with the blood of the Danes. Hither too by Aldhelm the Latin Muse was led; 20 here the Latin language had its first school. I need not be ashamed of my native place; I mourn an unjust time & the so many evils born with me. For through the scattered towns a rumor ran that our people's last day was coming in a fleet, 25 and so much fear my mother conceived at that time that she gave birth to twins: myself and Fear. That, I think, is why I loathe my country's enemies, love peace & the Muses & courteous companions.

I learn to speak and read four languages and to number 30 and, though not very well, to shape letters. For six years I studied the words of Greek and Latin and in my fourteenth was sent to Oxford.* On arriving there I am admitted into Magdalene Hall and put in the lowest class of Logic. And first I am attentive to the Lecturer. 35 He though beardless reads with gravity, "Barbara, celarent, darii, ferio, baralypton.* The first figure has," he would say, "those modes. Caesare, camestres, festino, baroco, darapti, --40 This figure is varied with as many modes. Felapton, disamis, datisi, bocardo, ferison --Again, legitimate modes of the same number." Though slowly, I learn them--then throw them out and am allowed to make each proof in my own way. I study Physics, & the instructor teaches how all things 45 are a compound of the parts Form and Matter; and that appearances of things by flitting thro' the air give shapes to the eyes, sounds to the ears.* Many effects he assigned to Sympathy and Antipathy 50 and many such things (that were) over my head. So I turn more to agreeable things; I return to books by which I had been taught before, though not well. And I fed my heart on maps that imitated the globe,

and saw the face of the earth and the painted stars.

he makes days right for all dwellers on earth;

by what threads Drake & Cavendish girdled the sea

I rejoiced to go as comrade to the Sun, & descry how deftly

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Cinxerunt medium; quaeque adiere loca
Atque hominum exiguos, si possem, cernere nidos,
Et picta ignotis monstra videre locis.
Tempore sed justo cum Baccalaureus Artis
Essem (namque hic est primus in arte gradus)

round the middle, and the places they went to; and to see if I could the tiny nests of humans and the monsters painted in unknown places.* But when at the proper time* I was a Bachelor of Arts (for this is the first stage in art)

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Service of Duke of Devonshire (1608-1628)

Oxonium linquo, servitum me fero in amplam
Gentis Candisiae conspicuamque domum;
Rectorisque aulae commendat Epistola nostrae:
Accipior, placita conditione steti:
Atque adolescenti mox applicor ipse adolescens:
Tunc patris imperio subditus ille fuit.
Huic ego servivi bis denos gnaviter annos;
Non Dominus tantum, verum et amicus erat.
Pars erat illa meae multo dulcissima vitae,
Et nunc saepe mihi somnia grata facit.
Ille per hoc tempus mihi praebuit otia, libros
Omnimodos studiis praebuit ille meis.

I leave Oxford, I apply for service in the rich and illustrious house of the Cavendish family; A letter from the Rector of our Hall commends me; I am accepted, I have pleasant conditions.

Soon, a youth myself, I devote myself to a youth*

(for) he was then still subject to his father's will.

Him I served diligently for twice ten years;

he was not my lord merely but also a friend.
That was by far the sweetest part of my life

and (even) now often it makes my dreams happy. Throughout this time he gave me leisure and gave me books of all kinds for my studies.

Study of classics

Vertor ego ad nostras, ad Graecas, atque Latinas Historias; etiam carmina saepe lego.
Flaccus, Virgilius, fuit et mihi notus Homerus, Euripides, Sophocles, Plautus, Aristophanes, Pluresque; et multi Scriptores Historiarum: Sed mihi prae reliquis Thucydides placuit. Is Democratia ostendit mihi quam sit inepta, Et quantum coetu plus sapit unus homo. Hunc ego scriptorem verti, qui diceret Anglis, Consultaturi rhetoras ut fugerent.

I turn to the English, to the Greek, to the Latin histories; I often read even poems. Horace, Vergil, and Homer I knew, Euripides, Sophocles, Plautus, Aristophanes, and others, and many writers of histories: but Thucydides pleased me above the rest.

but Thucydides pleased me above the rest.

He showed me how inept is a democracy
and how much wiser one man is than an assembly.

Him I translated so that he could speak to Englishmen
& they if about to deliberate would shun the orators.*

Travel

Urbes externas eadem per tempora vidi,
Germanas, Francas, Ausoniasque adii.
Mox Dominum morbo devictum vita reliquit,
Extremo (ut credas) sed reditura die.
Ante tamen fecit mihi ne servire necesse
Esset, qui modice vivere suetus eram.
Deinde domo placita nimium neglectus abivi,
Parisiisque moror mensibus octodecim.
Inde mei Domini revocor praeceptor ut essem
Nato: Devoniae tunc Comes ille fuit.
Hunc Romanarum sensus cognoscere vocum;
Jungere quoque decet verba Latina modo;

85 In that same time I saw foreign cities,
the German, French, Italian I visited.
Soon my lord, defeated by a disease, lost his life
that (as you may trust) will return on the Last Day.
But before dying he arranged that I need no longer
90 be in service; for I was used to living thriftily.

be in service; for I was used to living thriftily.

Then too little needed I left that pleasant house and I stay for eighteen months in Paris.

From there I am summoned to be tutor to my lord's son, who was now the Earl of Devon.*

95 Him I taught to recognize the sense of Roman voices and how to join Latin words correctly;

Fallere quaque solent indoctos rhetores arte;
Quid facit orator, quidque poeta facit;
Et demonstrandi docui praecepta, globique
Mundani faciem, multiplicesque gyros.
Litibus et finem, faciunt quas plus, minus, et par,
Qua posset justa ponere lege dedi.
Haec illum docui per septem sedulos annos;
Ille celer didicit, retinuitque memor.

3rd journey (1631 or after)

Nec tamen hoc tempus libris consumpsimus omne,
Ni mundum libri dixeris esse loco.

Italiae multas, Gallorum et vidimus urbes;
Secessus dulces vidimus Allobrogum.

Ast ego perpetuo naturam cogito rerum,
Seu rate, seu curru, sive ferebar equo.

Et mihi visa quidem est toto res unica mundo
Vera, licet multis falsificata modis:

Unica vera quidem, sed quae sit basis earum
Rerum, quas falso dicimus esse aliquid;

Qualia somnus habet fugitiva, et qualia vitris
Arbitrio possum multiplicare meo;

Phantasiae, nostri soboles cerebri, nihil extra;
Partibus internis nil nisi motus inest.

Study of physics (1636-7)

Hinc est quod, physicam quisquis vult discere, motus
Quid possit, debet perdidicisse prius.

Ergo materiae motusque arcana recludo;
Sic tempus vacuum fallo per Italiam.

Scribo nihil, facio adversaria nulla, magistra
Quae docuit, praesens nam mihi semper erat.

Linquimus Italiam, rursusque redimus ad alta
Moenia Lutetiae tectaque magnifica.

Hic ego Mersennum novi, communico et illi
De rerum motu quae meditatus eram.

Is probat, et multis commendat; tempore ab illo
Inter philosophos et numerabar ego.

Study of philosophy & psychology (1637)

In patriam rursus post menses octo reversus,
De conectendis cogito notitiis.

Motibus a variis feror ad rerum variarum
Dissimiles species, materiaeque dolos;

Motusque internos hominum, cordisque latebras;

by what art orators always trick the unlearned; what the orator does and what the poet does; and the rules of (logical?) proof; and the face of the terrestrial globe and its myriad windings. And by what just law to put an end to lawsuits that *plus, minus, equal* make.

These things I taught him through seven busy years; he learned quickly and retained it in memory.

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105 But we did not spend all this time with books, unless you could say the world was like a book. Many cities of Italy we saw, many French cities; we saw the sweet recesses of Savoy. But I, I forever pondered the Nature of things, as I travelled by ship, or by coach, or on horseback. 110 And in the whole world only one thing seemed to me true, even though it's falsified in many ways: an only truth, but one that's the basis of those things that we falsely say are 'something': such fleeting things as sleep has, or as by glass 115 I am able to multiply at will: phantasms, offspring of our brain, nothing more; in their inner parts is nothing but motion.

learn well what a power motion has.
I therefore unlock the secrets of matter and of motion, and thus cheat my free time all through Italy.
I write nothing, I make no polemics; a mistress who taught me was always with me.
We leave Italy and come again to the high walls and magnificent roofs of Paris.
Here I know Mersenne,* and to him communicate what I had worked out about the motion of things.
He approves and much commends; from that time
I too was numbered among the philosophers.

So that whoever wishes to learn Physics should first

Having returned after eight months to my country
I think about linking together all I know.
I go from the varying motions to the dissimilar shapes
of various things, and the deceptions of matter;
the inner motions of men, the heart's hiding-places;

Denique ad imperii justitiaeque bona. His ego me mersi studiis. Nam philosophandi Corpus, Homo, Civis continet omne genus. Tres super his rebus statuo conscribere libros; Materiemque mihi congero quoque die. & at length the goods of authority and justice. I immerse myself in these studies. For the Body, Man, the Citizen, contain every kind of philosophizing. On these three things I decide to compose three books and each day collect my material.

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Civil War; Exile (1640)

Nascitur interea scelus execrabile belli,
Et veniunt studiis tempora iniqua meis.
Sexcentesimus et jam quadragesimus annus
Post millesimum erat virginis a puero,
Cum patriam invasit morbus mirabilis, unde
Innumeri e doctis post periere viri.
Quo quicunque fuit tactus, divina putabat
Atque humana uni cognita jura sibi,
jamque in procinctu bellum stetit. Horreo spectans;
Meque ad dilectam confero Lutetiam.

Meanwhile arises the execrable crime of war and amidst my studies, unjust times arrive.

It was now the sixth hundred and fortieth year after the thousandth after the boy born to a Virgin, when the amazing sickness struck my country, from which countless learned men then perished.

Whoever was infected by it imagined that divine and human laws were understood by him alone, and stood already girt for war! I shudder at the sight and betake myself to beloved Paris.*

De Cive (1642)

Postque duos annos edo *De Cive* libellum,
 Qui placuit doctis, et novus omnis erat;
Versus et in varias linguas cum laude legebar,
 Gentibus et late nomine notus eram.
Laudabat mediis in Erynnibus Anglia, et illi
 Quorum consiliis cognitus hostis eram.
Sed quod consiliis praesentibus utile non est,
 Quantumvis justum, quis putat esse bonum.

And after two years I publish my book *De cive*,
which pleased the learned, and was wholly new.
I was often translated, read with praise
and known by name in countries far and wide.

England amid her Furies praised it, as did those
of whose policy I was the known enemy.

But that which is not useful to present policy,
however just it be, who would think to be good?

De Corpore

Inde annis quatuor libri De Corpore formam, Qua sit scribendus, nocte dieque puto. Comparo corporeas moles; et cogito rerum Visarum formas quid variare potest. Quaero quibus possim rationis Protea vinclis Stringere fassurum qua tegit arte dolos. Adfuit e Minimis Mersennus, fidus amicus; Vir doctus, sapiens, eximieque bonus. Cujus cella scholis erat omnibus anteferenda; Professorum omnes ambitione tument. Illi portabat, si dignum forte porisma Reppererat quisquam, principiumve novum. Perspicuo et proprio sermone, carente figuris Rhetoricis, gnomis, ambitione, dolo, Ille dedit doctis, qui vellent, rursus ut illud Vel statim possent, vel trutinare domi.

Then for four years I think night and day about what form the book *De Corpore* should take. 160 I compare bodily masses, and ponder what can vary the shapes of the things we see. I ask by what chains of reason I can force Proteus to confess by what art he conceals his tricks. With me the Minim friar Mersenne, faithful friend, a man learned, wise, and abnormally good. His cell was preferable to all the Schools (where) all the Professors swell with ambition. To him anyone, who had discovered perhaps a real 170 theorem or new principle, used to carry it and in clear plain speech without rhetorical figures, maxims, ambition, or trickery, he gave any learned man who wished the means to weigh it again, either right there or at home.

Edidit e multisque inventis optima quaeque; Signans authoris nomine quidque sui. Circa Mersennum convertebatur ut axem Unumquodque artis sidus in orbe suo.

Tutor to the Prince (1646-8). *Illness* (1647).

Saevierat bellum quatuor civile per annos, Anglos, Hibernos triverat atque Scotos. Perfidaque in castris mansit Fortuna scelestis: Diffugere via qua potuere probi. Ipse haeres regni Carolus, comitante caterva Armis clarorum et nobilitate virum, Lutetiam venit, expectans dum tempora iniqua Transirent, populi desineretque furor. Tunc ego decreram De Corpore scribere librum, Cujus materies tota parata fuit. Sed cogor differre; pati tot tantaque foeda Apponi jussis crimina, nolo, Dei. Divinas statuo quam primum absolvere leges; Idque ago paulatim, sollicitusque diu. Namque mathematicae studiis dum Principi adessem, Non potui studiis semper adesse meis. Dein per sex menses morbo decumbo, propinquae Accinctus morti; nec fugio, illa fugit.

Leviathan (1651)

Perfeci librum patrio sermone; ut ab Anglis
Posset saepe meis, utiliterque legi:
Londinoque typis celer evolat in regiones
Vicinas, notus nomine Leviathan.

Militat ille liber nunc regibus omnibus, et qui
Nomine sub quovis regia jura tenent.

Interea regem vendit Scotus, et necat Anglus;
Jus regni Carolus jamque Secundus habet,
Lutetiae residens. Vim regni turba rebellis
Occupat, et populum jam sine lege regit,
Et nomen (quamvis pauci) sibi Parliamenti
Sumens, se satiat sanguine nobilium;
Dejiciunt mitras, nec firmant Presbyteratum;
Clerica nil illic profuit ambitio.

Loss of the king's confidence.

Lutetiam ad regem multus venit inde scholaris Expulsus patria, tristis, egenus, onus. huc fuit usque meis studiis pax, multiplicata Of the many discoveries he published all the best marking each with the name of its author.Around Mersennus as around an axle turned, each in its own orbit, every (new) star of art.

The civil war had raged for four years, had worn down the English, the Irish, the Scots. 180 Treacherous Fortune had remained in the evil camp: good men fled by whatever road they could. Charles the heir of the kingdom, companioned by a crowd in arms and brilliant noblemen, came to Paris, waiting till the unjust times 185 should pass and the fury of the people die. I had decided to write the book De Corpore materials of which were wholly ready. But I had to postpone it, not wishing that so many & such foul crimes be ascribed to God's command. 190 I resolve as soon as I can to absolve the divine laws; and I do it little by little, long worrying. For as I guided my Prince's mathematical studies* I could not always guide my own studies. 195 Then for six months I lay sick, prepared

my Englishmen could read it often & usefully. Printed in London, it flew swiftly out into neighboring countries, known by its name Leviathan. 200 That book now soldiers for all kings & for whoever under whatever title have royal rights. Meanwhile the Scot sells, the Englishman kills, his king; and the law of the realm is now with Charles II 205 residing in Paris. A rebel mob usurps the power of the kingdom & rules the people lawlessly, and calling themselves 'Parliament', though few, sate themselves with the blood of the nobles. They cast down mitres but confirm no presbytery; 210 There cleric ambition brought no profit to any.

for imminent death; but I did not flee it: it fled.

I finished a book in my native tongue so that

Thence to the king at Paris came many a scholar exiled from England, sad, needy, a burden.
Till now my studies had had peace, that increased

Dum facerent annos octo per octo meos;
Sed meus ille liber, simul atque scholaribus illis
Lectus erat, Jani dissiluere fores.

Nam Regi accusor falso, quasi facta probarem
Impia Cromwelli, jus scelerique darem.

Creditur; adversis in partibus esse videbar;
Perpetuo jubeor Regis abesse domo.

Tunc venit in mentem mihi Dorislaus, et Ascham;*
Tanquam proscripto terror ubique aderat
Nec de rege queri licuit. Nam tunc adolescens
Credidit ille, quibus credidit ante pater.

Return (Winter 1651)

In patriam redeo tutelae non bene certus, Sed nullo potui tutior esse loco: Frigus erat, nix alta, senex ego, ventus acerbus; Vexat equus sternax et salebrosa via. Londinum veniens, ne clam venisse viderer, 'Concilio Status' conciliandus eram. Quo facto, statim summa cum pace recedo, Et sic me studiis applico, ut ante, meis. Solum regnabat tunc nomine 'Parliamentum'; Praesul erat nullus, Presbyterusque nihil. Omnia miles erat, committier omnia et uni Poscebat; tacite Cromwell is unus erat. Regia conanti calamo defendere jura, Quis vitio vertat, regia jura petens? Scribere cuique fuit libertas, quod sibi visum Esset, contento vivere more loci. Leviathan clerum at totum mihi fecerat hostem; Hostis Theologum nidus uterque fuit. Nam dum Papalis Regni contrecto tumorem, Hos, licet abscissos, laedere visus eram. Contra Leviathan, primo, convicia scribunt, Et causa, ut tanto plus legeretur, erant. Firmius inde stetit, spero, stabitque per omne AEvum, defensus viribus ipse suis. Justitiae mensura, atque ambitionis elenchus, Regum arx, pax populo, si doceatur, erit Ante duos minima praemisi mole libellos; Sed nec inest parvis gratia parva libris. Ille docet motus animi et phantasmata sensus, Nec sanos patitur spectra timere viros: Alter at Imperii sanctissima jura repandit, Quaeque rudes populos vincula sacra tenent. Tandem etiam absolvo librum De Corpore, cujus Materies simul et forma geometrica est.

till they made me eight times eight years old,

but on the instant that book of mine was read
by those scholars, Janus' doors leaped open!

For I was accused falsely to the king as if I approved
Cromwell's treason, and gave rights to crime.

This was believed; I appeared to be in the opposition;
was commanded never to be in the king's house.

Then I began thinking of Dorislaus and Ascham: *
as if for a proscribed man, terror was all about me.

Nor could I complain to the king since, then still a youth,
he trusted those whom his father had trusted.

I returned to my country, not very sure of safety there, but not able to be safer anywhere. It was cold, snow deep, wind keen, I an old man vexed by a horse inclined to buck, a rutty road. Coming to London, lest I seem to have come secretly, 230 I had to be reconciled with the 'Council of State'. That done, I at once retire, with the greatest relief and apply myself to my studies just as before. At the time only a so-called Parliament ruled; there was no president and no Presbyter; 235 the soldier was all, & demanded that all be entrusted to one, and that one was secretly Cromwell. If one tried with a pen to defend the king's rights who seeking a king's rights would blame him? Everyone had freedom to write what he thought 240 (if he were) content to live in the way of the place.* But Leviathan had made the clergy wholly an enemy; either nest of theologians was hostile. For as I palpate the tumor of the papal kingdom I seem to hurt these too--though they'd been cut off!* First, against Leviathan they wrote polemics 245 & were the cause why it was read much more. More firmly it stood, and will I hope stand for all time, defended by its own strength; measure of justice, ambition's refutation, fortress 250 of kings, the people's peace it will be if studied. I preceded it with two books of smallest bulk,* but there is in small books no small charm. One teaches emotions & the phantasmata of the sense & does not allow sane men to fear spectres, 255 the other unfolds the sacredest rights of Authority,

& what sacred bonds hold rude peoples. Finally I release the book *De Corpore* whose

matter and form alike are geometrical.

Controversy on mathematics (1655 ff.)

Tunc venit in lucem, tota plaudente caterva Algebristarum, Wallisii algebrica, Illa Geometriae pestis, quae coeperat ante

Annos plus centum, nunc et ubique furit.

Ars fuerat numeros quaesitos inveniendi, Quam docuit Cheber, et quam Diophantus habet

Deinde per hanc artem solam problemata solvi Posse geometriae cuncta Vieta docet.

Addidit Oxoniae Praelector Savilianus Wallisius multo nobile dogma magis :

Nempe infinitae molis finem esse, et habere Finitum partes et sine fine datas :

Quae duo fecerunt insanos dogmata, quotquot Festinaverunt esse geometrici.

Haec mihi causa satis scribendi est justa libelli, (Annos natus eram septuaginta duos)

Six lessons (1656)

In quo, Colloquiis ego Sex non molliter istos
Tango geometras, ut meruere, novos;
Sed nil profeci, magnis authoribus error
Fultus erat; cessit sic medicina malo.
Tunc quoque scribo duos patrio sermone libellos
Contra Bramhallum. Quaestio sola fuit,

Cujus ad arbitrium volumus, nostrumne, Deine: Ille scholam sequitur, sed mihi dux ratio est .

'Six Problems' (1662) etc.

Sex quoque post paulo scripsi *Problemata*, librum Exiguum, at purae fonticulum physicae.

Nam doceo natura locis qua dejicit arte Sublimes lapides, res aliasque graves;

Qua situla sol haurit aquas; ut frigora ventus Efficit; et venti qua ratione volant:

Quo pendent steriles, volitantque per aera nubes, Quo fulcro gravidae destituente ruunt;

Et quo consistunt durorum glutine partes, Duraque quae rursus mollia causa facit;

Unde fragor coelo, qua nix glaciesque fit arte; Excussusque altis emicat ignis aquis;

Quid res exiguas conjungit in aere sparsas,
Et calidum Phoebus qua ratione facit;

Herculeusque lapis ferrum quibus attrahit uncis,

Then came to light, as the whole crowd

260 of algebraists applauded, Wallis's algebra,*
that bane of geometry, which had begun over
a century before & now raged everywhere.

It had been an art of finding the numbers sought, which Gheber taught & Diophantos held; *

265 then Viète* taught that through this art alone all the problems of geometry could be solved.

The Oxford Savilian Reader, Wallis, added a dogma far nobler:

that in infinite mass is a limit, & that the finite had parts, given without limit.

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And these two doctrines made insane as many geometers as rushed into them.

This was the just cause of my writing a book when I was seventy-two years old

in which, in six dialogues, I handled those new geometers roughly, as they deserved.*But I achieved nothing; by great authors the error had been propped: so a medicine yielded to a disease.

Then too I wrote two small books in my native tongue against Bramhall.* The sole question was, whether we will at God's choice or at ours.

He follows the schools; my leader is Reason.

A little later I wrote *Sex Problemata*, a small book but a little spring of pure Physics.

285 For I teach by what art Nature casts down

Post I teach by what art Nature casts down lofty stones and other heavy things; how the Sun evaporates; how the wind chills and by what system fly the winds;

how clouds hang sterile and float throught the air, 290 or pregnant pour down, their support gone;

and by what cement the parts of hard things stick and what cause makes hard things soft; whence thunder; by what art snow and ice form

and how fire flashes shaken from water on high;*
295 what joins tiny things scattered in the air,

and how Phoebus makes (things) hot; & by what hooks Hercules' stone pulls iron*

Observatque suae matris utrumque polum;
Cur mare non aequis ad littora volvitur undis;
Anno, mense, die quoque, bis auget aquas;
Et quare, vento duce, navis it obvia vento;
Haec habet et monstrat parvulus ille liber,
Et valitura puto cum tempore; quandoquidem nunc
Inter tot Momos irreprehensa manent.
AEris et parvo naturam scribo libello
Adversus quandam machinam inanificam.
Tunc physicam linquens, ad amata mathemata vertor;
Namque meo tandem cesserat hostis agro.
Tantum non lapidem potuissem vera docere
Clamosas speret nemo docere scholas.

& how it watches both poles of its mother; why the sea rolls to shore in unequal waves 300 & swells its waters twice a year, month and day; why led by the wind ships tack against the wind: all this the little book has and shows, (things) destined I think to flourish in time, since now amid so much mockery they remain unscathed. And in a little book I write about the nature of the air 305 against a certain empty-making machine.* Then leaving Physics I turn to my beloved math, for the enemy had at last quitted my field. So great a stone I could not teach the truth to: 310 No one could hope to teach the shouting schools.

De Principiis et ratiocinatine geometrarum (1666)

At De Principiis alium tamen edo libellum, Fecique ut posset clarius esse nihil. In quo naturam rationis ita explico, ut illam Nemo non claram diceret atque probam. Hac mihi parte fuit victoria cognita cunctis, Dissimulant aliis vulnera magna locis; Deficiunt animis, sed deficientibus insto, Culminaque inscendo summa geometriae. Namque parem cyclum quadrato publico; necnon Jactatum Pythii monstro porisma Dei; Demonstrata prius, sed non rationibus iisdem, Sperabam methodo vincere posse nova. Sed nil profeci, densis umbonibus obstant, Cedere quos puduit, semi-mathematici. Ergo meam statuo non ultra perdere opellam, Indocile expectans discere posse pecus.

But I publish another book *De principiis* and made it so that nothing could be clearer. In it I so unfold the nature of Reason that no one would say that she was not clear and honest. 315 In this direction my victory was known to all; in other places they hide their great wounds; they lose courage but as they lose it I press them and ascend the highest heights of geometry. For I publish the Circle Squared, and I show 320 the vexed theorem of the Pythian god; things proven earlier but by different proofs I hoped to be able to overcome by a new method. But gain nothing: locking shields, they block me, the semi-mathematicians, ashamed to give in. 325 So I decide not to waste effort further

Rosetum Geometricum (1651)

Deinde librum scribo, quem nomine dico *Rosetum*Praecipuo densum flore geometriae.

Wallisius contra pugnat ; victusque videbar
Algebristarum Theologumque scholis.

Et simul eductus castris exercitus omnis
Pugnae securus Wallisianus ovat;
quem cum vidissem salebroso insistere campo,
Stabat ubi radix densa, molesta, tenax,
Pugna placet, vertor ; numerum licet infinitum
Temporis in puncto dissipo, sterno, fugo.

Next I write a book which I call *Rose Garden*dense with the loveliest flowers of geometry.
Wallis fights back; I am seen as beaten
in the schools both of algebraists & of theologians.
All at once Wallis's whole army, leaving camp, celebrates a parade, secure of the battle.
And when I saw it halt on the rut-filled field & there stand (like a) root, dense, nasty, tenacious, glad of battle, I turn: let their number be infinite; instantly I scatter 'em, level 'em, put them to flight

expecting that I can teach an unteachable herd.

Material Wealth (1672)

Bella mea audisti. Quid vis tibi dicier ultra? An quam dives, id est, quam sapiens fuerim? Anne refert quot agros habui, quot millia nummum? Si percontator forte rogabit et hoc, Exiguus mihi fundus erat propriusque relictus Quem fratri dono, ductus amore, dedi. Parva superficies, sed millia multa ferebat Granorum tritici, nam bona terra fuit. Longa satis votis regum; et nisi tota deorsum Tensa foret, Rex nunc magnus haberer ego. Ut primum belli sensi civilis odorem, Et populum ventos vidi agitasse levem: Quaero locum studiis et vitae commodiorem, Hinc me Parisios transfero remque meam. Quingentae mihi erat numerata pecunia librae, Cum fugiens patriae littora linquo meae: His aliae paulo post accessere ducentae Et simul immensus perpetuusque dolor. (Godolphine jaces; purae rationis amator, Justitiae et Veri miles amande, vale.) Venit et e patria mihi pensio certa quotannis, Bis quadragintis constitit illa libris. Deinde redux mihi Rex concessit habere quotannis Centum alias libras ipsius ex loculis, Dulce mihi donum. Convicia sperno aliorum, Quando teste ipso judicor esse probus. His ego contentus vivo, nec praefero plura; Quis vellet sanus re minor esse sua? Rem, si quando lubet, per vestros supputo Sousos, Ut fiat major: si neque sic satis est, Per Maravedisios numero, videorque beatus Croesos et Crassos vincere divitiis. Ipse meos nosti, Verdusi candide, mores, Et tecum cuncti qui mea scripta legunt. Nam mea vita meis non est incongrua scriptis: Justitiam doceo, justitiamque colo. Improbus esse potest nemo qui non sit avarus, Nec pulchrum quisquam fecit avarus opus. Octoginta annos complevi jam quatuorque, Et prope stans dictat mors mihi, Ne metue.

You've heard my wars: what more would you be told? About how rich, that is, how wise I was? Does it matter how many fields, what money I had? 340 Since the interrogator perhaps will ask even this, I had a small farm,* inherited and my own, which I gave my brother as a present, led by love. Small its extent, but it bore many thousands of grains of wheat for it was good land. Enough for prayers of kings, and if it had not been all 345 pulled down I would be now accounted a great king.* But when I sensed the smell of civil war and watched the winds toss the fickle populace I sought a place better suited to my studies & my life 350 and betook myself and my things to Paris. 500 pounds I had counted up (i.e. I took £ 500) when I left my country's shores in exile. To them two hundred more were later added* and simultaneously an immense everlasting grief 355 (You lie dead, Godolphin. Lover of pure reason, lovable soldier of justice and Truth, farewell.) And from my country came a sure annual pension that consisted of twice four hundred pounds.* Then the restored King granted me a pension 360 of a hundred more pounds from his own coffers, a gift sweet to me. I scorn the vituperation of others when I am judged upright with him as witness. With these sums I live content; I would not prefer more. Who if sane wants to be worth less than his wealth? 365 If I like I can compute my wealth by your sous to make it bigger: if not even thus it's enough I count by *maravedís** and seem happily to conquer Croesi and Crassi in riches. You yourself, honest Verdus,* know my character 370 as do all those with you who read my writings. For my life is not in disharmony with my writings; Justice I teach and I practice justice. No one can be a bad man who is not greedy nor has any greedy man ever made a beautiful book 375 I have completed eighty-four years already

and Death, standing near, dictates, "Don't be afraid".*

NOTES

INTRODUCTION. The English translation is as literal as I could make it, even at the cost of clumsiness. To me the poem seems rough-hewn, but very alive, witty, and full of a charm which I would love to imitate in English verse; but it seems better to try for accuracy, in case people who know no Latin want to refer to this text. Except for the last couplet (where see my note; and see on line 60) the Latin text is that given by its first editor, Richard Blackbourne, as reprinted in William Molesworth (ed.), *Thomae Hobbes Malmesburiensis Opera Philosophica quae Latine Scripsit Omnia*, London, 1839, vol. 1, pp. lxxxv-xcix. The poem's date, 1673, I take from John Aubrey in Andrew Clark (ed.), *'Brief Lives'*, *Chiefly of Contemporaries, set down by John Aubrey*" etc., Oxford 1898, p. 401. Other dates, both in the headings and in the notes, are taken from the dense, lucid, often charming article "Thomas Hobbes" by G. C. Robertson in the 11th edition of the Encyclopedia Britannica, 1911. (This is online at http://www.1911encyclopedia.org/Thomas_Hobbes -- but the text there was not proofread and is full of OCR errors. Beware especially of footnotes incorporated into the text.)

The epigraph from Vergil may be either Blackbourne's or Hobbes's: one doesn't know. Blackbourne's preface says this (reprinted by Molesworth, *loc. cit.*):

LECTORI S. Sequens Poemation, ab Authore tantum animi relaxandi gratia confectum, nullo in publicum emittendi consilio, post excessum ejus in librarii manus incidit; qui lucro suo addictior, (affectus iste inter hoc genus hominum grassatur vulgo) prout erat imperfectum, et mendis insuper deformatum, praelo subjecit. Quamvis autem ad Hobbiani ingenii laudem vix assurgat; quia tamen in publicum erupit jam irrevocabile, et multis etiam quicquid micam habet salis Hobbiani pergratum sit; idcirco, gravioribus quibus antea plurimum scatebat sphalmatis repurgatum, iterato damus. VALE.

TO THE READER, GREETINGS. The following little poem, made by its author only for the sake of relaxing & with no thought of publication, after his death fell into the hands of a bookseller; who too given to his own profits (a disposition that commonly preys on that sort of men), for all that it was unpolished and in addition deformed by errors, printed it. Although it hardly redounds to the glory of Hobbes' genius, still, since its publication is already irrevocable, and since anything that has the flash of Hobbes' wit is very agreeable to many, I give it to the press a second time, purified of those grosser slips of the pen in which it formerly abounded. FAREWELL.

I should make perhaps one general remark about Hobbes's meter. The reader will notice that in line 28 the -o in amo is scanned as short, that so is that of disco in 29, and that Hobbes takes this liberty far more often and more indiscriminately than classical elegists did, of regarding a long syllable as short, presumably by the rule of 'brevis brevians'. He does it mostly with verbs in the first-person singular, present indicative active (as there in 28-9), but with other words also (e.g. 47 volitandŏ per aera). I assume this was accepted practice among Neo-Latin poets (or at least some of them), but do not know them well enough to know for sure.

- (5) "day was beginning": at dawn, between 4:00 and 6:00 a.m. (as Hobbes himself told Aubrey: Aubrey p. 392). The odd expression 'little worm' perhaps refers to the baby's small size; for his mother was so frightened by the rumors of the Spanish fleet that she gave birth prematurely (*Vitae Hobbianae Auctarium*, in Molesworth p. xxii). About Hobbes' father Aubrey has this note (p. 391): ("Mr. Hobbes' father was minister of Westport, to which Brokenborough and Charlton doe belong as chapells of ease, but all not worth above... He was one of the clergie of Queen Elizabeth's time—a little learning went a great way with him and many other Sir Johns in those days—he read homilies." His father was also "a choleric man, (who) quarrelled, it is said, with a brother clergyman at the church door, and was forced to decamp, leaving his three children to the care of an elder brother Francis, a flourishing glover at Malmesbury" (Robertson); it was Francis who paid for Hobbes' education.
- (32 ff.) Oxford. In Aubrey's unfinished Life (p. 329: see above, Introd.) is a vivid glimpse of his life there: "At Oxford Mr. T. H. used, in the summer especially, to rise very early in the morning, and would tye the leaden-counters (which they used in those days at Christmas, at post and payre) with pacthreds, which he did besmere with birdlime, and bayte them with parings of cheese, and the jack-dawes would spye them a vast distance up in the aire, and as far as

Osney-abbey, and strike at the bait, and so be harled in the string, which the wayte of the counter would make cling about the wings." (Post and pair was a 16th- & 17th-century card game; 'pacthreads' = packing thread; 'harled' = tangled. For videos of jackdaws see an enchanting web site called the "Internet Bird Collection": http://ibc.hbw.com/ibc/.)

- (37 ff.) "barbara, celarent, darii" etc.: these famous nonsense-verses are mnemonics (invented in Paris in the 13th century by an Englishman, William of Shyreswood) for remembering how to form the kinds and parts of syllogism correctly.
- **(47)** "**Appearances**": other English for this is in *Leviathan* ch. 1, last par. (I am indebted for this reference to Prof. Tom West): "(The university professors) say, for the cause of vision that the thing seen, sendeth forth on every side a visible *species*, in English, a visible show, apparition, or aspect, or a being seen; the receiving whereof into the eye, is seeing." (In other words, the cause of appearance is appearance!)
- (60) Monstra, "monsters", could also be translated "wonders". After this line "Et picta" etc., Hobbes had perhaps another couplet: "Sunt sua Geographis etiam pleromata Doctum. / Commendat vacuus nullus in orbe locus." It is printed exactly thus by Lilian Quiller-Couch, who quotes this section of the poem in Reminiscences of Oxford, Oxford 1892, p. 16. Perhaps Hobbes had left it unfinished or illegible, and Blackbourne (on whom see Intro. & my note to 375-6) deliberately omitted it; for as it stands it is both unmetrical and ungrammatical. For the third word should scan 'Geōgraphiīs', and it seems impossible to construe "Doctum" and "commendat"; the rest means "Geography has its own fulnesses... / ... no empty place in the world." (Of no real help is an anonymous translation of 1680, quoted by Quiller-Couch p. 17 --"Nay there's a Fulness in Geography / For Nature e'r abhor'd Vacuity"-- for this translation is often wild or simply wrong.)
- **(61)** "at the proper time" -- "in fact ... from whatever cause, he remained at Magdalen Hall five, instead of the required four, years, not being admitted as bachelor till the 5th of February 1608" (Robertson, *op. cit.* above, Introd.).
- (67 ff.) "devote myself to a youth": William Cavendish, second Earl of Devonshire (c. 1590-1628). He and Hobbes, who was not so much his tutor as his paid companion, left for the Continent in 1610 and spent several years there.
- (84) "if about to deliberate": This could also be translated as, "so that they if about to consult the orators would shun them" (taking 'rhetoras' as object of both verbs; whereas my transl. construes 'consultaturi' absolutely). In his Latin prose autobiography (above, Introd.) he says he translated Thucydides "so as to expose to my countrymen the ineptness of Athenian democracy". The translation was published in 1628 some years after he had finished it; it is full of errors (like every translation of Thucydides!) but is scholarship of genius; in many places where the Greek is specially hard, Hobbes alone, of all translators and commentators, sees the truth.
- (94) "now the Earl of Devon". The 2nd earl (n. 8 above) died young of the plague in June 1628. "The affairs of the family were so disordered financially that the widowed countess was left with the task of righting them in the boyhood of the third earl. Hobbes went on for a time living in the household; but his services were no longer in demand, and, remaining inconsolable under his personal bereavement, he sought distraction, in 1629, in another engagement which took him abroad as tutor to the son of Sir Gervase Clifton, of an old Nottinghamshire family.... In 1631... he was recalled to train the young earl of Devonshire, now thirteen years old, son of his previous pupil." (Robertson, *op. cit.*). Hobbes in his Latin autobiography says "placuit tum filio tum patri, temperans, sedulus, hilaris" (Aubrey p. 396).
- **(127) Marin Mersenne** (1588-1648), friend of Descartes, Galileo and other scientists, French theologian, mathematician & musical theorist. By "from that time" etc. Hobbes means the winter of 1636-7.
- (150) Paris. In 1640, frightened by the arrests of Laud and Strafford (whom Aubrey says were both regarded as Hobbesians in doctrine), Hobbes left on his fourth and final trip abroad where he remained (mostly in or near Paris) for 11 years. War itself did not break out till 1642. The king was defeated at Marston Moor in mid 1644.

- (193) "my Prince": In 1646-8 Hobbes was mathematics tutor to the Prince of Wales, later Charles II, who is said to have loved his company, and who when king gave him a pension.
- (220) Isaac Dorislaus (1595-1649) and Anthony Ascham (1614-1650), sent by Parliament as ambassadors respectively to the Hague & Madrid, were stabbed to death as 'infamous regicides' by royalist ambassadors. Robertson (see Intro.) puts it thus: "Straightway, then, he saw himself exposed to a double peril. The exiles had among them desperadoes who could slay; and, besides exciting the enmity of the Anglican clergy about the king, who bitterly resented the secularist spirit of his book, he had compromised himself with the French authorities by his elaborate attack on the papal system. In the circumstances, no resource was left him but secret flight", i.e. back to England.
 - (240) "If he were content" etc., i.e. if he did not rebel against the present government.
 - (244) "Though they'd been cut off" -- i.e. excommunicated by Rome, in the time of Henry VIII!
- (251) Two small books: *De Natura Humana, De Corpore Politico,* written years earlier as a single treatise but now (1650) published separately.
- (260) John Wallis (1613-1703) a great English mathematician, now given "partial credit for the development of modern calculus" (Wikipedia). His Algebra was published in 1685; 2nd edition 1693. "*Arithmetica Infinitorum*, the most important of Wallis's works, was published in 1656". He also deciphered coded royalist despatches for the Parliament (a fact that, after the Restoration, Hobbes taunted him with).
- **(264) Diophantos** of Alexandria (AD b. 200 to 214, d. 284-298): 'the father of algebra' and the first mathematician to recognize fractions as numbers; his fragmentary *Arithmetica* was published in Latin in 1621. Who Gheber was I don't know.
- (265) François Viète (1540-1603), famous French mathematician; he was one of the first to use algebra to solve geometrical problems, and invented some symbols now still in use.
- (275 ff.) "Six Dialogues": "Six Lessons to the Professors of Mathematics, one of Geometry, the other of Astronomy, in the University of Oxford..., in which, after reasserting his view of the principles of geometry in opposition to Euclid's, he proceeded to repel Wallis's objections with no lack of dialectical skill, and with an unreserve equal to Wallis's own." (Robertson, op. cit. Robertson gives a long, fine-textured, charming account of the whole controversy).
- (280) John Bramhall (1594-1663), English bishop, Archbishop of Armagh, author of polemics against unbelievers such as (he thought) Hobbes. "In 1665 Bramhall wrote *Vindication of True Liberty*. Hobbes replied to Bramhall with *Animadversions*, and Bramhall replied to this with *Castigation of Hobbes' Animadversions* (with an afterpiece called "The Catching of Leviathan, the Great Whale") in 1658" (Wikipedia).
 - (294) "how fire flashes": i.e. (I suppose) how lightning happens.
- (297) "by what hooks" etc., i.e. how magnets work. "Its mother" = the Earth, Mother of all magnets, and all other stones!
- (305 f.) "In a little book" etc.: "This was the *Dialogus Physicus*, sive *De natura aeris* fulminated in 1661 against Boyle and other friends of Wallis who, as he fancied, under the influence of that malevolent spirit, were now in London, after the Restoration, forming themselves into a society (incorporated as the Royal Society in 1662) for experimental research, to the exclusion of himself personally, and in direct contravention of the method of physical inquiry enjoined in the *De corpore*." (Robertson).
- (341 ff.) "I had a small farm": Hobbes inherited this in c. 1638; he gave part of it in 1655-6 to his nephew Francis, son of his eldest brother Edmund, and later another part to his great-nephew Thomas, eldest son of Francis (Karl Schumann & Yves Zurka [edd.], *Hobbes: Une Chronique*, Paris, 1998, p. 58). According to Aubrey (p. 337), "He also not

long after dischardged a mortgage (to my knowledge, to Richard Thorne, an attorney) of two hundred pounds, besides the interest thereof, with which his nephew Francis (a careles husband) had incrumbred his estate."

- (345-6) This couplet "Longa satis" etc. does not make good sense in Latin, and my translation fudges. 'Longa' (which must modify 'terra') and 'tensa' are both used strangely; and one doesn't really see why he "would now be accounted a great king" (or perhaps we should translate "the Great King", meaning the king of Persia"). One wonders if the text here is accurate.
- (353) The £ 200 were bequeathed by his patron and friend, the poet Sydney Godolphin (1610-1643), who died during the civil war, in which he fought for the king, 'by a chance shot 'from an undiscerned and undiscerning hand' (Hobbes). Hobbes' love of him and high opinion of him were shared by many others.
 - (358) £ 800: gift of William Cavendish second Earl of Devonshire (n. 8 above).
- (367) maravedí: a Spanish gold coin of the 11th-14th c., later merely a unit of measure, still later, colonial small change; presumably by Hobbes' time a maravedí was worth even less than a *sou*, which = 1/20th of a pound.
 - (369) Verdus: François du Verdus, French admirer and translator of Hobbes.
- (375-6) "Dictates": or else "keeps saying", "says repeatedly" ('dicto' the frequentative of 'dico'). Aubrey in his Life of Hobbes says that because this last couplet has a metrical error (the 'qua-' in 'quatuorque' should be long), it was changed by Blackbourne (see above, Introd.) to the much feebler: "Octoginta ego jam complevi et quatuor annos: / Pene acta est vitae fabula longa meae", i.e. ".... The long story of my life is nearly finished". Of course, the metrical error in the penultimate verse does not really explain why Blackbourne felt he must *also* 'emend' the beautiful last verse (one can only pray that elsewhere he did his job better). See the brief unsigned article, "The Autobiographies of Thomas Hobbes" in *Mind*, New Series, Vol. 48, No. 191, (Jul., 1939), pp. 403-405.

It seems happiest to end these notes with another scrap from John Aubrey (*op. cit.* p. 352): "*Charity*. His brotherly love to his kindred has already been spoken of. He was very charitable (pro suo modulo) to those that were true objects of his bounty. One time, I remember, goeing into the Strand, a poor and infirme old man craved his almes. He beholding him with eies of pity and compassion, put his hands in his pocket, and gave him *6d.* Sayd a divine (scil. Dr Jasper Mayne) that stood by --'Would you have done this, if it had not been Christ's command?' --'Yea,' sayd he.-- 'Why?' quoth the other.-- 'Because,' sayd he, 'I was in paine to consider the miserable condition of the old man; and now my almes, giving him some reliefe, doth also ease me.'

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