

	Table 3: Instances of Bacon's use of forms of the word "violence"	Citation	Date
	* denotes an entry in which Bacon's original text does not use a cognate of "violence," supplied only by the translator		
3:1	For many of our men duringe the tyme of persecution & since hauing bin conuersaant in churches abroad & receiued a great impression of <i>the</i> forme of gouernment there ordayned haue violently sought to intrude <i>thee</i> same vpn our church.	<i>An advertisement touching ... the Church of England OFB 1.177 3v375–380</i>	1589
3:2	Thus we see <i>the</i> beginniges were modest but the extremes are violent , soe as theare is almost as great a distaunce now of either side from it self, as was at <i>the</i> first of one from <i>the</i> other.	<i>An advertisement touching ... the Church of England OFB 1.181 3v474–477</i>	1589
3:3	A greate while when they inueighed against such abuses in the Church, as Pluralities, Non Residencje, and the like, their zeale was not condemned, only their Violence was sometimes censured....	<i>On the religious policies of the queen OFB 1.231 36v.111–113</i>	c. 1589
3:4	For wee see Barbarous Customes, false superstitions, violent passions are able to effecte as much, but all thiese doe it as madnes sometymes doth it: they overcome one Tyraunt by another, but they leaue not the minde in entire libertie, for that is the onelie worke of <i>Fortitude</i> .	<i>Tribuit, or giuing that which is due OFB 1.255 71.267–271</i>	c. 1591 – 1592
3:5	It is the motion thereof that animateth all thinges. It is in vaine to thinke that any strenght of matter can Countervaille a violent motion.	<i>Tribuit, or giuing that which is due OFB 1.256 72.296–298</i>	c. 1591 – 1592
3:6	Doe wee not obserue how the <i>Heresiarchæ</i> & beginners of sectes make it the <i>summum bonum</i> to raigne in mens mindes, & therefore are iustly called violatores mentium the deflowrers of vnderstandinges?	<i>Tribuit, or giuing that which is due OFB 1.259 74.383–75.386</i>	c. 1591 – 1592
3:7	See againe a Queene that when a deepe and secret Conspiracie was plotted against her sacred person, practised by subtile instrumentes, embraced by vyolent & desperate humours, strenghtened and bound by vowes & sacramentes, and the same was revealed vnto her, & yet the nature of the affaires required further ripeninge	<i>Tribuit, or giuing that which is due OFB 1.267–268 82.627–635</i>	c. 1591 – 1592

	before the apprehension of any of the <i>parties</i> , was Contente to put her selfe in garde of the divine providence & her own prudence, to haue some of the Conspiratours in her eye, to suffer them to approach to her <i>person</i> , to take a petition of the hand that was Coniured for her death...		
3:8	...he that shall Consider of thiese and other thinges that may not well be touched as he shall never cease to wonder at such a Queene, soe he shall wonder the lesse that in soe dangerous tymes, when wittes are soe Cunyinge, humours soe extrauagante, passions soe violent , Corruptions soe great, dissimulacions doe deepe, factions soe many, shee hath notwithstandinge done soe great thinges, & raigned in such felicity.	<i>Tribuit, or giuing that which is due</i> OFB 1.282–283 96.1051–1057	c. 1591 – 1592
3:9	And albeit the vanyty of these pretenses with persons of Iudgemente; and the sensible effectes of the good gouernemente with the multitude be a stay that these writings hurte not so violently , together with the good & provident order taken for the suppressing of them, & stopping of their course into many handes;....	<i>An aduertisement touching seditious writing</i> OFB 1.311–312 195r103–108	c. 1589 – 1593
3:10	And to saie that thoughe he caried them not by violence yett he compassed them by devise, ther is no man of iudgement that looketh into <i>the</i> nature of theis times, but will easely descrie that the wittes of theis daies are too much refined, and practize too much in vse for anie man to walke invisible or to make all the world his instrumentes;...	<i>Certaine obseruations vppon a libell</i> OFB 1.350 12r.218–223	1593
3:11	And whensoever the States grewe into extreamities of dispaire and therby were readie to imbrace the offer of anie fforreynour then would her <i>Maiestie</i> yeeld them som releefe of money or permitt some supplie of forces to goe over vnto them to the end to interrupt such violent resolucion....	<i>Certaine obseruations vppon a libell</i> OFB 1.394–395 79r.1545–1549	1593
3:12	But howsoever by this fellow, as in a false artificall glasse <i>which</i> is able to make the best face deformed and hideous, his <i>Lordships</i> doinges be sett forth, yett lett his proceedinges <i>which</i> be indeed his owne be indifferentlie waighed and considered; and lett men call to minde that his <i>lordship</i> was never no violent & transported man in matters of State but ever respectiue and moderate.	<i>Certaine obseruations vppon a libell</i> OFB 1.403 95v.1806– 96r.1811	1593
3:13	[Lopez and his confederates] have descended to a course, against all Honour, All Society, and Humanity; Odious to <i>God</i> , and Man; detested by the <i>Heathen</i> themselves; which is, to take away the Life, of her <i>Majesty</i> , (which <i>God</i> have in his precious Custody,) by	<i>A true report of the detestable treason intended by Doctor</i>	1594

	violence , or poyson.	<i>Roderigo Lopez</i> <i>OFB</i> 1.438 U4v.36–39	
3:14	And so likewise I haue thowght and thowght agayne of the means to stoppe and divert as well the attemptes of violence as poyson in the parformaunce and execucon, but not knowing how my trauayle may be accepted, being the vnwarranted wyshes of a pryvate man, I leave humbly prayeng her <i>maiesties</i> pardon if in the zeale of my simplicity I have roued at thinges aboute my ayme.	<i>Memorandum on the queen's safety OFB</i> 1.503 1r.7–12	1594
3:15	If it seeme strange that I accounte noe State flourishing, but that <i>which</i> hath neither ciuile warres, nor too longe peace, I answere that in that politicke bodyes are like <i>our</i> natural bodyes, and must aswell have some exercise to spende their ill humours, as they must be kept from too violent or too continuall exercise, <i>which</i> spende their best spirittes.	<i>First letter of advice to the Earl of Rutland OFB</i> 1.644–645 40v.177–182	1595
3:16	... let the holding of affection in Confederates without charge, the frustrating the attemptes of enemies without battailes, the winning of chiefe Ministers about other Princes without Iealousie, the entituling the Crowne to new possessions <i>without</i> shew of wrong, the filling of the Princes Coffers <i>with</i> treasure without grudging, the suppressing of tumultes and seditions without violence , the keeping of men in appetite <i>without</i> impatience be the inventions he [the "Squire" of a Prince] seekes out;...	<i>Essex's device OFB</i> 1.714 112v.153–160	1595
3:17	This is a thing which I cannot tell whether I may so plainly speak as truly conceive, that as all knowledge appeareth to be a plant of God's own planting, so it may seem the spreading and flourishing or at least the bearing and fructifying of this plant, by a providence of God, nay not only by a general providence but by a special prophecy, was appointed to this autumn of the world: for to my understanding it is not violent to the letter, and safe now after the event, so to interpret that place in the prophecy of Daniel where speaking of the latter times it is said, <i>Many shall pass to and fro, and science shall be increased</i> ; as if the opening of the world by navigation and commerce and the further discovery of knowledge should meet in one time or age.	<i>Valerius Terminus of the Interpretation of Nature SEH</i> 3.220–221	1603
3:18	The heat of the sun in the hottest countries nothing so violent as that of fire, no not scarcely so hot to the sense as that of a living creature.	<i>Calor et frigus SEH</i> 3.648	1604
3:19	In the taste and touch we find every kind either of violence on the one hand or of gentle and friendly insinuation on the other which can happen in inanimate	<i>Cogitationes de natura rerum SEH</i> 5.433–434	1604

	<p>bodies, with all the configurations of these same passions, expressed and interpreted. For in dead bodies compressions, extensions, corrosions, separations, and the like are concealed in their process, and only perceived in their manifest effects. But in animals they are performed with a sensation of pain, according to the different kind and character of the violence, the spirit pervading everything. And from this principle is derived the knowledge whether any animal may possibly have some other sense besides those observed; and how many, and what kind of senses there may be in the whole race of animals. For a just distinction of the passions of matter will give the number of senses, provided only that the requisite organs be supplied, and the spirit be added. VIII. <i>On Violent Motion, that it is the flight and dispersion of the parts of a thing from pressure, though not visible.</i> Violent motion (as they call it), whereby projectiles, as stones, arrows, bullets, and the like, fly through the air, is about the commonest of all motions. And yet in the observation and inquisition hereof men have shown a strange supineness and negligence; nor is it a small loss that is entailed by miscarriage in the investigation of the nature and power of this motion; seeing it is of use in infinite ways, and as the life and soul of artillery, engines, and the whole business of mechanics. Now most inquirers, when they have pronounced this motion to be violent, and distinguished it from natural motion, think they have done. And it is indeed the peculiar manner and discipline of Aristotle and his school, to teach men what to say, not what to think; and how to discharge themselves by affirming or denying, not how to explain and satisfy themselves in thought.[Tactus autem ratio et gustus, omnem qua; in corporibus inanimatis accidere possit aut violentiam aut contra insinuationem aliam et amicam, ac universas earundem passionum figuras, veluti vates aut interpres exprimit.... VIII. <i>De Motu Violento, quod sit fuga et discursatio partium rei propter pressuram, licet minime visibilis.</i> Motus violentus (quem vocant) per quem missilia, ut lapides, sagittæ, globi ferrei, et similia per aërem volant, fere omnium motuum est vulgatissimus. Atque in hujus tamen observatione et inquisitione miram et supinam negligentiam hominum notare licet. Neque parvo detrimento in motus istius natura et potestate investiganda offenditur; cum ad infinita sit utilis, et</p>	[3.28]	
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	<p>tormentis, machinis, et universæ rei mechanicæ, sit instar animæ et vitæ. Plurimi autem se perfunctos inquisitione putant, si motum ilium violentum esse pronuntient, et a naturali distinguant. Atque is sane est Aristotelis et scholæ ejus mos proprius et disciplina, curare ut habeant homines quod pronuntient, non quod sentiant; et docere quomodo aliquis affirmando aut negando se expedire, non cogitando se explicare et sibi satisfacere possit.]</p>		
3:20	<p>Again, we see if a piece of iron wire, or a stick, or a quill (or such like bodies as are flexible and yet elastic) be bent, and held by both ends between the finger and thumb, it immediately leaps away. Now the cause of this motion is proved manifestly not to lie in the extreme parts of the body, which are held fast by the fingers; but in the middle, which bears the violence; to relieve which this motion is set at work. But in this example it plainly appears that the cause of motion they derive from the impulse of the air is excluded; for there is no percussion to set the air in action.... And this explanation of violent and mechanical motion (which has hitherto escaped observation) is as the fountain of practical operation. [Rursus videmus, si forte filum ferreum, aut bacillum, aut durior pars calami (vel hujusmodi corpora, quæ flexibilia quidem sunt, non absque aliqua renitentia) inter pollicem et indicem per extrema sua curventur et stringantur, ea statim prosilire. Cujus motus causa manifeste deprehenditur non esse in extremis corporis partibus, quæ digitis stringuntur, sed in medio, quod vim patitur; ad cujus relevationem motus ille se expedit. In hoc autem exemplo plane liquet, causam illam motus quam adducunt de impulsione aëris excludi....Atque hæc motus violenti sive mechanici (qui adhuc latuit) explicatio, veluti fons quidam practicæ est.]</p>	<p><i>Cogitationes de natura rerum</i> <i>SEH</i> 5.434–435 [3.30–31]</p>	1604
3:21	<p>Therefore the greater earthquakes (greater I mean in extent, not in violence), which happen seldom, may be rightly compared to the comets of which I spoke, that are themselves likewise uncommon; so that it is true, as I said at first, that between the heavens and the earth, as regards constancy and change, there is no great difference. [Itaque majores terræ motus (majores, inquam, ambitu, non violencia) qui rarius eveniunt, recte cometis ejus generis de quo diximus æquiparari possunt; qui et ipsi infrequentes sunt; ut illud maneat quod initio diximus, inter cælum et terram, quatenus ad constantiani et</p>	<p><i>Cogitationes de natura rerum</i> <i>SEH</i> 5.438 [3.34]</p>	1604

	mutationem, non multum interesse.]		
3:22	And if they stand in seditious and violent alterations; it is rather the reuerence which many times both aduerse parts doe giue to honestie, than any versatile aduantage of their owne carriage.	<i>Advancement of Learning OFB</i> 4.18 D4r29–32; <i>SEH</i> 3.279	1605
3:23	So in the fable, that <i>Achilles</i> was brought vp vnder <i>Chyron</i> the <i>Centaure</i> , who was part a man, & part a beast, Expounded Ingeniously, but corruptly by Machiauell, that it belongeth to the education and discipline of Princes, to knowe as well how to play the part of the Lyon, in violence , and the Foxe in guile, as of the Man in vertue and Iustice.	<i>Advancement of Learning OFB</i> 4.75 2E3r12–18; <i>SEH</i> 3.345	
3:24*	<i>Salust</i> noteth, that it is vsual with Kinges to desire Contradictoryes, <i>sed plerunque Regiæ voluntates, vt vehementes sunt, sic mobiles, sæpeque ipsæ sibi adversæ</i> : [royal desires, as they are violent , so are they changeable, and often incompatible with each other:] <i>Tacitus</i> obserueth how rarely raising of the fortune mendeth the disposition...	<i>Advancement of Learning OFB</i> 4.149 2X3v.7–9 <i>SEH</i> 3.436	1605
3:25	Thus haue I staide some what longer vpon these sentences pollitique of Salomon, then is agreeable to the proportion of an example: ledde with a desire to giue authority to this parte of knowledge, which I noted as deficiente, by so excellent a precedente: and haue also attended them with brief obseruations, such as to my vnderstandinge, offer noe violence to the sense, though I knowe they may bee applyed to a more diuine vse: But it is allowed euen in diuinity, that some Interpretations, yea and some writings haue more of the <i>Eagle</i> , then others...	<i>Advancement of Learning OFB</i> 4.162 3A2v9–17; <i>SEH</i> 3.452	1605
3:26	Fiftly to take speciall heed how they guide them selues by examples, in thinking they can doe as they see others doe: whereas perhappes their natures and carriages are farre differing; in which Error, it seemeth <i>Pompey</i> was, of whome <i>Cicero</i> saith, that hee was woont often to saye: <i>Sylla potuit; Ego non potero?</i> [Sylla could do it, why not I?] wherein he was much abused, the natures and proceedinges of himselfe and his example, beeing the vnlikest in the worlde, the one being fierce, violent , and pressing the fact; the other solemn, and full of Maiesty and circumstance, and therefore the lesse effectuall.	<i>Advancement of Learning OFB</i> 4.170 3C1r1–9; <i>SEH</i> 3.462	1605
3:27	Not for nothing, Bacon reflected, was this distinction observed in ancient times; for the benefits inventors confer extend to the whole human race, while those of civil heroes are confined to particular regions and	<i>Cogitata et visa SEH</i> 3.610; translation from Benjamin	1607

	narrower circles of human settlement. And there is this too. Inventions come without force or disturbance to bless the life of mankind, while civil changes rarely proceed without uproar and violence . [Nec immerito hanc distinctionem priscis illis temporibus invaluisse, cum illorum beneficia ad universum genus humanum, horum ad certas regiones et definitas hominum sedes pertinerent: ilia insuper sine vi aut perturbatione humanam vitam bearent; hæc vero non absque tumultu et violentia fere introducta sint.]	Farrington, <i>The Philosophy of Francis Bacon</i> (Liverpool: Liverpool Univ. Press, 1964), 91–92.	
3:28	Nor ought the calamity of her mother to be admitted as an objection to the dignity of her birth : the rather because it is clear that Henry the Eighth had fallen in love with another woman before he fell in anger with Anne, and because he has not escaped the censure of posterity as a man by nature extremely prone both to loves and suspicions, and violent in both even to the shedding of blood.	<i>In felicem memoriam Elizabethæ SEH</i> 6.306	1608
3:29	This is the demand that must be met. Our course, to speak plainly, must be to attract the willing, not to force the reluctant. As implied at the outset, we abjure all violence . A witty saying of Borgia about the expedition of Charles VIII into Italy is <i>à propos</i> . The French, he said, came with chalk in their hands to mark off their billets, not with arms to force an entry. We intend a similar course of action and anticipate a similar success. We seek a peaceful lodging in able and congenial minds, not a scuffle with those of contrary views. [Itaque huic desiderio subveniendum putavimus, atque hac prorsus eo spectant (ut quod res est aperte eloquamur) ut volentes ducant, non ut nolentes trahant. Omnem violentiam (ut jam ab initio professi sumus) abesse volumus: atque quod Borgia facete de Caroli Octavi expeditione in Italiam dixit, Gallos venisse in manibus cretam tenentes, qua diversoria notarent, non arma, quibus perrumperent; similem quoque inventorum nostrorum et rationem et successum animo præcipimus; nimirum ut potius animos hominum capaces et idoneos seponere et subire possint, quam contra sentientibus molesta sint. Verum in hac parte de qua jam loquimur, quæ ad redargutionem philosophiarum pertinet, feliciter sane levati sumus, casu quodam opportuno et mirabili.]	<i>Reargutio philosophiarum SEH</i> [3.558]; translation from Farrington, <i>Philosophy of Bacon</i> , 104.	c. 1608
3:30	Parables have been used in two ways, and (which is strange) for contrary purposes For they serve to disguise and veil the meaning, and they serve also to clear and	<i>De sapientia veterum SEH</i> 6.698 [6.627–	1609

	<p>throw light upon it. To avoid dispute then, let us give up the former of these uses. Let us suppose that these fables were things without any definite purpose, made only for pleasure. Still there remains the latter use. No force of wit can deprive us of that. Nor is there any man of ordinary learning that will object to the reception of it as a thing grave and sober, and free from all vanity; of prime use to the sciences, and sometimes indispensable: I mean the employment of parables as a method of teaching, whereby inventions that are new and abstruse and remote from vulgar opinions may find an easier passage to the understanding. [Duplex apud homines repertus est atque increbuit parabolarum usus, atque, quod magis mirum sit, ad contraria valet. Faciunt enim parabolæ ad involucrum et velum; faciunt etiam ad lumen et illustrationem. Atque misso illo usu priore (potius quam lites suscipiamus), et receptis fabulis antiquis, tanquam rebus vagis et ad delectationem compositis; manet tamen proculdubio posterior iste usus, neque ulla ingenii violentia nobis extorqueri possit, neque impediet quisquam (qui sit mediocriter doctus) quin protinus recipiatur modus iste docendi, tanquam res gravis et sobria, atque omnis vanitatis expers, et scientiis apprime utilis, imo et quandoque necessaria; nimirum ut in inventis novis et ab opinionibus vulgaribus remotis et penitus abstrusis, aditus ad intellectum humanum magis facilis et benignus per parabolas quacratur.]</p>	628]	
3:31	<p>This is told of Diomedes only: and in him certainly seems meant to be portrayed the character and fortunes of a man who makes it his declared object to persecute and overthrow by violence and the sword some religious worship or sect,... And yet this glory and felicity seldom endures to the end; but almost every kind of violence, unless by an early death it escape the vicissitudes of fortune, is in the end unprosperous. [Neque enim memoriae proditum est in aliqua alia fabula, heroem ullum, præter unum Diomedem, ferro violasse aliquem ex diis. Atque certe videtur fabula imaginem in illo depinxisse hominis et fortuna e ejus, qui ex professo hunc finem actionum suarum sibi proponit et destinat, ut cultum aliquem divinum, sive sectam religionis, licet vanam et levem, vi et ferro insectetur et debellet....Attamen hæc gloria et felicitas raro ad exitum durat: sed omnis fere violentia, nisi morte celeri vicissitudines rerum effugiat, sub finem</p>	<p><i>De sapientia veterum SEH</i> 6.732–733 [6.657–658]</p>	1609

	improspera est.]		
3:32	<p>Now the description of the manner in which the theft of fire was accomplished is apt and according to the nature of the thing. It was by applying a stalk of fennel to the chariot of the Sun. For fennel is used as a rod to strike with. The meaning therefore clearly is that Fire is produced by violent percussions and collisions of one body with another; whereby the matter they are made of is attenuated and set in motion, and prepared to receive the heat of the celestial bodies, and so by clandestine processes, as by an act of theft, snatches fire as it were from the chariot of the Sun. [Modus autem furti ignis apte describitur, atque ex natura rei. Is fuisse perhibetur per virgam ex ferula ad curium solis admotam. Ferula enim ad percussione[m] et plagas adhibetur, ut luculenter significetur, ignis generationem per corporum violentas percussiones et collisiones fieri, ex quibus attenuantur materiae, et in motu ponuntur, et ad calorem coelestium suscipiendum praeparantur, ignemque veluti ex curru solis modis clandestinis ac quasi furtim decerpunt et rapiunt.]</p>	<p><i>De sapientia veterum SEH</i> 6.748 [6.671]</p>	1609
3:33	<p>By Proserpina the ancients signified that ethereal spirit which, having been separated by violence from the upper globe, is enclosed and imprisoned beneath the earth (which earth is represented by Pluto)... or with regard to the first, most certain it is that there are two ways of confining and restraining spirit in solid and earthy matter; one by constipation and obstruction, which is simple imprisonment and violence; the other by administering some suitable aliment, which is spontaneous and free. For when the imprisoned spirit begins to feed and nourish itself, it is no longer in a hurry to escape, but becomes settled as in its own land. [Per Proserpinam antiqui significarunt spiritum illum aethereum, qui sub terra (per Plutonium repraesentata) clauditur et detinetur, a superiore globo divulsus... Primum enim certissimum est, duos esse modos spiritus in materia solida et terrestri cohibendi: alteram per constipationem sive obstructionem, qui est mera incarceration et violentia; alteram per ministrationem proportionati alimenti, atque id fit sponte et libenter. Postquam enim spiritus inclusus depascere incepit atque se alere, evolare protinus non festinat: sed veluti in terra sua figitur: atque haec est degustatio Proserpinae ex malo granato; quae si non fuisset, jampridem a Cerere cum face illa sua orbem terrarum peragrans abducta</p>	<p><i>De sapientia veterum SEH</i> 6.759–760 [6.681]</p>	1609

	fuisset.]		
3:34	The parable concerning the remedies remains to be spoken of: a wise and noble parable, though not at all abstruse. For a mischief so fraught with cunning and violence alike, there are proposed three remedies; two from philosophy, the third from religion. [Restat de remediis parabola, non abstrusa ea quidem, sed tamen prudens et nobilis. Proponuntur enim mali tam callidi et tam violent i remedia tria.]	<i>De sapientia veterum SEH</i> 6.764 [6.685]	1609
3:35	There is no doubt that a similar roughness also exists in the winds, which themselves roll about in the manner of waves, and when the initial violence ceases they do not relapse into tranquillity immediately...[Neque dubium est, quin & similis inæqualitas versetur in ventis, qui & ipsi in morem fluctuum se volvunt; neque vel cessante prima violentia se subito recipiunt in tranquillitatem...]	<i>Phænomena universi OFB</i> 6.36–37 P9v17–19; SEH [3.700]	1611
3:36	Water suddenly and violently let out of confined spaces looks like a continuous threadlike body, or rod or trunk, and becomes first straight, then arched, and then it breaks up and disperses itself in drops here and there in a circle, as with water-pipes or syringes and impluvia. [Aqua ex angustiis subito violenter emissa corporis continui veluti fili aut virgæ, aut trunci imaginem refert, & fit primum directa, post arcuata, deinde se scindit, & in guttas hinc illinc in orbem se dispertit, ut in fistulis sive syringis & impluviis.]	<i>Phænomena universi OFB</i> 6.38–41 P11r33–P11r2; SEH [3.701]	1611
3:37	Now the method is that when a very small hole has been made in the end of an egg they suck out all its substance, leaving the shell intact; then by powerful suction they strongly draw out the very air that has got in and, immediately after the suction, they stop the hole with a finger and put the egg stopped thus under water, and then finally take the finger away. Now the air, tormented by this tension and striving to recover itself, draws and takes water in to the point where the portion of air regains its former consistency. I tried the same thing with a glass egg and found the water taken in amounted to about an eighth of the volume, so much, that is, had the air been stretched by the suction. That remains the case whether the violence of suction is greater or smaller. Indeed, towards the end of the suction it was drawing in the lip itself. But in addition I was concerned to try a new experiment, namely, that after the suction had been completed, the hole should be well blocked with wax, and the egg so blocked left for a whole day. I did this to discover whether lapse of time	<i>Phænomena universi OFB</i> 6.42–45 Q1r27–34, 1–4; SEH [3.703]	1611

	<p>diminished the air's appetite, as is the case with consistent things, osiers, iron plates and the like, whose tendency to spring back from tension weakens when it is delayed; but I found that nothing happened in such a short time but the egg drew in a similar quantity of water and just as strongly as when it had been immersed immediately after the suction, so that when its hold was opened out of the water, it still drew in fresh air with a clear hissing noise; but I neglected to test the effect after longer delay. [Modus autem est ut parvo admodum facto in extremo ovi foramine, ovi cibum universum exsurgant, integra testa; tum vero fortiter aërem ipsum, qui subintravit, exsuctione forti alliciant, & statim sub exsuctione digito foramen obturent, atque ovum hoc modo clausum subter aquam illam ponant, & tum demum digitum amoveant. Aër vero tensura illa tortus, & se recipere nitens, aquam trahit & introcipit, quousque portio illa aëris antiquam recuperet consistentiam. Nos idem cum ovo vitreo experti sumus, & aquam receptam circa octavam partem contenti reperimus; tantum scilicet aër per exsuctionem erat extensus. Sed hoc pro violentia majore aut minore exsuctionis casum recipit. Sub finem vero exsuctionis labrum ipsum trahebat. Sed præterea cura nobis fuit novi experimenti, nimirum ut, postquam exsuctio facta fuisset foramen cera bene obturaretur, & ovum ita obturatum per diem integrum maneret. Id eo fecimus, ut experiremur ut mora illa appetitum aëris minueret, ut fit in rebus consistentibus, viminibus, laminis ferreis & similibus, quorum motus ad se recipiendum à tensura, mora elanguescit; sed comperimus tantula illa morâ nihil effectum, quin ovum illud æque fortiter ac similem traheret aquæ quantitatem, ac si continuo ab exsuctione immissum esset; adeo ut etiam foramine illius aperto extra aquam novum aërem cum sonitu & sibilo manifesto traheret, sed effectum ulterioris moræ experiri negleximus.]</p>		
3:38	<p>Moreover, what I have said should be remembered and diligently observed all the more because this universal motion of the ocean, with which I am now dealing, is so mild and gentle that it is quite subdued and reduced to order by the urgings of the currents, and gives into and is ruled and driven by their violence. [Atque hoc quod diximus eò magis memoria tenendum est, atque diligenter advertendum, quia motus ille universalis Oceani, de quo nunc agitur, adeo mitis est & mollis, ut à</p>	<p><i>De fluxu et refluxu maris</i> <i>OFB 6.66–67</i> <i>H7r15–20 SEH</i> 5.444 [3.48]</p>	<p>c. 1611</p>

	compulsionibus Currentium omnino dometur, & in ordinem redigatur, cedatque & ad eorum violentiam agatur & regatur.]		
3:39	Further, many have observed that a certain violent current is to be found caused by contrary tides about <i>Holland</i> , a current observed not just from that inversion I mentioned in the timings of high water tides, but also from particular and visible experiment. [Atque inveniri Euripum quendam ex contrariis fluxibus circa <i>Hollandiam</i> , non solum ex ea (quam diximus) inversione ordinis horarum in fluxu, sed etiam peculiari & visibili experimento à plurimis observatum est.]	<i>De fluxu et refluxu maris</i> <i>OFB</i> 6.82–83 I3v17–20 <i>SEH</i> 5.453 [3.57]	c. 1611
3:40	Then that secret escape which is invisible to the eye makes itself known to the nose—as in smells; and again, the volatile part of it is thrust out forcibly and as a body can easily be seen, as in the case of fumes and vapours. [Etiā secretā illa euolatio quæ oculos fallit, prodit se ad olfactum, ut in odoribus; etiā pars illa volatica, si violenter et confertim extrudatur, planè sub aspectum cadit, ut in fumis et uaporibus.]	<i>De vijs mortis</i> <i>OFB</i> 6.276–277 4r23–26	c. 1611 – 1619 ?
3:41	Indeed, they [ambient things] themselves even dissolve, coagulate, spread out or bring together the spirit by their own action; they tear apart and undermine the 'grosser' parts of the thing, and impart, interfuse themselves, and stamp or impress their nature—and not just by a kind of violence but rather by consent. [similiter ad partes rei quandoque laxandas, quandoque constringendas; quin et ipsa per actionem ipsorum propriam spiritum liquant, coagulant, extendunt, cogunt, partesque rei `crassiores' vellicant et fodiunt, seque indunt et immiscent, et naturam suam imprimunt, communicant; non solum violentia quādam, sed potius consensu.]	<i>De vijs mortis</i> <i>OFB</i> 6.286–287 7r7–12	c. 1611 – 1619 ?
3:42	Now this [oily nourishment] is achieved in particular by drink which by time or a lot of agitation or a kind of fine consumption of the fatty stuff, can be endowed with a very high degree of subtlety for moistening and irrigating the grosser parts of animals; and it does not have [less] spirit or vehemence on that account but it contains nothing which bites, pierces or violently digs into the insides or [outer] parts. [Hoc vero præcipue consiliat potus quj ex ætate aut `multa' agitatione aut tenuj quadam deprædatione rej <<ole>> pinguis, summa sit prædita subtilitate ad irrorandum et irrigendum partes crassiores animalium; neque propterea habeat [minus] spiritus aut feruoris, nihil autem prorsus habeat ex dente, aut perforatione aut penetratione violenta in internos aut	<i>De vijs mortis</i> <i>OFB</i> 6.304–305 12r17–22 (<<...>> denotes scribal deletions)	c. 1611 – 1619 ?

	partes [exteriores].]		
3:43	<p>For nature is either <i>free</i> and left to go its own way and unfold itself in its usual course, that is, nature advances by itself without being interfered with or worked on in any way, as in the heavens, animals, plants and the whole order of nature; <i>or again</i> it is quite forced and ripped from its state by the crookedness and arrogance of defiant and rebellious matter, and by the violence of impediments, as in the monsters and heteroclites of nature; <i>or finally</i> it is restrained, moulded, completely transformed and as it were made new by art and human agency, as in artificial things. [Aut enim <i>libera est</i> Natura ac sponte fusa, atque cursu consueto se explicans, cum scilicet ipsa Natura per se nititur, nullatenus impedita aut subacta: ut in Cœlis, Animalibus, plantis & et universo Naturæ apparatu; <i>aut rursus</i> ilia à pravitatibus & insolentiis materiæ contumacis & rebellis, atque ab impedimentorum violentia, de statu suo plane convellitur, & detruditur, ut in monstis & heteroclitis Naturæ; <i>aut denique</i> ab Arte & ministerio humano constringitur, & fingitur & plane transfertur & tanquam novatur, ut in artificialibus.]</p>	<p><i>Descriptio globi intellectualis</i> OFB 6.100–101 D4v18–26; <i>SEH</i> 5.505–506 [3.729]</p>	1612
3:44	<p>However, to their individual declinations, elevations, depressions and windings they have assigned so many perfect circles of the right thicknesses, carefully turning and polishing both their concave and their convex surfaces, so that nothing prominent or rough may be found in them, but that one may move quietly and happily, fitting as it does inside another and being exactly contiguous but still free to slide because of the smoothness—which deathless arrangement of course takes away all violence and disturbance, which are assuredly the inseparable harbingers of corruption. [Singulis autem declinationibus, sublacionibus, depressionibus, sinuationibus ipsorum tot circulos perfectos convenientis crassitudinis attribuerunt, circulorum eorum & concava & convexa egregie tornantes & polientes, ut in eis nil eminens, nil asperum inveniatur, sed alter inter alteram receptus & ob lævorem exacte contiguus, & tamen labi facilis moveat placide & feliciter, quæ immortalis scilicet ingeniatio summovet omnem violentiam & perturbationem, individuas profecto corruptionis prænuntias.]</p>	<p><i>Descriptio globi intellectualis</i> OFB 6.146–147 F5v16–24; <i>SEH</i> 5.531 [3.755]</p>	1612
3:45	<p>Therefore it seems that almost all tumult, conflict and disruption take place only at the boundaries of the heaven and Earth, just as happens in political affairs, in</p>	<p><i>Descriptio globi intellectualis</i> OFB 6.148–149</p>	1612

	<p>which we often find that the borders of two kingdoms are afflicted by continual incursions and violence, while the interior provinces of each kingdom enjoy prolonged peace, and are disturbed only by greater and rarer wars. [Itaque tumultus fere omnis & conflictus & perturbatio in confiniis tantum cœli & terræ locum habere videtur; ut in rebus civilibus fit, in quibus illud frequenter usu venit, ut duorum Regnorum fines continuis incursionibus & violentis infestentur, dum interiores utriusque Regni provinciæ diutina pace fruuntur, & bellis tantum gravioribus & rarioribus commoventur.]</p>	F6v17–22; <i>SEH</i> 5.532 [3.756–757]	
3:46	<p>For the heavens do not travel round on movable poles, nor again are there other points than the ones I have mentioned. Now this motion seems truly cosmical and for that reason singular except in so far as it admits both diminutions and deviations according to which this motion echoes through the universe of moveable things, and penetrates from the starry heaven to the bowels and insides of the Earth, not by some violent or vexatious compulsion, but by constant consent. [Etenim non jactantur cœli super polos mobiles, nec rursus alia sunt puncta quam quæ diximus. Atque hic motus vere videtur Cosmicus, atque ideo unicus, nisi quatenus recipit & decrementa & declinationes; secundum quæ decrementa & declinationes transverberat motus iste Universum rerum mobilium, & permeat à cœlo stellato usque ad viscera & interiora terras; non raptu aliquo prehensivo, aut vexativo, sed consensu perpetuo.]</p>	<p><i>Thema cœli</i> <i>OFB</i> 6.180–181 G10r13– G10v20; <i>SEH</i> 5.552 [3.773]</p>	1612
3:47	<p>On this supposition it is evident that the speed of this cosmical motion decreases in regular order as it descends, so that the nearer each planet gets to Earth the slower it moves, whereas the received opinion confuses the order and turns it upside down and, by assigning a proper motion to the planets, falls into the absurdity that the nearer the planets are to the Earth (which is the seat of the immovable nature) the quicker they are supposed to move; a thing which the astronomers frivolously and unsuccessfully try to account for by a remission of the violence of the <i>primum mobile</i>. [Quo posito, manifestum est velocitatem istius motus Cosmici, ordine non perturbato, descendendo decrescere, ut quo propius quique planeta appropinquet ad terram, eò tardius moveat; cum recepta opinio ordinem perturbet & invertat; & motum proprium tribuendo planetis, in illud absurdum incidat, ut planetæ, quo propinquiores sint ad terram (quæ est sedes naturæ immobilis) eo velocius</p>	<p><i>Thema cœli</i> <i>OFB</i> 6.180–183 G11r37–G11r8 <i>SEH</i> 5.552 [3.774]; <i>De fluxu et refluxu maris OFB</i> 6.76–77 H12v20 speaks of the “compulsion of the <i>primum mobile</i>” [ad raptum primi mobilis]; <i>SEH</i> 5.450 translates this as “violence of the</p>	1612

	moveri ponantur, id quod per remissionern violentiae primi mobilis, Astronomi excusare nugatorie & infeliciter conantur.]	<i>primum mobile.</i> ”	
3:48	Neither were the fisticuffs and furious assaults of <i>Aristotle</i> (who <i>Ottoman</i> fashion trembled for his own philosophical kingdom until he had killed off his brothers, and who also trembled, as his own words show, in case posterity should have any doubts left over), neither, I say, were his assaults by their violence alone, nor <i>Plato</i> ’s majesty and solemnity by reverence alone able entirely to obliterate this philosophy of <i>Democritus</i> . [Neque <i>Aristotelis</i> pugnae & dimicationes (qui <i>Ottomannorum</i> more de regno suo Philosophiae anxius erat, nisi fratres trucidasset; cui etiam curae erat, ut ex ejus verbis liquet, ne quid posterī scilicet dubitarent) tantum sua violentia , nec etiam <i>Platonis</i> majestas & solennia tantum reverentiā pauerunt, ut Philosophiam hanc <i>Democriti</i> delerent.]	<i>De principiis atque originibus</i> OFB 6.204–205 K1r18–23; <i>SEH</i> 5.465 [3.83–84]	1612
3:49	The heights of the heavens keep their nature whole and unimpaired, allowing for some diversity among themselves, but quite removed from the violence and insult of an antagonist... [Summitates vero cœli naturam suam integram atque illæsam servare, diversitatem nonnullam inter se admittentes, sed à contrariis violentia & insultu penitus semotas...]	<i>De principiis atque originibus</i> OFB 6.226–227 K12v18–20; <i>SEH</i> 5.477 [3.95]	1612
3:50	For in the spaces between the highest heavens and the innermost parts of the Earth, he finds all tumult, conflict and infernal disorder, as in the case in empires in which we find that the borders are troubled by incursions and violence , while the provinces inland enjoy a secure peace. [Nam in spatiis illis intrâ extima cœli & intima Terræ, omnem tumultum & conflictum, & tartarismum inveniri, ut fit in Imperiis, in quibus illud usuvenit, ut fines incursionibus & violentis infestentur, dum interiores provinciæ securâ pace fruuntur.]	<i>De principiis atque originibus</i> OFB 6.230–231 L3r25–29; <i>SEH</i> 5.480 [3.98]; same phraseology in <i>Descriptio globi intellectualis</i> OFB 6.148–149 F6v20; <i>SEH</i> 5.532 [3.757]	1612
3:51	...the <i>first</i> is pliancy, or that disposition of matter which makes a body to some extent give way to any greater violence , and put up with compression and especially extension, and be, in short, flexible or ductile. The <i>second</i> is softness, when there is no need of any great violence , but the body gives way to the slightest impact and the very touch of a hand without apparent resistance. [Lentor, qui est dispositio materiæ exhibens corpus ad majorem violentiam nonnihil obsequens, &	<i>De principiis atque originibus</i> OFB 6.242–243 L9v22–27; <i>SEH</i> 5.486 [3.106]	1612

	compressionis, & præcipue extensionis patiens, flexibile denique aut ductile. <i>Secundus</i> , Mollites, cum majore violentia nil opus est, sed corpus etiam levi impulsione, atque ad tactum ipsum sive manum cedit absque evidenti renitentia.]		
3:52*	Furthermore and in the same way it may be that in the depths of the Earth the heats are more intense than on the surface, i.e. when an approach has been made to the seat of primal cold, the cold, arousing itself, drives the heat back and puts it to flight with great violence , and turns it into itself. [Quin etiam similiter fieri posse, ut sint per profunda Terræ calores vehementiores quam in superficie; postquam scilicet ad sedem primi frigidi appropinquatio facta est, quod se excitans, magno impetu calidum rejicit, & fugat, & in se vertit.]	<i>De principiis atque originibus OFB 6.251–252 M1v3–7; SEH 5.490 [3.110]</i>	1612
3:53	But, as I began to say, we must see what kinds of virtues and actions we find in nature which we cannot ascribe to heat or cold by any consent of things or violence of intellect. [Verum ut occœpimus dicere, videndum quales inveniantur in rebus virtutes & actiones, quæ ad calidum & frigidum nullo rerum consensu, aut ingenii violentia trahi possint.]	<i>De principiis atque originibus OFB 6.258–259 M6r18–21; SEH 5.495 [3.114]</i>	1612
3:54	For <i>Telesio</i> , in the same way as <i>Democritus</i> , maintained that there is a collective vacuum without any limit, so that individual entities may lay aside and sometimes even desert the ones contiguous to them, with difficulty (as they say) and against their will, when indeed subdued and compelled by some greater violence ...[<i>Telesio</i> enim, quemadmodum & <i>Democrito</i> , vacuum coacervatum & sine meta dari placuit, ut Entia singularia contiguum suum deponant, nonnunquam & deserant, ægre (ut aiunt) & illibenter, sed majore nempe aliqua violentia domita & coacta...]	<i>De principiis atque originibus OFB 6.260–261 M7v22–26; SEH 5.496 [3.115]</i>	1612
3:55	But things which are stretched and pulled apart not by means of heat but by some violence , just love to get back to their former dimensions once the violence stops, even without it getting colder or the heat getting less, as when one exhausts a glass egg and opens up the bellows. Now this is still more evident in solid and thick bodies. For if a piece of cloth or string is stretched, they spring back very fast when the force is removed; and it is the same with compression. For air compressed and imprisoned by any violence bursts out with a great force, and indeed all that mechanical motion caused by when hard body strikes another, which is commonly called violent motion and which sends solid bodies	<i>De principiis atque originibus OFB 6.264–265 M9r12–M9v23; SEH 5.498 [3.117]</i>	1612

	<p>flying through the air and water, is nothing other than the straining of the parts of the discharged body to free themselves from compression; and yet traces of heat and cold appear anywhere here. [At quæ non mediante calore, sed violentia aliqua extensa sunt & distracta, etiam absque ulla frigoris accessione, aut diminutione caloris, in priora spatia (cessante violentia) cupidissime revertuntur; ut in exsuctione ovi vitrei, & foliis levatis. Id vero in solidis & crassis longe evidentius est. Nam si distendatur pannus vel chorda, remota vi, magna velocitate resiliunt; atque eadem est compressionis ratio. Nam aër violentia aliqua contrusus & incarceratus multo conatu erumpit; atque adeo omnis ille motus mechanicus quo durum à duro percutitur, qui vulgo motûs violenti nomine appellatur, per quem res solidæ mittuntur & volant per aërem & aquam, nihil aliud est quam nixus partium corporis emissi ad se expediendum à compressione; & tamen nusquam hie apparent vestigia calidi & frigidi.]</p>		
3:56	<p>For the scholastic philosophy holds that it is enough to distinguish between natural and violent motion, and to proclaim that heavy bodies are carried downwards by natural motion and light bodies upwards. But such speculations are of little use to philosophy. For these words, <i>nature</i>, <i>art</i>, and violence, are a kind of trivial shorthand, and people ought not only to refer this motion to nature, but also to look for the particular and proper affection and appetite of the natural body in this motion itself. For there are many other natural motions arising from very different passions of things. Thus the matter is be dealt with according to its differences. Moreover, those very motions which they call violent may be said to be more according to nature than this one that they call natural, if a thing be more according to nature which is stronger, or indeed if it be more according to the arrangement of the universe. [Schola enim communis satis habet si motum naturalem à violento distinguat; & gravia deorsum, levia sursum ferri ex motu naturali pronuntiet. Verum parum proficiunt ad philosophiam hujusmodi speculationes. Ista enim Natura, ars, violentia, compendia verborum sunt, & et nugæ. Debuerunt autem hunc motum non tantum ad naturam referre, sed etiam affectum & appetitum particularem & proprium corporis naturalis in hoc ipso motu quærere. Sunt enim & alii motus complures naturales ex passionibus rerum longe</p>	<p><i>De principiis atque originibus OFB 6.266–267 M10v7–11r19; SEH 5.499–500 [3.118]</i></p>	1612

	diversis. Itaque res secundum differentias proponenda est. Quin & ipsi illi motus, quos violentos appellant, magis secundum Naturam appellari possint, quam iste quem vocant Naturalem; si sit illud magis secundum Naturam quod est fortius, aut etiam quod est magis ex ratione Universi.]		
3:57	Now I, in thrall to an undying love of truth, have committed myself to the hazards, hardships and loneliness of the open road and, trusting for support to the Lord's help, I have kept my mind proof against the shock and marshalled ranks of opinion.... [Nos certè æterno Veritatis amore deuicti, viarum incertis, & arduis, & solitudinibus, nos commisimus; & Diuino auxilio freti & innixi, mentem nostram, & contra opinionum violentias , & quasi instructas acies....]	<i>Novum organum OFB</i> 11.20–21 A5r4–7; <i>SEH</i> 4.18–19 [1.130]	1620
3:58	And even when they want to point to anything to do with the causes of motions, and to draw distinctions between them, they very lazily introduce the distinction between natural and violent motion, which is a stock notion if there ever was one, since all violent motion is in reality natural, but with an external efficient setting nature working in a way different from the one it was working in before. [Etiam quùm de causis motuum aliquid significare volunt, atque diuisionem ex illis instituere, differentiam motûs naturalis & violentî , maximâ cum socoridâ, introducunt; quæ & ipsa omninò ex notione vulgari est; cùm omni motus violentus etiam naturalis reuerà sit, scilicet cùm externum efficiens naturam alio modo in opere ponet, quàm quo priùs]	<i>Novum organum OFB</i> 11.104–107 I1r34–2; <i>SEH</i> 4.67–68 [1.177]	1620
3:59	But even if there were a true and general consent, it is so far distant from real and solid authority, that it should provoke a violent presumption to the contrary. [Quòd si fuisset ille verus Consensus, & latè patens, tantùm abest, vt Consensus pro verâ & solidâ Authoritate haberi debeat, vt etiam violentam præsumptionem inducat in contrarium.]	<i>Novum organum OFB</i> 11.122–123 K3v6–8; <i>SEH</i> 4.76 [1.185]	1620
3:60	But the idea of a fiery wind so suddenly and violently expanding and blasting forth would hardly have struck a man's imagination or fancy – which is to be expected when he had seen nothing resembling it... [De vento autem igneo, tàm subitò & violentèr se expandente, & exsufflante, vix vnquâm aliquid alicuius imaginationi, aut phantasiæ occurrurum fuisset; vtpotè cuius exemplum in proximo non vidisset...]	<i>Novum organum OFB</i> 11.167–168 P1r7–10; <i>SEH</i> 4.99 [1.207]	1620
3:61	Moreover improvement of political conditions seldom proceeds without violence and disorder; whereas	<i>Novum organum OFB</i>	1620

	discoveries enrich and spread their blessings without causing hurt or grief to anybody. [Atque Statûs emendatio in Ciuilibus non sine vi & perturbatione plerumquè procedit: at Inuenta beant, & beneficium deferent absquè alicuius iniuriâ aut tristitiâ.]	11.192–193 R3v26–28; <i>SEH</i> 4.113 [1.221]	
3:62	Tin [gives off heat when dissolved in aqua fortis] more obviously, but most of all do iron and steel which provoke not just great heat in dissolution, but violent boiling too. [Stannum, atque omnium maximè Ferrum & Chalybs quæ non solùm fortem excitant calorem in dissolutione, sed etiam violentam ebullitionem.]	<i>Novum organum OFB</i> 11.232–235, X3v24–26; <i>SEH</i> 4.136	1620
3:63	Irritation by surrounding cold increases heat, as we see in fires during a sharp frost. I think that this happens not just because the heat is enclosed and contracted, which is a species of concentration, but by exasperation – like air or a stick which, when violently compressed or bent, does not return to its initial position but springs back beyond it. [Irritatio per frigidum ambiens auget Calorem; vt in focis videre est per gelu acre. Quod existimamus fieri non tantùm per conclusionem & contractionem Caloris, quæ est species vnionis, sed per exasperationem, veluti cùm Aër aut baculum violenter comprimitur aut fectitur, non ad punctum loci prioris resilit, sed vlteriùs in contrarium.]	<i>Novum organum OFB</i> 11.248–249, Z2v19–24; <i>SEH</i> 4.143 [1.254]	1620
3:64	12. On account of the ready warming up of all bodies without any radical destruction or alteration, <i>Reject</i> a destructive nature or violent imprinting of any new nature. [12. Per facilius Tepefactionem omnium corporum, absque aliquâ destructione aut alteratione notabili, <i>Reijce</i> Naturam destructiuam, aut inditionem violentam alicuius Naturæ nouæ.]	<i>Novum organum OFB</i> 11.258–259 2A3r28–30; <i>SEH</i> 4.148[1.260]	1620
3:65	For so great is the force and mass of the waters suddenly poured out by such spouts that the waters seem to have gathered before, and clung and stayed in these places, and afterwards rather to have been thrown and forced down by a violent cause than to have fallen by natural motion of gravity.... [Tanta enim videtur esse vis & moles aquarum, quæ per huiusmodi Cataractas subitò effunditur; vt videatur Collectio Aquarum fuisse antè facta, atque in his locis hæssisse & mansisse; & postea potiùs per causam violentam deiecta & detrusa esse, quàm naturali Motu grauitatis cecidisse...]	<i>Novum organum OFB</i> 11.318–319 2G3r2–5; <i>SEH</i> 4.179[1.293]	1620
3:66	But if the Earth turns, it could well be that the different rates of rotation of Earth and sea (in point of speed or impetus) produce a violent piling up of the waters or high tide... [Quòd si Terra rotet, rieri fortassè potest, vt	<i>Novum organum OFB</i> 11.322–323 2H1r18–21;	1620

	ex inæquali rotatione (quantenùs ad celeritatem siue incitationem) Terræ, & Aquarum Maris, seuatur Compulsio violenta Aquarum in Cumulum sursùm, quæ sit Fluxus...]	<i>SEH</i> 4.182 [1.295]	
3:67	In the same way, let the nature under investigation be motion through the air of missiles, such as darts, arrows, and cannon balls. As usual the scholastics' treatment of this motion is very lax: they think it quite enough to name it violent motion and distinguish it from the one they call natural... [Similtèr, sit Natura Inquisita, Motus Missilium: velutì Spiculorum, saggitarum, Globulorum, per Aërem. Hunc Motum Schola (more suo) valdè negligenter expedit; satis habens, si eum nomine Motûs violentis à Naturali (quem vocant) distinguat...]	<i>Novum organum OFB</i> 11.332–333 2H4v11–2I1r14; <i>SEH</i> 4.187 [1.301]	1620
3:68	[about expansive motion of gunpower into flame] either this motion is provoked by the body's simple appetite to expand once it has been detonated, or by the compound appetite of the raw spirit rushing away from the surrounding fire, and bursting from its embrace as from a prison. [Aut excitatur iste Motus à mero Corporis Appetitu se dilatandi, postquàm fuerit inflammatum; aut ab appetitu mixto Spiritûs Crudi. qui rapidè fugit Ignem, & ex eo circumfuso, tanquàm ex Carcere, violenter erumpit.]...	<i>Novum organum OFB</i> 11.332–335 2I1r34–2I1v2; <i>SEH</i> 4.188	1620
3:69	And we see that flame in the instant of its birth is soft and gentle and needs room to play and try itself out. So such violence cannot be ascribed just to flame alone. [Atque videmus Flamma, præsertim in primâ generatione, mollem esse & lenem, & requirere Cauum, in quo experiri & ludere possit. Itaque tanta violentia huic rei per se assignari non potest.]	<i>Novum organum OFB</i> 11.334–335 2I1v14–17; <i>SEH</i> 4.188 [1.302]	1620
3:70	Now the parting of the ways for this nature [of flame] is as follows: this fleeting nature either happen when the cause that first produced it stops, as in lumen, sounds and (as they call them) violent motions, or because flame is by nature capable of persisting but here with us suffers the force of ambient contrary natures which destroys it. [Biuium autem circa hanc naturam tale est. Momentanea ista Natura, aut fit remittente se Causâ quæ eam primò genuit, vt in Lumine, Sonis, & Motibus (quos vocant) Violentis ; aut quòd Flamma in Naturâ suâ possit hîc apud nos manere, sed à contrarijs Naturis circumfusus vim patiatur & destruat.]	<i>Novum organum OFB</i> 11.336–337 2I2v14–18; <i>SEH</i> 4.189	1620
3:71	Moreover, we should also take note of the measure of violent motions (as they call them), as of missiles, artillery, wheels, and the like, since these too plainly	<i>Novum organum OFB</i> 11.370–371	1620

	have their definite limits. [Quin etiam Mensuræ Motuum Violentorum (quos vocant) vt Missilium, Tormentorum, Rotarum, & similibus, cum hæ quoque manifestò suos habeant limites certos, notandæ sunt.]	2M4r22–25; SEH 4.207 [1.322]	
3:72	Then I worked out how much space had been lost by compression, and gathered that the water had endured that much compression (but only when worked on with great violence). [Posteà, quantum spatij per eam Compressionem imminutum foret, computauimus. Atque tantam Compressionem passam esse Aquam (sed violentia magnâ subactam) intelleximus.]	<i>Novum organum OFB</i> 11.374–375 2N1v15–16; SEH 4.209 [1.324]	1620
3:73	Let the first motion be motion of matter's <i>Resistance</i> , a motion which inheres in its every single portion, and through which it utterly refuses to be annihilated, such that no conflagration, no burden or downward pressure, no violence and, if it comes to that, no age or stretch of time can reduce any amount or the smallest portion of matter to nothing, but it stays something and occupies some space and (no matter what kind of necessity is imposed upon it) either frees itself by changing its form or its place or (if it is not given this chance) it stays as it is; and things never get to the point of being nothing or nowhere. [Motus primus sit Motus <i>Antitypiæ</i> Materiæ, quæ inest in singulis portionibus eius; per quem planè Annihilari non vult: ita vt nullum incendium, nullum pondus, aut pressio, nulla violentia , nulla denique portionem Materiæ in Nihilum; quin illa & sit Aliquid, & Loci aliquid occupet; & se (in qualicunque necessitate ponatur) vel Formam mutando vel Locum liberet; vel (si non detur copia) vt est, subsistat; neque vnquam res eò deueniat, vt aut Nihil sit, aut Nullibi.]	<i>Novum organum OFB</i> 11.384–385 2O1v5–12; SEH 4.214–215	1620
3:74	But it is far more necessary (for a great deal turns on it) to persuade men that violent motion (which I call <i>Mechanical</i> , and which <i>Democritus</i> , who in setting out his primary motions ranks even beneath run-of-the-mill philosophers, called motion of <i>Percussion</i>) is nothing other than motion of liberty, i.e. from compression to relaxation. [At longè magis necessarium est (quia multa secum trahit) vt intimetur hominibus, Motum Violentum (quem nos <i>Mechanicum</i> ; <i>Democritus</i> , qui in Motibus suis primis expediendis etiam infrà Mediocres Philosophos ponendus est, Motum <i>Plagæ</i> vocauit) nil aliud esse quàm Motum Libertatis, scilicèt à Compressione ad Relaxationem.]	<i>Novum organum OFB</i> 11.386–387 2O2v28–32; SEH 4.216 [1.331–332]	1620
3:75	As for the second of the seven modes of operation mentioned above, the main thing to note is that	<i>Novum organum OFB</i>	1620

	<p>compressions and suchlike violent motions certainly make a great contribution to local motion and other things of that kind, as in machines and missiles, and also in the ruination of an organic body and those of its virtues which wholly depend on motion..... [De Secundo verò Modo ex septem prædicits illud imprimis notandum est, valere certè Compressiones & huiusmodi Violentias, ad Motum localem, atque alia id genus, potentissimè; vt in Machinis & Missilibus; Etiam ad destructionem Corporis Organici, atque earum Virtutem quæ consistunt planè in Motu....] But these violent motions do not do much for the nobler transformations and alterations of similar bodies, for these bodies do not obtain any new stable and steady consistency from them, but a transient one which is always struggling to restore itself and break free. And yet it would not be a complete waste of time to do some more careful experiments on this question, namely to see whether condensation or likewise rarefaction of a similar body (such as air, water, oil and so on) brought about by violence could be made stable and fixed, and pretty well changed in its nature. This should first be tried by simple passing of time, and after that with aids and consents....[Verùm ad transformationes & alterationes nobiliores Corporum Similarium non multùm valent istæ Violentiæ; quia Corpora per eas non acquirunt consistentiam aliquam nouam constantem & quiescentem, sed transitoriam & nitentem semper ad restitutionem & liberationem sui. Attamen non abs re foret huius rei facere Experimenta aliqua diligentiora; ad hoc scilicèt, vtrùm Condensatio Corporis benè similis (qualia sunt Aër, Oleum, & huiusmodi) aut Rarefactio similiter per violentiam indita possint fieri constantes & fixæ & quasi mutatae in Naturam. Id quod primò experiendum per Moram simplicem; deinde per Auxilia & Consensus....] But if the experiment does not work by time alone, we should still not give up on it but bring in other things to help us. For it would be very beneficial if we could impose a fixed and stable nature on bodies by violent means. For on this principle air could be changed into water by condensations, and many other things of that kind be accomplished. For man is master of violent motions more than of the rest. [Quòd si non succedat Experimentum per Moram simplicem; tamen non deserendum est negotium, sed Auxilia alia adhibenda. Non enim parùm lucri fit, si per</p>	<p>11.422–425 2S1r18–22, 29–36, 2S1v1–3, 2S2r24–29; <i>SEH</i> 4.235–237 [1.352–353]</p>	
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	Violentias indi possint Corporibus Naturæ fixæ & constantes. Hac enim ratione Aër possit verti in Aquam per Condensationes, & complura alia id genus. Dominus enim est Homo Motuum Violentorum , magis quàm cæterorum.]		
3:76	Meanwhile it would not be by the way to note that the motions of bodies quite enclosed have something violent about them. For imprisonment inhibits a body's spontaneous motions. [Illud interim no abs re fuerit notare; Motus Corporum penitùs Conclusorum habere nonnihil ex violento . Incarceratio enim illa impedit Motus spontaneos Corporis.]	<i>Novum organum OFB</i> 11.434–435 2T1v12–15; <i>SEH</i> 4.241	1620
3:77	For there seems to be a certain love of liberty which will hardly suffer itself to be constrained or diverted. However, this motion is of two sorts, one away from compression, the other from stretching; and both motions are a pair as far as bodies give way and as far as they restore themselves. But since this motion constitutes the one commonly called violent , and is also relevant to countless things, an extremely careful and very particular inquiry about it should therefore be undertaken. [Videtur enim libertatis quidam amor, qui se constringi aut trahi ægri patiat. Duplex autem est motus iste; alus a pressura, alius a tensura; atque vterque eorum geminus, quatenus corpora cedunt, & quatenus se retituunt. Quoniam autem iste motus constituit eum qui vulgo violentus vocatur, atque ad innumera pertinet, ideo diligens admodeum, & bene particularis facienda est de eo inquisitio.]	<i>Novum Abecedarium OFB</i> 13.192–193 29r12–17 [not given in <i>SEH</i>]	1622
3:78	Wherefore with great violence of affection she embraced this ouerture.	<i>History of King Henry VII OFB</i> 8.25 6v5; <i>SEH</i> 6.53	1622
3:79	For at that tyme the Lord of Ravenstein, being not only a Subiect rebelled but a Seruant revolted (and so much the more malicious and violent ;) by the aid of Bruges and Gaunt had taken the Towne and both <i>the</i> castles of Sluise (as wee said before). And hauing by the commodity of the Hauen gotten together certaine Ships and Barkes, fell to a kinde of Piraticall trade, robbing and spoiling & taking Prisoners, the Ships and vessels of all Nations that passed alongst that Coast, towards the Marte of Antuerpe, or into any part of Brabant, Zealand, or Freezeland;...	<i>History of King Henry VII OFB</i> 8.72 49r23–49v32; <i>SEH</i> 6.123	1622
3:80*	Without human intervention they [the winds] cause great and violent motion, as a result of which they are	<i>Historia ventorum OFB</i>	1622

	<p>brought in as workers to drive shipping and mills, and could be used for many other things, provided that human industry does not sleep. Their nature is usually assigned to the category of the secret, and hidden; which is no wonder since the nature and power of the air, which the winds serve and batten on (according to the poets) as Æolus on Juno, is quite unknown anywhere. They are not original creations, nor are they among the works of the Six Days; just as the other meteors in their actualization are not original but born later in the order of creation. [<i>Motum, absque operâ humanâ, cient magnum, & vehementem</i> vnde & ad Nauigandum, & ad Molendum, veluti Operarij conducti sunt, & ad multò plura adhiberi possunt, si Humana non cesset Diligentia. Natura ipsorum inter se creta, & abdita reponi solet; Nec mirum, cum nec Aeris Natura, & Potestas, cognita quoquo modo sit, cui famulantur, & parasitantur Venti, vt (apud Poetas) Æolus Iunoni. Primariæ Creaturæ non sunt, nec ex Operibus sex Dierum; quemadmodum nec reliqua Meteôra quoad Actum, sed Post-nati, ex Ordine Creationis.]</p>	<p>12.18–19 C7v9–C8r17; <i>SEH</i> 5.139 [2.19]</p>	
3:81*	<p>7. The south wind prevails by night for it rises more often at night and blows more violently, whereas the north wind blows by day. [7. <i>Auster noctis Assecla est; nam noctu & sæpius oritur, & flat vehementiùs. Boreas autem interdiu.</i>]</p>	<p><i>Historia ventorum OFB</i> 12.42–43 F4r3–4; <i>SEH</i> 5.152 [2.31]</p>	
3:82*	<p>13. Sea winds are generally more violent than land ones, but nevertheless such that when they stop the calm is greater out to sea than inshore, so that sailors like rather to hug the ins and outs of the coast to avoid calms than to take to the high seas and risk them. [13. Vehementiores plerunque sunt venti marini, quàm terrestres, ita tamen, ut cum cessent, maior sit Malacia, in medio Mari, quàm ad litora; adeo vt Nautæ quandoque ament, potius litorum obliquitates premere, quàm vrgere altum; ad euitandas Malacias.]</p>	<p><i>Historia ventorum OFB</i> 12.44–45 F6r5–F6v8; <i>SEH</i> 5.153 [2.32]</p>	1622
3:83*	<p>28. Winds blowing from the west are more violent than ones from the east, and they bend and lash the trees more. [28. <i>Venti ab Occidente spirantes, sunt vehementiores, quàm illi ab Oriente, & magis curuant, & contorquent arbores.</i>]</p>	<p><i>Historia ventorum OFB</i> 12.50–51 G4r17–G4v18; <i>SEH</i> 5.157 [2.36]</p>	1622
3:84*	<p>It is a violent wind, and wide so that it cannot shift the clouds as quickly as they turn back and resist it... [vehemens est Ventus, & latus, vt non possit summouere nubes, tam citò, quàm illæ renitantur, & se</p>	<p><i>Historia ventorum OFB</i> 12.50–51 G4v27–28; <i>SEH</i></p>	1622

	vertant...]	5.157 [2.36]	
3:85*	1. In Denbighshire in Britain, a mountainous and stony place, there are (as Gilbert tells us) such violent eruptions of winds from certain caverns that clothing or rags put down them are blown back up again with great force, and carried high into the air. [11. In Comitatu <i>Denbigh</i> in <i>Britanniâ</i> , montosâ regione & lapidosâ, ex cauernis quibusdam, tam vehementes (ait <i>Gilbertus</i>) sunt <i>Ventorum</i> eruptiones, vt iniecta vestimenta, pannique, rursus magnâ vi efflentur, & altiùs in Aerem efferantur.]	<i>Historia ventorum OFB</i> 12.58–59 H3v5–8; <i>SEH</i> 5.161 [2.40]	1622
3:86*	In fields too, bundled-up pea stalks, corn sheafs, and linen put out to dry are carried right up to the treetops or up over the roofs by whirlwinds, and this happens without the wind being at all strong or violent . [etiam in agris, vt caules pisarum inuoluti, & aristæ segetum demessæ, quin etiam lintea ad exsiccandum exposita, attollantur à <i>Turbinibus</i> , vsque ad altitudinem Arborum, aut supra fastigia <i>Ædium</i> ; hæcque fiunt, absque aliquo maiore <i>Venti</i> impetu, aut vehementiâ .]	<i>Historia ventorum OFB</i> 12.66–67 I4v25–I5r29; <i>SEH</i> 5.166 [2.45]	1622
3:87*	13. Winds caused merely by motions of the air, without intermixture of vapours, are soft and gentle. But we must look into vaporous winds (as I call those generated from vapours) which can surpass those others in violence , by as much as a drop of water turned into air exceeds any dilatation of air already made; which it does many times over, as I have shown above. [13. <i>Venti</i> ex meris motibus Aeris, absque immistione Vaporum, lenes & molles sunt. Videndum de <i>ventis Vaporarijs</i> (eos dicimus qui generantur à vaporibus) qui tantò illis alteris, possunt esse vehementiores , quantò dilatatio guttæ aquæ, versæ in Aerem, excedit aliquam dilatationem Aeris, iam facti: quod multis partibus facit, vt superiùs monstrauius.]	<i>Historia ventorum OFB</i> 12.72–73 K1v10–K2r15; <i>SEH</i> 5.169 [2.48]	1622
3:88*	29. Gatherings of winds, if they be strong, produce violent whirlwinds; but if they be gentle and moist, they beget rains but calm the winds down. [29. <i>Concursus Ventorum</i> , ad inuicem, si fuerint fortes, gignunt <i>Ventos vehementes</i> , & vorticosos; si lenes, & humidi, gignunt pluuiam, & sedant <i>Ventos</i> .]	<i>Historia ventorum OFB</i> 12.74–75 K4v34–K5r36; <i>SEH</i> 5.171 [2.50]	1622
3:89*	35. Pliny says that the violence of a whirlwind can be suppressed by sprinkling vinegar at its onset. [35. <i>Narrat Plinius Turbinis vehementiam</i> , aspersione Aceti in occursum eius, compesci.]	<i>Historia ventorum OFB</i> 12.76–77 K6r28–29; <i>SEH</i> 5.172 [2.50]	1622
3:90*	5. Winds which cover large spaces (if they are of the	<i>Historia</i>	1622

	free type) are often violent , not gentle. [5. Spatiosi Venti (si sint ex Liberis) plerunque vehementes sunt, non lenes:]	<i>ventorum OFB</i> 12.78–79 K7v17–18; <i>SEH</i> 5.172 [2.51]	
3:91*	10. Very violent winds at sea last longest if they are supplied with enough vapours;[10. Durationes <i>ventorum</i> , valde vehementium , in Mari longiores sunt, sufficiente copiâ vaporum;]	<i>Historia ventorum OFB</i> 12.78–79 K8r32–33; <i>SEH</i> 5.173 [2.52]	1622
3:92	1. We should, then, investigate what prompts and directs winds, seeing that we have already looked into their local origins. As for those winds whose principle of motion lies in their initial impulse, as in those cast down from above, or exhaled from the earth, it is obvious what sparks them off. At the start the former descend, and the latter rise up and then, because of the air's resistance, they grow fuller, principally in accordance with the way their violence is angled. [1. Inquirendum igitur, & de Excitatione Motûs in <i>ventis</i> , & de Directione eius, cùm de <i>Originibus localibus</i> iam inquisitum sit. Atque de ijs <i>ventis</i> , qui habent principium motûs, in sua primâ Impulsione, vt in ijs, qui dejiciuntur ex alto, aut efflant è terrâ, Excitatio motûs est manifesta; alteri sub initijs suis descendunt, alteri ascendunt, & postea ex resistentiâ Aeris, fiunt voluminosi, maximè secundum angulos violentia e suæ.]	<i>Historia ventorum OFB</i> 12.82–83 L2v9–L3r15; <i>SEH</i> 5.174 [2.53]	1622
3:93	26. The winds' motion in the upper sails drives the ship on more than motion in the lower ones because violent motion is most effective where it is most remote from resistance, as in levers and the sails of windmills. [26. Motus <i>Ventorum</i> in <i>velis superiorum ordinum</i> , promouet magis, quam in <i>velis ordinis inferioris</i> ; quia Motus violentus maximè efficax est, vbi plurimum remouetur à resistentiâ, vt in vectibus & <i>velis molendinorum</i> .]	<i>Historia ventorum OFB</i> 12.94–95 M6v34–M7r37; <i>SEH</i> 5.181 [2.60]	1622
3:94	The length too of the sails contributes to motion. For in rotary motions, a little pressure at the circumference is equal to a great deal more towards the centre. [<i>Etiam longitudo velorum facit ad Motum. Nam in rotationibus, leuis violentia versus circumferentiam, æquiparatur longè maiori versus centrum.</i>]	<i>Historia ventorum OFB</i> 12.104–105 O1v26–28; <i>SEH</i> 5.186 [2.65]	1622
3:95*	11. If at sunrise the clouds accumulate near the Sun, that is a sign of a violent storm that day; [1. Si sub Exortum <i>Solis</i> , globabunt se Nubes prope <i>Solem</i> , denunciant eodem die tempestatem asperam;]	<i>Historia ventorum OFB</i> 12.108–109 O5r23–24; <i>SEH</i> 5.188 [2.67]	1622
3:96*	15. If the clouds shall have hedged the Sun in, the less	<i>Historia</i>	1622

	light remains and the smaller the Sun's orb appears, so much the more violent will the storm be. [5. Si Nubes, Solem circuncluserint, quantò minus luminis relinquetur, & magis pusillus apparebit Orbis Solis, tantò turbidior erit <i>tempestas</i> .	<i>ventorum OFB</i> 12.108–111 O5v36–O5v1; <i>SEH</i> 5.188 [2.67]	
3:97*	26. Double or triple circles about the Moon presage wild and violent storms;[26. Circuli circa <i>Lunam</i> , si fuerint duplices, aut triplices, præmon-strant horridas, & asperas tempestates ;]	<i>Historia ventorum OFB</i> 12.110–111 O7r31–32; <i>SEH</i> 5.189 [2.68]	1622
3:98*	But if it suddenly gets dull without cloud or fog, so that it cuts down the brightness of the stars, that means rough and violent storms are at hand. [Quod si subito fiat obscuratio, sine nube, aut caligine, quæ fulgorem Stellarum perstringat, graues & asperæ instant Tempestates .]	<i>Historia ventorum OFB</i> 12.112–113 O8v18–20; <i>SEH</i> 5.190 [2.69]	1622
3:99*	... but if lightning flashes from different parts of the sky, wait for violent and severe storms. [... si ex diuersis partibus coli fulgurauerit, sequentur atroces, & horridæ Tempestates .]	<i>Historia ventorum OFB</i> 12.112–113 P1r31–32; <i>SEH</i> 5.191 [2.69]	1622
3:100	7. Wind motion is almost always lateral and, indeed, winds made by plain overburdening move laterally from the start; wind arising from expiration from the earth or from repercussion from on high becomes so not much later—unless the eruption, precipitation, or reverberation are extremely violent . [7. <i>Motus venti quasi sempèr lateralis est; verum is qui fit per Super-onationem simplicem, vsque à principio; is qui fit per Expirationem è terrâ, aut Repercussionem ab alto, non multò post; nisi Eruptio, aut Præcipitium, aut Reuerberatio, fuerint admodum violenta.</i>]	<i>Historia ventorum OFB</i> 12.126–127 Q6r9–13; <i>SEH</i> 5.197 [2.76]	1622
3:101	Nature exists in a triple condition and is subject, as it were, to three kinds of government. For it is either free and unfolds itself in its ordinary course; or it is torn from its course by the crookedness and arrogance of matter and by the violence of impediments; or it is restrained and moulded by art and human agency. [Natura in triplici Statu ponitur, & tanquam Regimen subit trinum. Aut enim libera est, & cursu suo ordinario se explicat; aut à prauitatibus & insolentijs Materiæ, atque ab Impedimentorum violentâ de statu suo detruditur; aut ab Arte & ministerio humano constringitur & fingitur.]	<i>Parasceve OFB</i> 11.454–455 a4r6–a4v9; <i>SEH</i> 4.253	1623
3:102*	7. Likewise cannon shot, once they have been fired and when they have completely stopped not only being	<i>Historia densi et rari OFB</i>	1623

	<p>carried along but also growing in violence or tumbling down, such that to all appearances they are totally motionless, we find that for a long time after they have a commotion or pulsation in their smallest parts to such an extent that if anything is put on top of them it will experience a great shock; and that comes not so much from the burning heat as from the percussive throbbing. [7. Etiam <i>Pilæ</i> è <i>Bombardis</i> emissæ, postquam non solum vehi, sed & gliscere aut labi omnino desierint, adeo ut ad aspectum sint prorsus immobiles, tamen diu post magnum deprehenduntur habere Tumultum, & pulsationem in minimis; adeo ut, si aliquid superponatur, magnam vim patiatur: neque id tam à <i>Calore comburente</i>, quam à <i>palpitatione percussiva</i>.]</p>	<p>13.94–95 D1r17–D1v22; <i>SEH</i> 5.365 [2.270]</p>	
3:103*	<p>8. Take a pennyweight of iron sheeting and nine pennyweights of aqua fortis and, in the absence of fire, the iron rises up in large bubbles, not just within the body of the water but above, to the extent that it foams up out of the mouth of the glass and gives off abundant and dense yellow fumes; and it does that with an extremely violent commotion and with heat so very fierce that you cannot touch it. [8. Accipe <i>Ferri</i> in laminis pond. Den. 1. <i>Aquæ Fortis</i> pond. Den. 9; & sine igne surgit <i>Ferrum</i> in magnis bullis, non tantum intra corpus <i>Aquæ</i>, sed supra, adeo ut ebulliat extra os vitri, atque insuper emittat copiosum & densum Fumum croceum; idque cum maximo rumultu, & calore vehementissimo, & qualem manus non sustineat.]</p>	<p><i>Historia densi et rari OFB</i> 13.112–113 D8v21–25; <i>SEH</i> 5.374 [2.279]</p>	1623
3:104*	<p>The commotion within the parts of the body causes this frothing up when it is being dissolved. For when they are being violently eaten away, bodies are to a certain extent driven by local motion, as we see in pea gravel which, when it is put to the side of the vessel in strong vinegar (so that it can slide more easily), moves back and forth like a little fish. [Tumultus intra partes corporis inter dissolvendum, istam Ascensionem causat. Nam in vehementi Erosione Corpora impelluntur nonnihil motu locali; ut videre est in lapide parvo glareoso, qui positus in Aceto forti, ad latera patellæ, (ut facilius labatur) per vices gliscit, ut <i>Pisciculus</i>.]</p>	<p><i>Historia densi et rari OFB</i> 13.114–115 E1v21–25; <i>SEH</i> 5.375 [2.280]</p>	1623
3:105a	<p>[Et est alia dilatatio, quæ fit (ab) non ab appetitu aliquo in corpore ipso quod dilatatur, sed per violentiam corporum externorum, quæ cum suis motibus præualeant, necessitatem imponunt corpori alicui vt dilatetur et distrahatur.]</p>	<p><i>Historia densi et rari</i> (Dupuy version) see ex</p>	1623
3:105b	<p>We must pass on to those dilatations or disruptions and</p>	<p><i>Historia densi</i></p>	1623

	divulsions caused not by some appetite in the body dilated itself, but by the violence of bodies outside which, since theier motions have the upper hand, force the other body to dilate and be disrupted.... <i>Dilatations or disruptions by violence from outside.</i> [Transeundeum ad eas <i>Dilatationes</i> , vel <i>Distractiones & Divulsiones</i> , quæ fiunt, non ab Appetitu aliquo in corpore ipso quod dilatatur, sed per violentiam <i>Corporum externorum</i> , quæ, cum suis motibus, prævaleant, necessitatem imponunt Corpori alicui ut <i>dilatetur & distrahatur</i> <i>Dilatationes sive distractions à violentia externa.</i>]	<i>et rari OFB</i> 13.120–123 E4r25–29,3; <i>SEH</i> 5.378 [2.283]	
3:106	9. On the other hand, the chemists observe that the expansion of quicksilver by fire is also extremely violent ; why even gold vexed and shut in sometimes bursts out with fury, endangering the people working with it. [9. Notant autem <i>Chymistæ</i> , etiam <i>Argenti Vivi</i> expansionem per ignem esse admodum violentam ; quin & <i>Aurum vexatum</i> , & occlusum, quandoque potenter erumpere, cum periculo operantium.]	<i>Historia densi et rari OFB</i> 13.120–121 E3v21–E4r23; <i>SEH</i> 5.377–378 [2.282]	1623
3:107	4. There is no swelling when flesh rises in cupping glasses, bur a violent extension of the whole flesh by attraction. 5. With the following experiment you can establish what rarefaction air will put up with (according to the degree of violence applied). Take a glass egg with a little hole in it; suck out as much of the air as you can, then immediately stop the hole with your finger and with it so stopped put the egg under water. Then take your finger away and you will see the egg draw in the same amount of water as there was air sucked out, so that the air left behind can regain the old bulk from which it had been distracted and extended by force... [4. <i>Caro</i> , quæ surgit in <i>Ventosis</i> , non est <i>Tumor</i> , sed violenta <i>Extensio Carnis integralis</i> per <i>Attractionem</i> . 5. <i>Qualem Rarefactionem</i> toleret <i>Aer</i> (pro modo scilicet violentiae) tali <i>Experimento</i> elicere possis. Accipe <i>ovum vitreum</i> , in quo sit <i>Foramen minutum</i> ; exuge <i>Aerem</i> anhelitu quantum potes; deinde affatim obtura <i>Foramen</i> digito, & merge <i>ovum</i> in aquam ita obturatum. Post rolle digitum, & videbis <i>ovum</i> attrahere <i>aquam</i> , tantum scilicet, quantum exuctum fuerit <i>Aeris</i> , ut <i>Aer</i> qui remansit possit recuperare exporrectionem suam veterem, à qua fuerat vi distractus, & extensus.]	<i>Historia densi et rari OFB</i> 13.122–123 E4v15–23; <i>SEH</i> 5.379 [2.283]	1623
3:108	2. In the process of contraction of the parts by fire there is an end and last extreme. For if by the violent depredations of fire the amount of matter be brought to	<i>Historia densi et rari OFB</i> 13.136–137	1623

	the point where the parts cannot hang together, then they part company, and are incinerated and calcined. [2. Est in processu <i>Contractions</i> partium ab Igne, Finis & ultimitas: Nam si minor sit copia <i>Materiae</i> , per violentam <i>Deprædationem</i> Ignis, quam ut cohærere possint; tum demum se deserunt, & incinerantur, & calcinantur.]	F2r14–17; <i>SEH</i> 5.385 [2.290]	
3:109	[problems regarding the formation of rain through condensation:] The first is whether their drops are congealed and condensed as they fall, or first collected and gathered together into greater masses of water which hang in the air (because of their distance from the Earth), and are afterwards shaken by some violence and break up and disperse themselves into drops, as in some downpours in the West Indies which come down so suddenly and heavily that you would think they had been tipped and flung down out of buckets. [Altera, utrum Guttæ ipsorum congelentur & condensentur in ipso casu; an fuerint illæ primo collectæ & congregatæ in moles majores Aquarum, in Aere (propter distantiam à Terra) pensiles, quæ postea, per violentiam aliquam conquassatæ, frangunt se, & comminuunt in Guttas; ut in nonnullis Cataractis <i>Indiæ Occidentalis</i> , quæ tam subito & confertim descendunt, ut videantur quasi ex vasibus fusæ & dejectæ.]	<i>Historia densi et rari OFB</i> 13.138–141 F3r32–F3r6; <i>SEH</i> 5.386 [2.291]	1623
3:110	Opposed to the action of dilatation by external violence , either for or against the appetite of the body dilated, is the action of contraction by violence likewise external when bodies are forced by the things acting on them to give way and compress themselves. <i>Contractions of bodies caused by external violence</i> 1. Air easily puts up with some condensation by violence or external compression; but it does not put up with much, as we see in the violent shock of winds and earthquakes. [Actioni Dilatationis per violentiam externam, sive ex appetitu sive contra appetitum Corporis Dilatati, oppunitur Actio Contractionis per violentiam similiter externam; cum corpora ponuntur in necessitate, ab illis quæ in ipsa agunt, cedendi, & se comprimendi. <i>Contractiones corporum quæ finunt per violentiam externam</i> . 1. Aer per violentiam sive compressionem externam aliquam <i>Condensationem</i> facile patitur; majorem vero non tolerat: ut in violento impetu ventorum, & Terræ liquet.]	<i>Historia densi et rari OFB</i> 13.154–155 G1r18–21; <i>SEH</i> 5.394 [2.298–299]	1623
3:111	5. But all motion which they call violent , as of shot from guns, arrows, spears, machines and a host of other	<i>Historia densi et rari OFB</i>	1623

	things, works by preternatural compression of bodies and their struggle to restore themselves which, when they cannot achieve that promptly, they move somewhere else. For solid bodies, especially the hard ones, will scarcely stand much further compression. But I leave the inquiry into this matter to the title on Motion of Liberty. [5. At omnis <i>Motus</i> , quem vocant, violentus , veluti <i>Pilarum è Tormentis, Sagittarum, Spiculorum, Machinarum</i> , & aliorum infinitorum, expeditur per <i>Compressionem præternaturalem Corporum</i> , & Nixum pg 158 ipsorum ad se restituendum; quod cum commode ad tempus facere non possint, loco moventur. Nam <i>solida</i> , præsertim dura, ulteriorem <i>compressionem</i> ægre admodum tolerant. Verum hujusce rei Inquisitionem ad <i>Titulum de Motu libertatis</i> rejicimus.]	13.156–158 G2r34–G2r4; <i>SEH</i> 5.395 [2.300]	
3:112	[one of the efficientes of bodily dilatation:] 8. Disruption by violence from outside...7. Compression by external violence . [8. <i>Distractio</i> à violentia externa....7. <i>Compressio</i> per violentiam externam.]	<i>Historia densi et rari OFB</i> 13.160–161 G3r9, G3v16; <i>SEH</i> 5.396 [2.301]	1623
3:113	20. Recovery from violence both dilates and condenses in opposition to the violence . [20. <i>Restitutio</i> à violentia & <i>dilatata</i> & <i>condensata</i> , in adversum violentia .]	<i>Historia densi et rari OFB</i> 13.164–165 G5v26–27; <i>SEH</i> 5.399 [2.303]	1623
3:114	22. The rarer the bodies the more they put up with dilatation and contraction by external violence within certain limits. [22. Quo <i>Corpora</i> sunt <i>Rariora</i> , eo majorem sustinent & <i>Dilatationem</i> & <i>Contractionem</i> per externam violentiam , ad certos Terminos.]	<i>Historia densi et rari OFB</i> 13.164–165 G5v30–32; <i>SEH</i> 5.399 [2.303–304]	1623
3:115	But since it is difficult to know the ways to death, unless you first examine and search out the seat and residence (or rather vault) of death, an inquiry into this should be made, yet not into every kind of death but only of those deaths which come by privation and want, and not by violence . For only the former relate to the atrophy of old age. 15. Inquire into the moment of death and into the antechambers which lead to it on every hand (so long as it is caused by want and not violence). [<i>Quoniam verò difficile est, vias ad Mortem nosse, nisi ipsius Mortis Sedem, & Domicilium (vel Antrum potiùs) perscrutatus sis, & inueneris; de hoc facienda est Inquisitio, neque tamen de omni genere Mortis, sed tantùm de ijs Mortibus, quæ inferuntur per Priuationem, &</i>	<i>Historia vitæ & mortis OFB</i> 12.154–155 B6v7–B7r15; <i>SEH</i> 5.222 [2.110]	1623

	Indigentiam, <i>non per</i> Violentiam ; <i>Illæ enim sunt tantum, quæ ad Atrophiam Senilem spectant.</i> 15. <i>De Articulo Mortis, & de Atriolis Mortis, quæ ad illum ducant, ab omni parte (si modò id fiat per Indigentiam, & non per violentiam), inquirito.]</i>		
3:116	Gordianus the Elder lived to 80 and yet died a violent death before he had tasted the fruits of empire. He was a large-hearted and brilliant man, learned and a poet, and ever fortunate up to the time of his death. The emperor Valerian was 76 before the Persian king Sapor got his hands on him, after which he lasted another seven amid abuse, and he died a violent death. [<i>Gordia-20nus Senior, Octoginta Annos vixit, & tamen violentâ Morte perijt, postquam vix degustasset Imperium; Vir Magnanimus, & Splendidus, Eruditus, & Poeta, & constanti vitæ tenore (ante ipsum obitum) Fœlix. Valerianus Imperator, Septuaginta sex Annos vixit, antequam à Sapore Rege Persarum, captus esset; post Captiuitatem autem Septem Annos vixit, inter contumelias; etiam violentâ Morte præreptus;</i>]	<i>Historia vitæ & mortis OFB</i> 12.208–209 I7r19–25; <i>SEH</i> 5.250 [2.140]	1623
3:117*	73. Next comes the inquiry concerning curbing the spirit's motion. For motion manifestly attenuates and heats it. This curbing takes place in three ways: by sleep, by avoiding hard work, violent exercise, and all lassitude, and by checking distressing feelings. [73. <i>Sequitur Inquisitio de Frænatione Motûs Spiritûs; Motus enim manifestò eum attenuat & incendit; Illa Frænatio fit tribus modis: Per Somnum; per Euitationem Laboris vehementis, aut Exercitii nimii, denique omnis lassitudinis; & per Cohibitionem Affectuum molestorum.</i>]	<i>Historia vitæ & mortis OFB</i> 12.262–263 Q5r9–Q5v12; <i>SEH</i> 5.277 [2.170]	1623
3:118*	...he, who had on previous occasions suffered violent seasickness, now fared well and experienced no nausea at all. [<i>Eúmque, cùm antea ex Mari grauissimè ægrotare solitus esset, optimè tunc valuisse, nec Nauseam vllam sensisse.</i>]	<i>Historia vitæ & mortis OFB</i> 12.276–277 S2v15–17; <i>SEH</i> 5.285 [2.178]	1623
3:119*	Again, oil ought to be applied not just when exercise comes to a close, as is the case with massage, but also at the beginning and end in more violent exercise, as is the practice with athletes. [<i>Atque insupèr, Exercitatio Inunctione non tantum claudi debet, vt Fricatio, sed etiam in Exercitationibus vehementioribus, adhibenda est Vnctio, et in Principio, et sub finem, more Athletarum.</i>]	<i>Historia vitæ & mortis OFB</i> 12.308–309 X8r12–15; <i>SEH</i> 5.301 [2.193]	1623
3:120	Now we must inquire into the anterooms of death, i.e. into the things which befall the moribund during the	<i>Historia vitæ & mortis OFB</i>	1623

	critical instants just before and just after death; so that, since the approaches to death are many, one may understand the common destination at which they end, especially in deaths occurring by defect of nature rather than by violence ; though I shall be obliged to say something here and there about the latter by reason of the connection of things. [<i>De Atriolis Mortis iam inquirendum; id est de ijs, quæ accidunt Morientibus in Articulo Mortis, & paulò Antè, & Post: Vt cùm multis vijs perueniatur ad Mortem, intelligi possit in quæ Communia; illæ desinant; Præcipuè in Mortibus, quæ inferuntur per Indigentiam Naturæ, potiùs quàm per Violentiam; tametsi etiam aliquid ex his, propter Rerum Connexionem insper- gendum sit.</i>]	12.328–329 2A5r2–2A5v8; <i>SEH</i> 5.311 [2.203]	
3:121	2. Death of the spirit by destruction of the organs (as happens through illness and violence) does not (as I said at the start) belong to the present inquiry, but this too ends up in those same three anterooms. [2. <i>De Interitu Spiritûs, per Destructionem Organorum (qualis fit per Morbos, & Violentiam) non est Inquisitio præsens (vt ab initio diximus) tametsi & ille in eadem tria Atriola desinat.</i>]	<i>Historia vitæ & mortis OFB</i> 12.336–337 2B5r15–17; <i>SEH</i> 5.315 [2.207–208]	1623
3:122*	34. Many are the cases of men left for dead, or laid out on the deathbed; or carried off for burial, or indeed who have been actually buried, who have none the less come back to life again. This is apparent (after exhumation) in the case of the ones buried, from the bruising and injuries to the head caused by the struggles and violent travails of the body in its box. [4. <i>Complura fuerunt Exempla Hominum tanquam Mortuorum, Aut Expositorum è Lecto, Aut Delatorum ad Funus, quinetiam nonnul-lorum in Terrâ Conditorum, qui nihilominùs reuixerunt; Id quod in ijs, qui Conditi sunt, repertum est (terrâ aliquantò post apertâ), per Obtusionem & Vulnerationem Capitis, ex iactatione & Nixu Cadaueris intra Feretrum:</i>]	<i>Historia vitæ & mortis OFB</i> 12.338–339 2B8r31–36; <i>SEH</i> 5.317 [2.209]	1623
3:123	This rule is more difficult to put into practice than to understand. For it is plain that whatever penetrates well, but yet with pricking or bite (as all acrid and acid things are) leaves in its wake wherever it goes a trace of dryness or disruption, as it hardens the juices and undermines the parts. But on the other hand, things that penetrate by sheer tenuity, as if by strength and guile, and without violence , moisten and irriate on their way. [<i>Canon iste magis difficilis est Practicâ, quam Intellectu. Manifestum est enim, quicquid benè penetrat,</i>	<i>Historia vitæ & mortis OFB</i> 12.366–367 2F1r16–22; <i>SEH</i> 5.330–331 [2.221]	1623

	<i>sed tamen cùm Stimulo, aut Dente (qualia sunt omnia Acria, & Acida) relinquere, vbicunque transit, Vestigium non-20nullum Siccitatis, & Diuulsionis; vt Succos induret, Partes conuellat; At contrà, quæ penetrant merâ Tenuitate, tanquam furtim, & insinuatuiè, absque violentiâ, irrorare, & irrigare in transitu. De his in Operationibus quartâ, & septimâ, haud pauca descripsimus.]</i>		
3:124*	[regarding diet]“ guarding against things which inflame the spirit and imbue it with violent heat, such as wine and seasonings; [Cautio de ijs, quæ incendunt Spiritum, induntque ei Calorem acrem , vt de Vinis, & Aromatibus;]	<i>Historia vitæ & mortis OFB</i> 12.374–375 2F6v23–24; <i>SEH</i> 5.334 [2.224]	1623
3:125	The division which I will make of Natural History is founded upon the state and condition of nature herself. For I find nature in three different states, and subject to three different conditions of existence. She is either free and follows her own course of development as in the heavens, in the animal and vegetable creation, and in the general array of the universe; or she is driven out of her ordinary course by the perverseness, insolence, and forwardness of matter and violence of impediments, as in the case of monsters; or lastly she is put in constraint, molded, and made as it were new by art and the hand of man; as in things artificial. [Partitionem <i>Historiae Naturalis</i> moliemur ex statu et conditione ipsius Naturae, quae in triplici statu posita invenitur, et tanquam regimen trinum subit. Aut enim libera est natura et cursu consueto se explicans, ut in coelis, animalibus, plantis, et universo naturae apparatu; aut a pravitatibus et insolentiis materiae contumacies et ab impedimentorum violentia de statu suo detruditur, ut in monstis; aut denique ab arte et opera humana constringitur et fingitur, et tanquam novatur, ut in artificialibus]	<i>De augmentis SEH</i> 4.294 [1.496]	1623
3:126*	And it is most true that every passion of the more violent kind is as it were of doubtful sex; for it has at once the force of a man and the weakness of a woman. [Atque illud verissimum est, omnem affectum vehementiorem tanquam <i>ambigui sexus</i> esse. Habet enim impetum virilem, impotentiam autem muliebrem.]	<i>De augmentis SEH</i> 4.333 [1.536]	1623
3:127	For long ago have those doctrines been exploded of the Force of the First Mover and the Solidity of the Heaven, —the stars being supposed to be fixed in their orbs like nails I in a roof. And with no better reason is it affirmed,	<i>De augmentis SEH</i> 4.348 [1.552]	1623

	that there are different poles of the zodiac and of the world; that there is a Second Mover of counteraction to the force of the first; that all the heavenly bodies move in perfect circles; that there are eccentrics and epicycles whereby the constancy of motions in perfect circles is preserved; that the moon works no change or violence in the regions above it: and the like. [Explosa enim fere jampridem sunt illa, <i>Raptus Primi Mobilis</i> , et <i>Soliditas Cœli</i> , (stellis in orbibus suis tanquam clavis in laquearibus infixis). Nec multo melius asseritur, quod sint <i>diversi Poli Zodiaci</i> et <i>Mundi</i> ; quod sit <i>Secundum Mobile</i> renitentia in adversum <i>Primi Mobilis</i> raptus; quod omnia in cœlo ferantur per <i>circulos perfectos</i> ; quod sint <i>eccentrici</i> et <i>epicycli</i> , quibus motuum in circulis perfectis constantia servetur; quod a Luna in superius nulla sit <i>mutatio</i> aut violentia ; et hujusmodi.]		
3:128	For Providence no doubt directs all kinds of death alike, whether from violence or disease or the decay of age; yet it does not on that account exclude the use of preventions and remedies. But art and human industry do not command nature and destiny; they only serve and minister to them.	<i>De augmentis</i> <i>SEH</i> 4.383–384	1623
3:129	And again it is no small dominion which imagination holds in persuasions that are wrought by eloquence; for when by arts of speech men's minds are soothed, inflamed, and carried hither and thither, it is all done by stimulating the imagination till it becomes ungovernable, and not only sets reason at nought, but offers violence to it, partly by blinding, partly by incensing it. Nevertheless, I see no cause to alter the former division; for imagination hardly produces sciences; poesy (which in the beginning was referred to imagination) being to be accounted rather as a pleasure or play of wit than a science. And for the power of the imagination in nature, I have just now assigned it to the doctrine concerning the soul. And its relation to rhetoric I think best to refer to that art itself, which I shall handle hereafter.	<i>De augmentis</i> <i>SEH</i> 4.406	1623
3:130	14. Inquire touching the motion of gravity as compared with other motions; what motions it overcomes, and what overcome it. As in violent motion (as it is called) the motion of gravity is overpowered for a time; and as when a little magnet lifts a piece of iron much heavier than itself, the motion of gravity yields to the motion of sympathy.	<i>De augmentis</i> <i>SEH</i> 4.426–427	1623

3:131	Rhetoric is subservient to the imagination, as Logic is-to the understanding; and the duty and office of Rhetoric, if it be deeply looked into, is no other than to apply and recommend the dictates of reason to imagination, in order to excite the appetite and will. For we see that the government of reason is assailed and disordered in three ways; either by the illaqueation of sophisms, which pertains to Logic; or by juggleries of words, which pertain to Rhetoric; or by the violence of the Passions, which pertains to Ethics. For as in negotiations with others, men are usually wrought either by cunning, or by importunity, or by vehemency; so likewise in this negotiation within ourselves, we are either undermined by fallacies of arguments, or solicited and importuned by assiduity of impressions and observations, or agitated and transported by violence of passions. And yet the nature of man is not so unfortunately built, as that those arts and faculties should have power to disturb reason, and no power to strengthen or establish it; on the contrary they are of much more use that way. For the end of logic is to teach a form of argument to secure reason, and not to entrap it; the end likewise of moral philosophy is to procure the affections to fight on the side of reason, and not to invade it; the end of rhetoric is to fill the imagination with observations and images, to second reason, and not to oppress it. For abuses of arts only come in indirectly, as things to guard against, not as things to practise.	<i>De augmentis</i> <i>SEH</i> 4.455–456	1623
3:132	Revenge is a kind of wild justice. He who requites violence with violence , sins against the law but not against the man.... VIOLENT COUNSELSEvery violent remedy is pregnant with some new evil.....Necessity, which gives violent counsels, also executes them.... The only violent counsellors are anger and fear.	<i>De augmentis</i> <i>SEH</i> 4.488, 490–491	1623
3:133	For <i>dissolution</i> into liquor, we are to enquire what is the proper <i>menstruum</i> to dissolve any metal, and in the negative, what will touch upon the one and not upon the other, and what several <i>menstrua</i> will dissolve any metal, and which most exactly. <i>Item</i> the process or motion of the dissolution, the manner of rising, boiling, vapouring, more violent or more gentle, causing much heat or less. <i>Item</i> the quantity or charge that the strong water will bear, and then give over. <i>Item</i> the colour into which the liquor will turn. Above all it is to be enquired, whether there be any <i>menstruum</i> to dissolve any metal, that is not fretting or corroding, and openeth the body by	<i>Physiological</i> <i>Remains:</i> <i>Questions</i> <i>touching</i> <i>minerals</i> <i>SEH</i> 3.814	1623 – 1626 ?

	sympathy, and not by mordacity or violent penetration.		
3:134	9. Take a glass, and put water into it, and wet your finger; and draw it round about the lip of the glass, pressing it somewhat hard; and after you have drawn it some few times about, it will make the water frisk and sprinkle up in fine dew. This instance doth excellently demonstrate the force of compression in a solid body. For whensoever a solid body (as wood, stone, metal, &c.) is pressed, there is an inward tumult in the parts thereof, seeking to deliver themselves from the compression. And this is the cause of all violent motion. Wherein it is strange in the highest degree, that this motion hath never been observed nor inquired; it being of all motions the most common, and the chief root of all mechanical operations.	<i>Sylva sylvarum</i> <i>SEH 2.342</i>	1624
3:135	This is an instance of great consequence for the discovery of the nature of flame; and sheweth manifestly that flame burneth more violently towards the sides than in the midst; and, which is more, that heat or fire is not violent or furious but where it is checked and pent.	<i>Sylva sylvarum</i> <i>SEH 2.353</i>	1624
3:136	We see also, that breathing upon a glass or smooth body giveth a dew; and in frosty mornings (such as we call rime frosts) you shall find drops of dew upon the inside of glass-windows; and the frost itself upon the ground is but a version or condensation of the moist vapours of the night into a watery substance: dews likewise, and rain, are but the returns of moist vapours condensed; the dew, by the cold only of the sun's departure, which is the gentler cold; rains, by the cold of that which they call the middle region of the air; which is the more violent cold.	<i>Sylva sylvarum</i> <i>SEH 2.373–374</i>	1624
3:137	It is an inveterate and received opinion, that cantharides applied to any part of the body touch the bladder and exulcerate it, if they stay on long. It is likewise received, that a kind of stone, which they bring out of the West Indies, hath a peculiar force to move gravel, and to dissolve the stone; insomuch as laid but to the wrist, it hath so forcibly sent down gravel, as men have been glad to remove it, it was so violent .	<i>Sylva sylvarum</i> <i>SEH 2.379</i>	1624
3:138	And so bodies in weighing one upon another, though the upper body press the lower body down, make no noise. So the motion in the minute parts of any solid body (which is the principal cause of violent motion, though unobserved,) passeth without sound; for that sound that is heard sometimes, is produced only by the breaking of	<i>Sylva sylvarum</i> <i>SEH 2.391</i>	1624

	the air, and not by the impulsion of the parts.		
3:139	The second, in that an object of surcharge or excess destroyeth the sense; as the light of the sun the eye; a violent sound (near the ear) the hearing:	<i>Sylva sylvarum</i> <i>SEH 2.429</i>	1624
3:140	The evils that come of exercise are: First, that it maketh the spirits more hot and predatory. Secondly, that it doth absorb likewise, and attenuate too much the moisture of the body. Thirdly, that it maketh too great concussion (especially if it be violent) of the inward parts, which delight more in rest. But generally exercise, if it be much, is no friend to prolongation of life; which is one cause why women live longer than men, because they stir less.	<i>Sylva sylvarum</i> <i>SEH 2.440</i>	1624
3:141	If the spirits be detained within the body, and move more violently , there followeth colliquation; as in metals, &c. If more mildly, there followeth digestion or maturation ; as in drinks and fruits. If the spirits be not merely detained, but protrude a little, and that motion be confused and inordinate, there followeth putrefaction; which ever dissolveth the consistence of the body into much inequality ; as in flesh, rotten fruits, shining wood, &c., and also in the rust of metals.	<i>Sylva sylvarum</i> <i>SEH 2.451</i>	1624
3:142	It is affirmed both by ancient and modern observation, that in furnaces of copper and brass where chalcites (which is vitriol) is often cast in to mend the working, there riseth suddenly a fly, which sometimes moveth as if it took hold on the walls of the furnace, sometimes is seen moving in the fire below; and dieth presently as soon as it is out of the furnace: which is a noble instance, and worthy to be weighed; for it sheweth, that as well violent heat of fire as the gentle heat of living creatures will vivify.	<i>Sylva sylvarum</i> <i>SEH 2.559</i>	1624
3:143	But this dependeth upon one of the greatest secrets in all nature; which is, that similitude of substance will cause attraction, where the body is wholly freed from the motion of gravity: for if that were taken away, lead would draw lead, and gold would draw gold, and iron would draw iron, without the help of the loadstone. But this same motion of weight or gravity (which is a mere motion of matter, and hath no affinity with the form or kind) doth kill the other motion, except itself be killed by a violent motion; as in these instances of arrows; for then the motion of attraction by similitude of substance beginneth to shew itself.	<i>Sylva sylvarum</i> <i>SEH 2.564–565</i>	1624
3:144	Secondly, hot water doth cause evaporation from the skin; so as it spendeth the matter in those parts under the	<i>Sylva sylvarum</i> <i>SEH 2.566</i>	1624

	water, before it issueth in sweat. Again, sweat cometh more plentifully, if the heat be increased by degrees, than if it be greatest at first, or equal. The cause is, for that the pores are better opened by a gentle heat than by a more violent ; and by their opening the sweat issueth more abundantly.		
3:145	721. Laughing causeth a dilatation of the mouth and lips; a continued expulsion of the breath, with the loud noise, which maketh the interjection of laughing; shaking of the breast and sides; running of the eyes with water, if it be violent and continued.	<i>Sylva sylvarum</i> <i>SEH 2.570</i>	1624
3:146	791. Let there be a body of unequal weight (as of wood and lead, or bone and lead); if you throw it from you with the light end forward, it will turn, and the weightier end will recover to be forwards; unless the body be over-long. The cause is, for that the more dense body hath a more violent pressure of the parts from the first impulsion; which is the cause (though heretofore not found out, as hath been often said) of all violent motions; and when the hinder part moveth swifter (for that it less endureth pressure of parts) than the forward part can make way for it, it must needs be that the body turn over: for (turned) it can more easily draw forward the lighter part.	<i>Sylva sylvarum</i> <i>SEH 2.596</i>	1624
3:147	And gold, which seemeth by the weight to be the closest and most solid body, doth greedily drink in quicksilver. And it seemeth that this reception of other bodies is not violent : for it is many times reciprocal, and as it were with consent.	<i>Sylva sylvarum</i> <i>SEH 2.601</i>	1624
3:148	We have likewise violent streams and cataracts, which serve us for many motions: and likewise engines for multiplying and enforcing of winds, to set also on going divers motions.	<i>New Atlantis</i> <i>SEH 3.157</i>	1624
3:149	We have also engine-houses, where are prepared engines, and instruments for all sorts of motions. There we imitate and practise to make swifter motions than any you have, either out of your muskets or any engine that you have; and to make them and multiply them more easily, and with small force, by wheels and other means: and to make them stronger, and more violent than yours are; exceeding your greatest cannons and basilisks. We represent also ordnance and instruments of war, and engines of all kinds: and likewise new mixtures and compositions of gun-powder, wildfires burning in water, and unquenchable. Also fire-works of all variety both for pleasure and use.	<i>New Atlantis</i> <i>SEH 3.163</i>	1624

3:150	Boiling water does not give off light; air, though violently heated, does not give off light; mirrors and diamonds, which reflect light so strikingly, give off none that originates with them. [Aqua bulliens non edit lucem; aër licet violenter fervefactus non edit lucem; Specula & Diamantes, quæ lucem tam insigniter reflectunt, nullam edunt lucem originalem.]	<i>Topica de luce et lumine OFB</i> 13.246–147 X3v2–6 <i>SEH</i> 5.409–410 [2.318]	1625
3:151	For which purpose, the wiser Sort of Great Persons, bring in ever upon the Stage, some Body, upon whom to derive the <i>Envie</i> , that would come upon themselves; Sometimes upon Ministers, and Servants; Sometimes upon Colleagues and Associates; and the like; And for that turne, there are never wanting, some Persons of violent and undertaking Natures, who so they may have Power, and Businesse, will take it at any Cost.	<i>Essays OFB</i> 15.30 G4r129–136; <i>SEH</i> 6.396	1625
3:152	For <i>Honour</i> is, or should be, the Place of Vertue: And as in Nature, things move violently to their Place, and calmly in their Place: So Vertue in Ambition is violent , in Authoritie settled and calme.	<i>Essays OFB</i> 15.36 I2v100–103; <i>SEH</i> 6.401, 552	1625
3:153	And therefore, when great Ones, in their owne particular Motion, move violently , and as <i>Tacitus</i> expressed it well, <i>Liberiùs, quàm ut Imperantium meminissent</i> ; It is a Signe, the Orbs are out of Frame.	<i>Essays OFB</i> 15.45 L4r61–65; <i>SEH</i> 6.408,	1625
3:154	For both <i>Constantinus</i> , and <i>Constance</i> , his Sonnes, died violent deaths; And <i>Constantius</i> his other Sonne, did little better; who died, indeed, of Sicknesse...	<i>Essays OFB</i> 15.61 P4r105–107; <i>SEH</i> 6.421	1625
3:155	...there are set, for our Instruction, the two Markes, whereby <i>Bad Counsell</i> is, for ever, best discerned: That it was <i>young Counsell</i> , for the Persons; And Violent Counsells , for the Matter.	<i>Essays OFB</i> 15.64 Q2v21–24; <i>SEH</i> 6.424	1625
3:156	And as it is certaine, that in bodies inanimate, union strengthneth any naturall motion, and weakeneth any violent motion; So amongst men, friendship multiplieth joies, and divideth griefes.	<i>Essays OFB</i> 15.80n1; <i>SEH</i> 6.558	1625
3:157	For in Bodies, <i>Union</i> strengthneth and cherisheth any Naturall Action; And, on the other side, weakneth and dulleth any violent Impression: And euen so is it of Minds.	<i>Essays OFB</i> 15.84 X2v131–134; <i>SEH</i> 6.440	1625
3:158	Force maketh <i>Nature</i> more violent in the Returne;...	<i>Essays OFB</i> 15.119 2G2r5–6; <i>SEH</i> 6.469, 571	1625
3:159	Natures that have much Heat, and great and violent desires and Perturbations, are not ripe for Action, till they have passed the Meridian of their yeares....	<i>Essays OFB</i> 15.130 2I4r10–12; <i>SEH</i> 6.477	1625
3:160	When <i>Factions</i> are carried too high, and too violently , it	<i>Essays OFB</i>	1625

	is a Signe of Weaknesse in Princes; And much to the Prejudice both of their Authoritie, and Businesse.	15.156 2Q2r52–54; <i>SEH</i> 6.500,	
3:161	They that are <i>Glorious</i> , must needs be <i>Factionous</i> ; For all Bravery stands upon Comparisons. They must needs be Violent , to make good their owne Vaunts.	<i>Essays OFB</i> 15.161 2R2v7–10; <i>SEH</i> 6.503, 585	1625
3:162	So when there appeareth on either side, an High Hand; Violent Prosecution, Cunning Advantages taken, Combination, Power, Great Counsell, then is the Vertue of a <i>Judge</i> seene, to make Inequalitie Equall...	<i>Essays OFB</i> 15.166 2S3v34–37; <i>SEH</i> 6.507, 6.583	1625
3:163	Surely, there is no better Way to stop the Rising of <i>New Sects</i> and <i>Schisms</i> ; then To reforme Abuses; To compound the smaller Differences; To proceed mildly, and not with Sanguinary Persecutions; And rather to take off the principall Authours, by Winning and Advancing them, then to enrage them by Violence and Bitternesse.	<i>Essays OFB</i> 15.174 2V3v99–2V4r105; <i>SEH</i> 6.514	1625