INTRODUCTION

TO THE

LITERATURE OF EUROPE,

IN THE

FIFTEENTH, SIXTEENTH, AND SEVENTEENTH CENTURIES.

VOLUME III.

INTRODUCTION

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LITERATURE OF EUROPE,

IN THE

FIFTEENTH, SIXTEENTH, AND SEVENTEENTH
CENTURIES.

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De modo autem hujusmodi historiæ conscribendæ, illud imprimis monemus, ut materia et copia ejus, non tantum ab historiis et criticis petatur, verum etiam per singulas annorum centurias, aut etiam minora intervalla, seriatim libri præcipui, qui eo temporis spatio conscripti sunt, in consilium adhibeantur; ut ex eorum non perlectione (id enim infinitum quiddam esset), sed degustatione, et observatione argumenti, styli, methodi, genius illius temporis literarius, veluti incantatione quadam, a mortuis evocetur.—BACON *de Augm. Scient.*

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PART III.—*continued.*

ON THE LITERATURE OF THE FIRST HALF OF
THE SEVENTEENTH CENTURY.

CHAPTER III.

HISTORY OF SPECULATIVE PHILOSOPHY FROM 1600 TO 1650.

Section I.

Aristotelian Logic — Campanella — Theosophists — Lord Herbert of Cherbury — Gassendi's Remarks upon him.

Subjects of this Chapter.

1. In the two preceding periods, we have had occasion to excuse the heterogeneous character of the chapters that bear this title. The present is fully as much open to verbal criticism; and perhaps it is rather by excluding both moral and mathematical philosophy that we give it some sort of unity, than from a close connexion in all the books that will come under our notice in the ensuing pages. But any tabular arrangement of literature, such as has often been attempted with no very satisfactory result, would be absolutely inappropriate to such a work as the present, which has already to labour with the inconvenience of more subdivisions than can be pleasing to the reader, and would interfere too continually with that general regard to chronology without which the name of history seems incongruous. Hence the metaphysical inquiries

that are conversant with the human mind, or with natural theology, the general principles of investigating truth, the comprehensive speculations of theoretical physics, subjects very distinct and not easily confounded by the most thoughtless, must fall, with no more special distribution, within the contents of this chapter. But since, during the period which it embraces, men arose who have laid the foundations of a new philosophy, and thus have rendered it a great epoch in the intellectual history of mankind, we shall not very strictly, though without much deviation, follow a chronological order, and after reviewing some of the less important labourers in speculative philosophy come to the names of three who have most influenced posterity, Bacon, Descartes, and Hobbes.

Aristotelians and Ramists.

2. We have seen in a former chapter how little progress had been made in this kind of philosophy during the sixteenth century. At its close the schools of logic were divided, though by no means in equal proportion, between the Aristotelians and the Ramists; the one sustained by ancient renown, by civil, or at least academical power, and by the common prejudice against innovation; the other deriving some strength from the love of novelty, and the prejudice against established authority, which the first age of the reformation had generated, and which continued, perhaps, to preserve a certain influence in the second. But neither from one nor the other had philosophy, whether in material or intellectual physics, much to hope; the disputations of the schools might be technically correct; but so little regard was paid to objective truth, or at least so little pains taken to ascertain it, that no advance in real knowledge signalised either of these parties of dialecticians. According, indeed, to a writer of this age, strongly attached to the Aristotelian party, Ramus had turned all physical science into the domain of logic, and argued from words to things still more than his opponents.[a] Lord Bacon, in the bitterest language, casts on him a similar reproach.[b]

[a] Keckermann, Praecognita Logica, p. 129. This writer charges Ramus with plagiarism from Ludovicus Vives, placing the passages in apposition, so as to prove his case. Ramus, he says, never alludes to Vives. He praises the former, however, for having attacked the scholastic party, being himself a genuine Aristotelian.

[b] Ne vero, fili, cum hanc contra Ari-

It seems that he caused this branch of philosophy to retrograde rather than advance.

No improvement till near the end of the century.

3. It was obvious, at all events, that from the universities, or from the church, in any country, no improvement in philosophy was to be expected; yet those who had strayed from the beaten track, a Paracelsus, a Jordano Bruno, even a Telesio, had but lost themselves in irregular mysticism, or laid down theories of their own, as arbitrary and destitute of proof as those they endeavoured to supersede. The ancient philosophers, and especially Aristotle, were, with all their errors and defects, far more genuine high-priests of nature than any moderns of the sixteenth century. But there was a better prospect at its close, in separate though very important branches of physical science. Gilbert, Kepler, Galileo, were laying the basis of a true philosophy; and they, who do not properly belong to this chapter, laboured very effectually to put an end to all antiquated errors, and to check the reception of novel paradoxes.

Methods of the universities.

4. We may cast a glance, meantime, on those universities which still were so wise in their own conceit, and maintained a kind of reputation by the multitude of their disciples. Whatever has been said of the scholastic metaphysicians of the sixteenth century, may be understood as being applicable to their successors during the present period. Their method was by no means extinct, though the books which contain it are forgotten. In all that part of Europe which acknowledged the authority of Rome, and in all the universities which were swayed by the orders of Franciscans, Dominicans, and Jesuits, the metaphysics of the thirteenth century, the dialectics of the Peripatetic school, were still taught. If new books were written, as was frequently the case, they were written upon old systems. Brucker, who sometimes

stotelem sententiam fero, me cum rebelli ejus quodam neoterico Petro Ramo conspirasse augurare. Nullum mihi commercium cum hoc ignorantiæ latibulo, perniciosissima literarum tinea, compendiorum patre, qui cum methodi suæ et compendii vinclis res torqueat et premat, res quidem, si qua fuit, elabitur protinus et exsilit: ipse vero aridas et desertissimas nugas stringit. Atque Aquinas quidam cum Scoto et sociis etiam in non rebus rerum varietatem effinxit, hic vero etiam in rebus non rerum solitudinem æquavit. Atque hoc hominis cum sit, humanos tamen usus in ore habet impudens, ut mihi etiam pro [præ ?] sophistis prævaricari videatur. Bacon, De Interpretatione Naturæ.

transcribes Morhof word for word, but frequently expands with so much more copiousness that he may be presumed to have had a direct acquaintance with many of the books he mentions, has gone most elaborately into this unpropitious subject.[c] The chairs of philosophy in Protestant German universities, except where the Ramists had got possession of them, which was not very common, especially after the first years of this period, were occupied by avowed Aristotelians; so that if one should enumerate the professors of physics, metaphysics, logic, and ethics, down to the close of the century, he would be almost giving a list of strenuous adherents of that system.[d] One cause of this was the "Philippic method" or course of instruction in the philosophical books of Melanchthon, more clear and elegant, and better arranged than those of Aristotle himself or his commentators. But this, which long continued to prevail, was deemed by some too superficial, and tending to set aside the original authority. Brucker, however, admits, what seems at least to limit some of his expressions as to the prevalence of Peripateticism, that many reverted to the scholastic metaphysics, which raised its head about the beginning of the seventeenth century, even in the Protestant regions of Germany. The universities of Altdorf and Helmstadt were the chief nurseries of the genuine Peripateticism.[e]

Scholastic writers.

5. Of the metaphysical writers whom the older philosophy brought forth we must speak with much ignorance. Suarez of Granada is justly celebrated for some of his other works; but, of his Metaphysical Disputations, published at Mentz in 1614, in two folio volumes, and several times afterwards, I find no distinct character in Morhof or Brucker. They both, especially the former, have praised Lalemandet, a Franciscan, whose Decisiones Philosophicæ, on logic, physics, and metaphysics, appeared at Munich, in 1644 and 1645. Lalemandet, says Morhof, has well stated the questions between the Nominalist and Realist parties; observing that the difference between them is like that of a man who casts up a sum of money by

[c] Morhof, vol. ii. l. 1, c. 13, 14. Brucker, iv. cap. 2, 3.

[d] Brucker, iv. 243.

[e] Id., p. 248–253.

figures, and one who counts the coins themselves.[f] Vasquez, Tellez, and several more names, without going for the present below the middle of the century, may be found in the two writers quoted. Spain was peculiarly the nurse of these obsolete and unprofitable metaphysics.

6. The Aristotelian philosophy, unadulterated by the figments of the schoolmen, had eminent upholders in the Italian universities, especially in that of Padua. Cæsar Cremonini taught in that famous city till his death in 1630. Fortunio Liceto, his successor, was as staunch a disciple of the Peripatetic sect. We have a more full account of these men from Gabriel Naudé, both in his recorded conversation, the Naudæana, and in a volume of letters, than from any other quarter. His twelfth letter, especially, enters into some detail as to the state of the university of Padua, to which, for the purpose of hearing Cremonini, he had repaired in 1625. He does not much extol its condition; only Cremonini and one more were deemed by him safe teachers: the rest were mostly of a common class; the lectures were too few, and the vacations too long. He observes, as one might at this day, the scanty population of the city compared with its size, the grass growing and the birds singing in the streets, and, what we should not find now to be the case, the "general custom of Italy, which keeps women perpetually locked up in their chambers, like birds in cages."[g] Naudé in many of these letters speaks in the most panegyrical terms of Cremonini,[h] and particularly for his standing up almost alone in defence of the Aristotelian philosophy, when Telesio, Patrizi, Bruno, and others had been propounding theories of their own. Liceto, the successor of Cremonini, maintained, he afterwards informs us, with little support, the Peripatetic verity. It is probable that, by this time, Galileo, a more powerful adversary than Patrizi or Telesio, had drawn away the students of physical philosophy from Aristotle; nor did Naudé himself long continue in the faith he had imbibed from Cremonini. He became the intimate friend of Gassendi, and embraced a better system without

[f] Morhof, vol. ii. lib. i. cap. 14, sect. 15. Brucker, iv. 129.

[g] Naudæi Epistolæ, p. 52 (edit. 1667).

[h] P. 27, et alibi sæpius.

repugnance, though he still kept up his correspondence with Liceto.

Treatises on logic.

7. Logic had never been more studied, according to a writer who has given a sort of history of the science about the beginning of this period, than in the preceding age; and in fact he enumerates above fifty treatises on the subject, between the time of Ramus and his own.[i] The Ramists, though of little importance in Italy, in Spain, and even in France, had much influence in Germany, England, and Scotland.[k] None, however, of the logical works of the sixteenth century obtained such reputation as those by Smiglecius, Burgersdicius, and our countryman Crakanthorp, all of whom flourished, if we may use such a word for those who bore no flowers, in the earlier part of the next age. As these men were famous in their generation, we may presume that they at least wrote better than their predecessors. But it is time to leave so jejune a subject, though we may not yet be able to produce what is much more valuable.

Campanella;

8. The first name, in an opposite class, that we find in descending from the sixteenth century, is that of Thomas Campanella, whose earliest writings belong to it. His philosophy, being wholly dogmatical, must be classed with that of the paradoxical innovators whom he followed and eclipsed. Campanella, a Dominican friar, and, like his master Telesio, a native of Cosenza, having been accused, it is uncertain how far with truth, of a conspiracy against the Spanish government of his country, underwent an imprisonment of twenty-seven years; during which almost all his philosophical treatises were composed and given to the world. Ardent and rapid in his mind, and, as has just been seen, not destitute of leisure, he wrote on logic, physics, metaphysics, morals, politics, and grammar. Upon all these subjects his aim seems to have been to recede as far as possible from Aristotle. He had early begun to distrust this guide, and had formed a noble resolution to study all schemes of philosophy, comparing them with their archetype, the world itself, that he might distinguish how

[i] Keckermann, Præcognita Logica, p. 110 (edit. 1606).

[k] Id., p. 147.

much exactness was to be found in those several copies, as they ought to be, from one autograph of nature.[m]

his theory taken from Telesio.

9. Campanella borrowed his primary theorems from Telesio, but enlarged that Parmenidean philosophy by the inventions of his own fertile and imaginative genius. He lays down the fundamental principle, that the perfectly wise and good Being has created certain signs and types (statuas atque imagines) of himself, all of which, severally as well as collectively, represent power, wisdom, and love, and the objects of these attributes, namely, existence, truth, and excellence, with more or less evidence. God first created space, the basis of existence, the primal substance, an immovable and incorporeal capacity of receiving body. Next he created matter without form or figure. In this corporeal mass God called to being two workmen, incorporeal themselves, but incapable of subsisting apart from body, the organs of no physical forms, but of their Maker alone. These are heat and cold, the active principles diffused through all things. They were enemies from the beginning, each striving to occupy all material substances itself; each therefore always contending with the other, while God foresaw the great good that their discord would produce.[n] The heavens, he says in another passage, were formed by heat out of attenuated matter, the earth by cold out of condensed matter; the sun, being a body of heat, as he rolls round the earth, attacks the colder substance, and converts part of it into air and vapour.[o] This last part of his theory Campanella must have afterwards changed in words, when he embraced the Copernican system.

10. He united to this physical theory another, not wholly original, but enforced in all his writings with sin-

[m] Cypriani Vita Campanellæ, p. 7.

[n] In hac corporea mole tantæ materia statuæ, dixit Deus, ut nascerentur fabri duo incorporei, sed non potentes nisi a corpore subsistere, nullarum physicarum formarum organa, sed formatoris tantummodo. Idcirco nati calor et frigus, principia activa principalia, ideoque suæ virtutis diffusiva. Statim inimici fuerunt mutuo, dum uterque cupit totam substantiam materialem occupare. Hinc contra se invicem pugnare cœperunt, providente Deo ex hujusmodi discordia ingens bonum. Philosophia Realis Epilogistica (Frankfort, 1623), sect. 4.

[o] This is in the Compendium de Rerum Natura pro Philosophia humana, published by Adami in 1617. In his Apology for Galileo, in 1622, Campanella defends the Copernican system, and says that the modern astronomers think they cannot construct good ephemerides without it.

gular confidence and pertinacity, the sensibility of all created beings. All things, he says, feel; else would the world be a chaos. For neither would fire tend upwards, nor stones downwards, nor waters to the sea; but everything would remain where it was, were it not conscious that destruction awaits it by remaining amidst that which is contrary to itself, and that it can only be preserved by seeking that which is of a similar nature. Contrariety is necessary for the decay and reproduction of nature; but all things strive against their contraries, which they could not do, if they did not perceive what is their contrary.[p] God, who is primal power, wisdom, and love, has bestowed on all things the power of existence, and so much wisdom and love as is necessary for their conservation during that time only for which his providence has determined that they shall be. Heat, therefore, has power, and sense, and desire of its own being: so have all other things, seeking to be eternal like God; and in God they are eternal, for nothing dies before him, but is only changed.[q] Even to the world as a sentient being, the death of its parts is no evil, since the death of one is the birth of many. Bread that is swallowed dies to revive as blood, and blood dies, that it may live again in our flesh and bones; and thus as the life of man is compounded out of the deaths and lives of all his parts, so is it with the whole universe.[r] God said, Let all things feel,

Notion of universal sensibility.

[p] Omnia ergo sentiunt; alias mundus esset chaos. Ignis enim non sursum tenderet, nec aquæ in mare, nec lapides deorsum; sed res omnis ubi primo reperiretur, permaneret, cum non sentiret sui destructionem inter contraria nec sui conservationem inter similia. Non esset in mundo generatio et corruptio nisi esset contrarietas, sicut omnes physiologi affirmant. At si alterum contrarium non sentiret alterum sibi esse contrarium, contra ipsum non pugnaret. Sentiunt ergo singula. De Sensu Rerum, l. i. c. 4.

[q] Igitur ipse Deus, qui est prima potentia, prima sapientia, primus amor, largitus est rebus omnibus potentiam vivendi, et sapientiam et amorem quantum sufficit conservationi ipsarum in tanto tempore necessariæ, quantum determinavit ejus mens pro rerum regimine in ipso ente, nec præteriri potest. Calor ergo potest, sentit, amat esse: ita et res omnis, cupitque æternari sicut Deus, et Deo res nulla moritur, sed solummodo mutatur, &c. l. ii. c. 26.

[r] Non est malus ignis in suo esse; terræ autem malus videtur, non autem mundo: nec vipera mala est, licet homini sit mala. Ita de omnibus idem prædico. Mors quoque rei unius si nativitas est multarum rerum, mala non est. Moritur panis manducatus, ut fiat sanguis, et sanguis moritur, ut in carnem, nervos et ossa vertatur ac vivat; neque tamen hoc universo displicet animali, quamvis partibus mors ipsa, hoc est, transmutatio dolorifica sit, displiceatque. Ita utilis est mundo transmutatio eorum particularium noxia displicensque illis. Totus homo compositus est ex morte ac

some more, some less, as they have more or less necessity to imitate my being. And let them desire to live in that which they understand to be good for them, lest my creation should come to nought.[s]

His imagination and eloquence.

11. The strength of Campanella's genius lay in his imagination, which raises him sometimes to flights of impressive eloquence on this favourite theme. "The sky and stars are endowed with the keenest sensibility; nor is it unreasonable to suppose that they signify their mutual thoughts to each other by the transference of light, and that their sensibility is full of pleasure. The blessed spirits that inform such living and bright mansions behold all things in nature and in the divine ideas; they have also a more glorious light than their own, through which they are elevated to a supernatural beatific vision."[t] We can hardly read this, without recollecting the most sublime passage, perhaps, in Shakspeare:—

> "Sit, Jessica; look how the floor of heaven
> Is thick inlaid with patines of bright gold;
> There 's not the smallest orb, which thou behold'st,
> But in his motion like an angel sings,
> Still quiring to the young-eyed cherubim;
> Such harmony is in immortal souls;
> But, while this muddy vesture of decay
> Does grossly close us in, we cannot hear it."[u]

12. "The world is full of living spirits," he proceeds; "and when the soul shall be delivered from this dark cavern, we shall behold their subtle essences. But now we cannot discern the forms of the air, and the winds as they rush by us; much less the angels and dæmons who people them. Miserable as we are, we recognise no other sensation than that which we observe in animals and plants, slow and half extinguished, and buried under a weight that oppresses it. We will not understand that

vita partialibus, quæ integrant vitam humanam. Sic mundus totus ex mortibus ac vitabus compositus est, quæ totius vitam efficiunt. Philosop. Realis, c. 10.

[s] Sentiant alia magis, alia minus, prout magis minusque opus habent, ut me imitentur in essendo. Ibidem ament omnia vivere in proprio esse præcognito ut bono, ne corruat factura mea. Id., c. 10.

[t] Animæ beatæ habitantes sic viv[illegible]-cidasque mansiones, res naturales vident omnes divinasque ideas, habent quoque lumen gloriosius quo elevantur ad visionem supernaturalem beatificam, et veluti apud nos luces plurimæ sese mutuo tangunt, intersecant, decussant, sentiuntque, ita in cœlo luces distinguuntur, uniuntur, sentiunt. De Sensu Rerum, l. iii. c. 4.

[u] Merchant of Venice, act v.

all our actions and appetites and motions and powers flow from heaven. Look at the manner in which light is diffused over the earth, penetrating every part of it with endless variety of operation, which we must believe that it does not perform without exquisite pleasure."[x] And hence there is no vacuum in nature, except by violent means; since all bodies delight in mutual contact, and the world no more desires to be rent in its parts than an animal.

13. It is almost a descent in Campanella from these visions of the separate sensibility of nature in each particle, when he seizes hold of some physical fact or analogy to establish a subordinate and less paradoxical part of his theory. He was much pleased with Gilbert's treatise on the magnet, and thought it, of course, a proof of the animation of the earth. The world is an animal, he says, sentient as a whole, and enjoying life in all its parts.[y] It is not surprising that he ascribes intelligence to plants; but he here remarks that we find the male and female sexes in them, and that the latter cannot fructify without the former. This is manifest in siliquose plants and in palms (which on this account he calls in another place the wiser plants, plantæ sapientiores), in which the two kinds incline towards each other for the purpose of fructification.[z]

His works published by Adami.

14. Campanella, when he uttered from his Neapolitan prison these dulcet sounds of fantasy, had the advantage of finding a pious disciple who spread them over other parts of Europe. This was

[x] Prætervolant in conspectu nostro venti et aer, at nihil eos videmus, multo minus videmus Angelos Dæmonasque, quorum plenus est mundus.

Infelices qui sensum alium nullum agnoscimus, nisi obtusum animalium plantarumque, tardum, demortuum, aggravatum, sepultum: nec quidem intelligere volumus omnem actionem nostram et appetitum et sensum et motum et vim a cœlo manare. Ecce lux quanto acutissimo expanditur sensu super terram, quo multiplicatur, generatur, amplificatur, idque non sine magna efficere voluptate existimanda est. l. iii. c. 5.

Campanella used to hear, as he tells us, whenever any evil was impending, a voice calling him by his name, sometimes with other words; he doubted whether this were his proper dæmon, or the air itself speaking. It is not wonderful that his imagination was affected by length of confinement.

[y] Mundum esse animal, totum sentiens, omnesque portiones ejus communi gaudere vita. l. i. c. 9.

[z] Inveniemus in plantis sexum masculinum et fœmininum, ut in animalibus, et fœminam non fructificare sine masculi congressu. Hoc patet in siliquis et in palmis, quarum mas fœminaque inclinantur mutuo alter in alterum et sese osculantur, et fœmina impregnatur, nec fructificat sine mare; immo conspicitur dolens, squalida mortuaque, et pulvere illius et odore reviviscit.

Tobias Adami, initiated, as he tells us, in the same mysteries as himself (nostræ philosophiæ symmysta), who dedicated to the philosophers of Germany his own Prodromus Philosophiæ Instaurandæ, prefixed to his edition of Campanella's Compendium de Rerum Natura, published at Frankfort in 1617. Most of the other writings of the master seem to have preceded this edition; for Adami enumerates them in his Prodromus.[a] Campanella did not fully obtain his liberty till 1629, and died some years afterwards in France, where he had experienced the kindness of Peiresc, and the patronage of Richelieu. His philosophy made no very deep impression: it was too fanciful, too arbitrary, too much tinctured with marks of an imagination rendered morbid by solitude, to gain many proselytes in an age that was advancing in severe science. Gassendi, whose good nature led him to receive Campanella, oppressed by poverty and ill usage, with every courteous attention, was of all men the last to be seduced by his theories. No one, probably, since Campanella, aspiring to be reckoned among philosophers, has ventured to assert so much on matters of high speculative importance and to prove so little. Yet he seems worthy of the notice we have taken of him, if it were only as the last of the mere dogmatists in philosophy. He is doubtless much superior to Jordano Bruno, and I should presume, except in mathematics, to Cardan.[b]

Basson.

15. A less important adversary of the established theory in physics was Sebastian Basson, in his "Philosophiæ Naturalis adversus Aristotelem Libri XII., in quibus abstrusa veterum physiologia restauratur, et Aristotelis errores solidis rationibus refelluntur. Genevæ, 1621." This book shows great animosity against Aristotle, to whom, what Lord Bacon has himself insinuated, he allows only the credit of having preserved fragments of the older philosophers, like pearls in mud. It is difficult to give an account of this long work. In some places we perceive signs of a just philosophy; but in general his explanations of physical

[a] [Prodromus Philosophiæ Instaurandæ is only a title-page. Adami contributed a preface to this edition of Campanella's work; but the words Prodromus, &c., are meant for the latter, and not for anything written by the editor. See Notes and Queries, vol. iv. p. 275.—1853.]

[b] Brucker (vol. v. p. 106–144) has given a laborious analysis of the philosophy of Campanella.

phænomena seem as bad as those of his opponents, and he displays no acquaintance with the writings and the discoveries of his great contemporaries. We find also some geometrical paradoxes; and in treating of astronomy he writes as if he had never heard of the Copernican system.

Berigard.

16. Claude Berigard, born at Moulins, became professor of natural philosophy at Pisa and Padua. In his Circuli Pisani, published in 1643, he attempted to revive, as it is commonly said, the Ionic or corpuscular philosophy of Anaxagoras, in opposition to the Aristotelian. The book is rare; but Brucker, who had seen it, seems to have satisfactorily repelled the charge of atheism, brought by some against Berigard.[c]

Magnen.

Another Frenchman domiciled in Italy, Magnen, trod nearly the same path as Berigard, professing, however, to follow the modification of the corpuscular theory introduced by Democritus.[d] It seems to be observable as to these writers, Basson and the others, that coming with no sufficient knowledge of what had recently been discovered in mathematical and experimental science, and following the bad methods of the universities, even when they deviated from their usual doctrines, dogmatising and asserting when they should have proved, arguing synthetically from axioms, and never ascending from particular facts, they could do little good to philosophy, except by contributing, so far as they might be said to have had any influence, to shake the authority of Aristotle.

Paracelsists

17. This authority, which at least required but the deference of modest reason to one of the greatest of mankind, was ill exchanged, in any part of science, for the unintelligible dreams of the school of Paracelsus, which had many disciples in Germany, and a very few in England. Germany, indeed, has been the native soil of mysticism in Europe. The tendency to reflex observation of the mind, characteristic of that people, has exempted them from much gross error, and given them insight into many depths of truth, but at the expense of

[c] Brucker, iv. 460. Niceron, xxxi., where he is inserted by the name of Beauregard, which is probably more correct, but against usage.

[d] Brucker (p. 504) thinks that Magnen misunderstood the atomic theory of Democritus, and substituted one quite different in his Democritus reviviscens, published in 1646.

some confusion, some liability to self-deceit, and to some want of strictness in metaphysical reasoning. It was accompanied by a profound sense of the presence of Deity; yet one which, acting on their thoughtful spirits, became rather an impression than an intellectual judgment, and settled into a mysterious indefinite theopathy, when it did not even evaporate in pantheism.

18. The founder, perhaps, of this sect, was Tauler of Strasburg, in the fourteenth century, whose sermons in the native language, which, however, are supposed to have been translated from Latin, are full of what many have called by the vague word mysticism, an intense aspiration for the union of the soul with God. An anonymous work generally entitled The German Theology, written in the fifteenth century, pursues the same track of devotional thought. It was a favourite book with Luther, and was translated into Latin by Castalio.[e] These, indeed, are to be considered chiefly as theological; but the study of them led readily to a state of mental emotion, wherein a dogmatic pseudo-philosophy, like that of Paracelsus, abounding with assertions that imposed on the imagination, and appealing frequently both to Scriptural authority and the evidence of inward light, was sure to be favourably received. The mystics, therefore, and the theosophists belonged to the same class, and it is not uncommon to use the names indifferently.

and Theosophists.

19. It may appear not here required to dwell on a subject scarcely falling under any province of literary history, but two writers within this period have been sufficiently distinguished to deserve mention. One of these was Robert Fludd, an English physician, who died in 1637; a man of indefatigable diligence in collecting the dreams and follies of past ages, blending them in a portentous combination with new fancies of his own. The Rabbinical and Cabalistic authors, as well as the Paracelsists, the writers on magic, and whatever was most worthy to be rejected and forgotten, formed the basis of his creed. Among his numerous works the most known was his "Mosaic Philosophy," in which, like many before his time as well as

Fludd.

[e] Episcopius places the author of the Theologia Germanica, with Henry Nicolas, and David George, among mere enthusiasts.

since, he endeavoured to build a scheme of physical philosophy on the first chapters in Genesis. I do not know whether he found there his two grand principles or forces of nature: a northern force of condensation, and a southern force of dilatation. These seem to be the Parmenidean cold and heat, expressed in a jargon affected in order to make dupes. In peopling the universe with dæmons, and in ascribing all phænomena to their invisible agency, he pursued the steps of Agrippa and Paracelsus, or rather of the whole school of fanatics and impostors called magical. He took also from older writers the doctrine of a constant analogy between universal nature, or the macrocosm, and that of man, or the microcosm; so that what was known in one might lead us to what was unknown in the other.[f] Fludd possessed, however, some acquaintance with science, especially in chemistry and mechanics; and his rhapsodies were so far from being universally contemned in his own age, that Gassendi thought it not unworthy of him to enter into a prolix confutation of the Fluddian philosophy.[g]

Jacob Behmen.

20. Jacob Behmen, or rather Boehm, a shoemaker of Gorlitz, is far more generally familiar to our ears than his contemporary Fludd. He was, however, much inferior to him in reading, and in fact seems to have read little but the Bible and the writings of Paracelsus. He recounts the visions and ecstasies during which a supernatural illumination had been conveyed to him. It came indeed without the gift of transferring the light to others; for scarce any have been able to pierce the clouds in which his meaning has been charitably presumed to lie hid. The chief work of Behmen is his Aurora, written about 1612, and containing a record of the visions wherein the mysteries of nature were revealed to him. It was not published till 1641. He is said to have been a man of great goodness of heart, which his writings display; but, in literature, this cannot give a sanction to the incoherencies of madness. His language, as far as I have seen any extracts from his works, is coloured with the phraseology of the

[f] This was a favourite doctrine of Paracelsus. Campanella was much too fanciful not to embrace it. Mundus, he says, habet spiritum qui est coelum, crassum corpus quod est terra, sanguinem qui est mare. Homo igitur compendium epilogusque mundi est. De Sensu Rerum, l. ii. c. 32.

[g] Brucker, iv. 691. Buhle, iii. 157.

alchemists and astrologers; as for his philosophy, so to style it, we find, according to Brucker, who has taken some pains with the subject, manifest traces of the system of emanation, so ancient and so attractive; and from this and several other reasons, he is inclined to think the unlearned shoemaker of Gorlitz must have had assistance from men of more education in developing his visions.[h] But the emanative theory is one into which a mind absorbed in contemplation may very naturally fall. Behmen had his disciples, which such enthusiasts rarely want; and his name is sufficiently known to justify the mention of it even in philosophical history.

Lord Herbert De Veritate.

21. We come now to an English writer of a different class, little known as such at present, but who, without doing much for the advancement of metaphysical philosophy, had at least the merit of devoting to it with a sincere and independent spirit the leisure of high rank, and of a life not obscure in the world—Lord Herbert of Cherbury. The principal work of this remarkable man is his Latin treatise, published in 1624, "On Truth as it is distinguished from Revelation, from Probability, from Possibility, and from Falsehood." Its object is to inquire what are the sure means of discerning and discovering truth. This, as, like other authors, he sets out by proclaiming, had been hitherto done by no one, and he treats both ancient and modern philosophers rather haughtily, as being men tied to particular opinions, from which they dare not depart. "It is not from an hypocritical or mercenary writer that we are to look for perfect truth. Their interest is not to lay aside their mask, or think for themselves. A liberal and independent author alone will do this."[i] So general an invective, after Lord Bacon, and indeed after others like Campanella, who could not be charged with following any conceits rather than their own, bespeaks either ignorance of philosophical literature, or a supercilious neglect of it.

His axioms.

22. Lord Herbert lays down seven primary axioms. 1. Truth exists: 2. It is coeval with the things to which it relates: 3. It exists everywhere: 4.

[h] Brucker, iv. 698.

[i] Non est igitur a larvato aliquo vel stipendioso scriptore ut verum consummatum opperiaris: Illorum apprime interest ne personam deponant, vel aliter quidem sentiant. Ingenuus et sui arbitrii ista solummodo præstabit auctor. Epist. ad Lectorem.

It is self-evident:[k] 5. There are as many truths, as there are differences in things: 6. These differences are made known to us by our natural faculties: 7. There is a truth belonging to these truths: "Est veritas quædam harum veritatum." This axiom he explains as obscurely as it is strangely expressed. All truth he then distinguishes into the truth of the thing or object, the truth of the appearance, the truth of the perception, and the truth of the understanding. The truth of the object is the inherent conformity of the object with itself, or that which makes every thing what it is.[m] The truth of appearance is the conditional conformity of the appearance with the object. The truth of perception is the conditional conformity of our senses (facultates nostras prodromas) with the appearances of things. The truth of understanding is the due conformity between the aforesaid conformities. All truth therefore is conformity, all conformity relation. Three things are to be observed in every inquiry after truth; the thing or object, the sense or faculty, and the laws or conditions by which its conformity or relation is determined. Lord Herbert is so obscure, partly by not thoroughly grasping his subject, partly by writing in Latin, partly perhaps by the "sphalmata et errata in typographo, quædam fortasse in seipso," of which he complains at the end, that it has been necessary to omit several sentences as unintelligible, though what I have just given is far enough from being too clear.

Conditions of truth.

23. Truth, he goes on to say, exists as to the object, or outward thing itself, when our faculties are capable of determining every thing concerning it; but though this definition is exact, it is doubtful, he observes, whether any such truth exists in nature. The first condition of discerning truth in things, is that they should have a relation to ourselves (ut intra nostram stet analogiam); since multitudes of things may exist which the senses cannot discover. The three chief constituents of this condition seem to be: 1. That it should be of a proper size, neither immense nor too small; 2. That it should have its determining differ-

[k] Hæc veritas est in se manifesta. He observes that what are called false appearances are true as such, though not true according to the reality of the object: sua veritas apparentiæ falsæ inest, verè enim ita apparebit, vera tamen ex veritate rei non erit.

[m] Inhærens illa conformitas rei cum seipsa, sive illa ratio, ex qua res unaquæque sibi constat.

ence, or principle of individuation, to distinguish it from other things; 3. That it should be accommodated to some sense or perceptive faculty. These are the universally necessary conditions of truth (that is of knowledge) as it regards the object. The truth of appearance depends on others, which are more particular; as that the object should be perceived for a sufficient time, through a proper medium, at a due distance, in a proper situation.[n] Truth of perception is conditional also, and its conditions are that the sense should be sound, and the attention directed towards it. Truth of understanding depends on the κοιναι εννοιαι, the common notions possessed by every man of sane mind, and implanted by nature. The understanding teaches us by means of these, that infinity and eternity exist, though our senses cannot perceive them. The understanding deals also with universals, and truth is known as to universals, when the particulars are rightly apprehended.

Instinctive truths.

24. Our faculties are as numerous as the differences of things; and thus it is, that the world corresponds by perfect analogy to the human soul, degrees of perception being as much distinct from one another as different modes of it. All our powers may however be reduced to four heads; natural instinct, internal perception, external sensation, and reason. What is not known by one of these four means cannot be known at all. Instinctive truths are proved by universal consent. Here he comes to his general basis of religion, maintaining the existence of κοιναι εννοιαι, or common notions of mankind on that subject, principles against which no one can dispute, without violating the laws of his nature.[o] Natural instinct he defines to be an act of those faculties existing in every man of sane mind, by which the common notions as to the relations of things not perceived by the senses (rerum internarum), and especially such as tend to the conservation of the individual, of the species, and of the

[n] Lord Herbert defines appearance, ectypum, seu forma vicaria rei, quæ sub conditionibus istis cum prototypo suo conformata, cum conceptu denuo sub conditionibus etiam suis, conformari et modo quodam spirituali, tanquam ab objecto decisa, etiam in objecti absentia conservari potest.

[o] Principia illa sacrosancta, contra quæ disputare nefas. p. 44. I have translated this in the best sense I could give it; but to use *fas* or *nefas*, before we have defined their meaning, or proved their existence, is but indifferent logic.

whole, are formed without any process of reasoning. These common notions, though excited in us by the objects of sense, are not conveyed to us by them; they are implanted in us by nature, so that God seems to have imparted to us not only a part of his image, but of his wisdom.[p] And whatever is understood and perceived by all men alike deserves to be accounted one of these notions. Some of them are instinctive, others are deduced from such as are. The former are distinguishable by six marks; priority, independence, universality, certainty, so that no man can doubt them without putting off, as it were, his nature, necessity, that is, usefulness for the preservation of man, lastly, intuitive apprehension, for these common notions do not require to be inferred.[q]

Internal Perceptions.

25. Internal perceptions denote the conformity of objects with those faculties existing in every man of sane mind, which being developed by his natural instinct, are conversant with the internal relations of things, in a secondary and particular manner, and by means of natural instinct.[r] By this ill-worded definition he probably intends to distinguish the general power, or instinctive knowledge, from its exercise and application in any instance. But I have found it very difficult to follow Lord Herbert. It is by means, he says, of these internal senses that we discern the nature of things in their intrinsic relations, or hidden types of being.[s] And it is necessary well to distinguish the conforming faculty in the mind or internal perception, from the bodily sense. The cloudiness of his expression increases as we proceed, and in many pages I cannot venture to translate or abridge it. The injudicious use of a language in which he did not write with facility, and which is not very well adapted, at the best, to metaphysical disquisition, has doubtless increased the perplexity into which he has thrown his readers.

26. In the conclusion of this treatise, Herbert lays down the five common notions of natural religion, im-

[p] P. 48.

[q] P. 68.

[r] Sensus interni sunt actus conformitatum objectorum cum facultatibus illis in omni homine sano et integro existentibus, quæ ab instinctu naturali expositæ, circa analogiam rerum internam, particulariter, secondario, et ratione instinctûs naturalis versantur. p. 66.

[s] Circa analogiam rerum internam, sive signaturas et characteras rerum penitiores versantur. p. 68.

planted, as he conceives, in the breasts of all mankind. 1. That there is a God; 2. That he ought to be worshipped; 3. That virtue and piety are the chief parts of worship; 4. That we are to repent and turn from our sins; 5. That there are rewards and punishments in another life.[t] Nothing can be admitted in religion which contradicts these primary notions; but if any one has a revelation from heaven in addition to these, which may happen to him sleeping or waking, he should keep it to himself, since nothing can be of importance to the human race which is not established by the evidence of their common faculties. Nor can anything be known to be revealed, which is not revealed to ourselves; all else being tradition and historic testimony, which does not amount to knowledge. The specific difference of man from other animals he makes not reason, but the capacity of religion. It is a curious coincidence that John Wesley has said something of the same kind.[u] It is also remarkable that we find in another work of Lord Herbert, De Religione Gentilium, which dwells again on his five articles of natural religion, essential, as he expressly lays it down, to salvation, the same illustration of the being of a Deity from the analogy of a watch or clock, which Paley has since employed. I believe that it occurs in an intermediate writer.[v]

Five notions of natural religion.

27. Lord Herbert sent a copy of his treatise De

[t] P. 222.

[u] I have somewhere read a profound remark of Wesley, that, considering the sagacity which many animals display, we cannot fix upon reason as the distinction between them and man; the true difference is, that we are formed to know God, and they are not.

[v] Et quidem si horologium per diem et noctem integram horas signanter indicans, viderit quispiam non mente captus, id consilio arteque summa factum judicaverit. Ecquis non planè demens, qui hanc mundi machinam non per viginti quatuor horas tantum, sed per tot secula circuitus suos obeuntem animadverterit, non id omne sapientissimo utique potentissimoque alicui autori tribuat? De Relig. Gentil., cap. xiii.

[The original idea, as has been rightly pointed out to me by M. Alphonse Borghers, the translator of this work, as well as of my History of the Middle Ages, is in Cicero de Nat. Deorum, ii. 34. Quod si in Scythiam aut in Britanniam, sphæram aliquis tulerit hanc, quam nuper familiaris noster effecit Posidonius, cujus singulæ conversiones idem efficiunt in sole, et in lunâ, et in quinque stellis errantibus, quod efficitur in cœlo singulis diebus et noctibus: quis in illa barbarie dubitet, quin ea sphæra sit perfecta ratione? And with respect to intermediate writers between Lord Herbert and Paley, I have been referred, by two other correspondents, to Hale's Primitive Origination of Mankind, where I had myself suspected it to be, and to Nieuwentyt's Religious Philosopher (English translation, 1730), p. xlvi. of preface.—1842.]

Veritate several years after its publication to Gassendi.

Remarks of Gassendi on Herbert.

We have a letter to the noble author in the third volume of the works of that philosopher, showing, in the candid and sincere spirit natural to him, the objections that struck his mind in reading the book.[x] Gassendi observes that the distinctions of four kinds of truth are not new; the veritas rei of Lord Herbert being what is usually called substance, his veritas apparentiæ no more than accident, and the other two being only sense and reason. Gassendi seems not wholly to approve, but gives as the best, a definition of truth little differing from Herbert's, the agreement of the cognisant intellect with the thing known: "Intellectûs cognoscentis cum re cognita congruentia." The obscurity of the treatise De Veritate could ill suit an understanding like that of Gassendi, always tending to acquire clear conceptions; and though he writes with great civility, it is not without smartly opposing what he does not approve. The aim of Lord Herbert's work, he says, is that the intellect may pierce into the nature of things, knowing them as they are in themselves, without the fallacies of appearance and sense. But for himself he confesses that such knowledge he has always found above him, and that he is in darkness when he attempts to investigate the real nature of the least thing; making many of the observations on this which we read also in Locke. And he well says that we have enough for our use in the accidents or appearances of things without knowing their substances, in reply to Herbert, who had declared that we should be miserably deficient, if, while nature has given us senses to discern sounds and colours and such fleeting qualities of things, we had no sure road to internal, eternal, and necessary truths.[y] The universality of those innate principles, especially moral and religious, on which his correspondent had built so much, is doubted by Gassendi on the usual grounds, that many have denied, or been ignorant of them. The letter is imperfect, some sheets of the autograph having been lost.

[x] Gassendi Opera, iii. 411.

[y] Misere nobiscum actum esset, si ad percipiendos colores, sonos et qualitates cæteras caducas atque momentaneas subessent media, nulla autem ad veritates illas internas, æternas, necessarias sine errore superesset via.

28. Too much space may seem to have been bestowed on a writer who cannot be ranked high among metaphysicians. But Lord Herbert was not only a distinguished name, but may claim the priority among those philosophers in England. If his treatise De Veritate is not as an entire work very successful, or founded always upon principles which have stood the test of severe reflection, it is still a monument of an original, independent thinker, without rhapsodies of imagination, without pedantic technicalities, and, above all, bearing witness to a sincere love of the truth he sought to apprehend. The ambitious expectation that the real essences of things might be discovered, if it were truly his, as Gassendi seems to suppose, could not be warranted by any thing, at least, within the knowledge of that age. But from some expressions of Herbert I should infer that he did not think our faculties competent to solve the whole problem of *quiddity*, as the logicians called it, or the real nature of any thing, at least, objectively without us.[z] He is, indeed, so obscure, that I will not vouch for his entire consistency. It has been an additional motive to say as much as I have done concerning Lord Herbert, that I know not where any account of his treatise De Veritate will be found. Brucker is strangely silent about this writer, and Buhle has merely adverted to the letter of Gassendi. Descartes has spoken of Lord Herbert's book with much respect, though several of their leading principles were far from the same. It was translated into French in 1639, and this translation he found less difficult than the original.[a]

29. Gassendi himself ought, perhaps, to be counted wholly among the philosophers of this period, since

[z] Cum facultates nostræ ad analogiam propriam terminatæ quidditates rerum intimas non penetrent: ideo quid res naturalis in seipsa sit, tali ex analogia ad nos ut sit constituta, perfecte sciri non potest. p. 165. In another place he says, it is doubtful whether any thing exist in nature, concerning which we have a complete knowledge. The eternal and necessary truths which Herbert contends for our knowing, seem to have been his communes notitiæ, subjectively understood, rather than such as relate to external objects.

[a] Descartes, vol. viii. p. 138 and 168. J'y trouve plusieurs choses fort bonnes, *sed non publici saporis;* car il y a peu de personnes qui soient capables d'entendre la métaphysique. Et, pour le général du livre, il tient un chemin fort différent de celui que j'ai suivi. . . . Enfin, par conclusion, encore que je ne puisse m'accorder en tout aux sentimens de cet auteur, je ne laisse pas de l'estimer beaucoup au-dessus des esprits ordinaires.

many of his writings were published, and all may have been completed within it. They are contained in six large folio volumes, rather closely printed.

Gassendi's defence of Epicurus.

The Exercitationes Paradoxicæ, published in 1624, are the earliest. These contain an attack on the logic of Aristotle, the fortress that so many bold spirits were eager to assail. But in more advanced life Gassendi withdrew in great measure from this warfare, and his Logic, in the Syntagma Philosophicum, the record of his latest opinions, is chiefly modelled on the Aristotelian, with sufficient commendation of its author. In the study of ancient philosophy, however, Gassendi was impressed with an admiration of Epicurus. His physical theory, founded on corpuscles and a vacuum, his ethics, in their principle and precepts, his rules of logic and guidance of the intellect, seemed to the cool and independent mind of the French philosopher more worthy of regard than the opposite schemes prevailing in the schools, and not to be rejected on account of any discredit attached to the name. Combining with the Epicurean physics and ethics the religious element which had been unnecessarily discarded from the philosophy of the Garden, Gassendi displayed both in a form no longer obnoxious. The Syntagma Philosophiæ Epicuri, published in 1649, is an elaborate vindication of this system, which he had previously expounded in a commentary on the tenth book of Diogenes Laertius. He had already effaced the prejudices against Epicurus himself, whom he seems to have regarded with the affection of a disciple, in a biographical treatise on his life and moral character.

His chief works after 1656.

30. Gassendi died in 1656; the Syntagma Philosophicum, his greatest as well as last work, in which it is natural to seek the whole scheme of his philosophy, was published by his friend Sorbière in 1658. We may therefore properly defer the consideration of his metaphysical writings to the next period; but the controversy in which he was involved with Descartes will render it necessary to bring his name forward again before the close of this chapter.

Sect. II.

On the Philosophy of Lord Bacon.

Preparation for the philosophy of

31. It may be judged from what has been said in a former chapter, as well as in our last pages, that at the beginning of the seventeenth century, the higher philosophy, which is concerned with general truth, and the means of knowing it, had been little benefited by the labours of any modern inquirer. It was become, indeed, no strange thing, at least out of the air of a college, to question the authority of Aristotle; but his disciples pointed with scorn at the endeavours which had as yet been made to supplant it, and asked whether the wisdom so long reverenced was to be set aside for the fanatical reveries of Paracelsus, the unintelligible chimæras of Bruno, or the more plausible, but arbitrary, hypotheses of Telesio.

Lord Bacon.

32. Francis Bacon was born in 1561.[b] He came to years of manhood at the time when England was rapidly emerging from ignorance and obsolete methods of study, in an age of powerful minds, full himself of ambition, confidence, and energy. If we think on the public history of Bacon, even during the least public portion of it, philosophy must appear to have been but his amusement; it was by his hours of leisure, by time hardly missed from the laborious study and practice of the law and from the assiduities of a courtier's life, that he became the father of modern science. This union of an active with a reflecting life had been the boast of some ancients, of Cicero and Antonine; but what comparison, in depth and originality, between their philosophy and that of Bacon?

His plan of philosophy.

33. This wonderful man, in sweeping round the champaign of universal science with his powerful genius, found as little to praise in the recent, as in the ancient methods of investigating truth. He liked as little the empirical presumption of drawing

[b] Those who place Lord Bacon's birth in 1560, as Mr. Montagu has done, must be understood to follow the old style, which creates some confusion. He was born the 22nd of January, and died the 9th of April, 1626, in the sixty-sixth year of his age, as we are told in his Life by Rawley the best authority we have.

conclusions from a partial experience as the sophistical dogmatism which relied on unwarranted axioms and verbal chicane. All, he thought, was to be constructed anew; the investigation of facts, their arrangement for the purposes of inquiry, the process of eliciting from them the required truth. And for this he saw, that, above all, a thorough purgation of the mind itself would be necessary, by pointing out its familiar errors, their sources, and their remedies.

Time of its conception.

34. It is not exactly known at what age Bacon first conceived the scheme of a comprehensive philosophy, but it was, by his own account, very early in life.[c] Such noble ideas are most congenial to

[c] In a letter to Father Fulgentio, which bears no date in print, but must have been written about 1624, he refers to a juvenile work about forty years before, which he had confidently entitled The Greatest Birth of Time. Bacon says: Equidem memini me quadraginta abhinc annis juvenile opusculum circa has res confecisse, quod magna prorsus fiducia et magnifico titulo, "Temporis Partum maximum" inscripsi. The apparent vain-glory of this title is somewhat extenuated by the sense he gave to the phrase, Birth of Time. He meant that the lapse of time and long experience were the natural sources of a better philosophy, as he says in his dedication of the Instauratio Magna: Ipse certè, ut ingenue fateor, soleo æstimare hoc opus magis pro partu temporis quam ingenii. Illud enim in eo solummodo mirabile est, initia rei, et tantas de iis quæ invaluerunt suspiciones, alicui in mentem venire potuisse. Cætera non illibenter sequuntur.

No treatise with this precise title appears. But we find prefixed to some of the short pieces a general title, Temporis Partus *Masculus*, sive Instauratio Magna Imperii Universi in Humanum. These treatises, however, though earlier than his great works, cannot be referred to so juvenile a period as his letter to Fulgentio intimates, and I should rather incline to suspect that the *opusculum* to which he there refers has not been preserved. Mr. Montagu is of a different opinion. See his Note L to the Life of Bacon in vol. xvi. of his edition. The Latin tract De Interpretatione Naturæ Mr. M. supposes to be the germ of the Instauratio, as the Cogitata et Visa are of the Novum Organum. I do not dissent from this; but the former bears marks of having been written after Bacon had been immersed in active life. The most probable conjecture appears to be that he very early perceived the meagreness and imperfection of the academical course of philosophy, and of all others which fell in his way, and formed the scheme of affording something better from his own resources; but that he did not commit *much* to paper, nor had planned his own method till after he was turned of thirty, which his letter to the king intimates.

In a recent and very brilliant sketch of the Baconian philosophy (Edinb. Review, July, 1837), the two leading principles that distinguish it throughout all its parts are justly denominated *utility* and *progress*. To do good to mankind, and do more and more good, are the ethics of its inductive method. We may only regret that the ingenious author of this article has been hurried sometimes into the low and contracted view of the deceitful word *utility*, which regards rather the enjoyments of physical convenience, than the general well-being of the individual and the species. If Bacon looked more frequently to the former, it was because so large a portion of his writings relates to physical observation and experiment. But it was far enough from his design to set up physics in any sort of opposition to ethics, much less in

the sanguine spirit of youth, and to its ignorance of the extent of labour it undertakes. In the dedication of the Novum Organum to James in 1620, he says that he had been about some such work near thirty years, "so as I made no haste." "And the reason," he adds, "why I have published it now, specially being imperfect, is, to speak plainly, because I number my days, and would have it saved. There is another reason of my so doing, which is to try whether I can get help in one intended part of this work, namely, the compiling of a natural and experimental history, which must be the main foundation of a true and active philosophy." He may be presumed at least to have made a very considerable progress in his undertaking before the close of the sixteenth century. But it was first promulgated to the world by the publication of his Treatise on the Advancement of Learning in 1605. In this, indeed, the whole of the Baconian philosophy may be said to be implicitly contained, except, perhaps, the second book of the Novum Organum. In 1623 he published his more celebrated Latin translation of this work, if it is not rather to be deemed a new one, entitled De Augmentis Scientiarum. I find, upon comparison, that more than two thirds of this treatise are a version, with slight interpolation or omission, from the Advancement of Learning, the remainder being new matter.

Instauratio Magna.

35. The Instauratio Magna had been already published in 1620, while Lord Bacon was still chancellor. Fifteen years had elapsed since he gave to the world his Advancement of Learning, the first fruits of such astonishing vigour of philosophical genius, that, inconceivable as the completion of the scheme he had even then laid down in prospect for his new philosophy by any single effort must appear, we may be disappointed at the great deficiencies which this latter work exhibits, and which he was not destined to fill up. But he had passed the interval in active life, and in dangerous paths, deserting, as in truth he had all along been prone enough to do, the "shady spaces of philosophy,"

a superior light. I dissent also from some of the observations in this article, lively as they are, which tend to depreciate the originality and importance of the Baconian methods. The reader may turn to a note on this subject by Dugald Stewart, at the end of the present section

as Milton calls them, for the court of a sovereign, who, with some real learning, was totally incapable of sounding the depths of Lord Bacon's mind, or even of estimating his genius.

First part: Partitiones Scientiarum.

36. The Instauratio Magna, dedicated to James, is divided, according to the magnificent ground-plot of its author, into six parts. The first of these he entitles Partitiones Scientiarum, comprehending a general summary of that knowledge which mankind already possess; yet not merely treating this affirmatively, but taking special notice of whatever should seem deficient or imperfect; sometimes even supplying, by illustration or precept, these vacant spaces of science. This first part he declares to be wanting in the Instauratio. It has been chiefly supplied by the treatise De Augmentis Scientiarum; yet perhaps even that does not fully come up to the amplitude of his design.

Second part: Novum Organum.

37. The second part of the Instauratio was to be, as he expresses it, "the science of a better and more perfect use of reason in the investigation of things, and of the true aids of the understanding;" the new logic, or inductive method, in which what is eminently styled the Baconian philosophy consists. This, as far as he completed it, is known to all by the name of the Novum Organum. But he seems to have designed a fuller treatise in place of this; the aphorisms into which he has digested it being rather the heads or theses of chapters, at least in many places, that would have been farther expanded.[d] And it is still more important to observe, that he did not achieve the whole of this summary that he had promised; but out of nine divisions of his method we only possess the first, which he denominates 'prærogativæ instantiarum.' Eight others, of exceeding importance to his logic, he has not touched at all, except to describe them by name and to promise more. "We will speak," he says, "in the first place, of prerogative instances; secondly, of the aids of induction; thirdly, of the rectification of induction; fourthly, of varying the investigation according to the nature of the subject; fifthly, of prerogative natures (or objects), as to investigation, or the choice of

[d] It is entitled by himself, Partis secundæ Summa, digesta in aphorismos.

what shall be first inquired into; sixthly, of the boundaries of inquiry, or the synoptical view of all natures in the world; seventhly, on the application of inquiry to practice, and what relates to man; eighthly, on the preparations (parascevæ) for inquiry; lastly, on the ascending and descending scale of axioms."[a] All these, after the first, are wanting, with the exception of a few slightly handled in separate parts of Bacon's writings; and the deficiency, which is so important, seems to have been sometimes overlooked by those who have written about the Novum Organum.

Third part: Natural History.

38. The third part of the Instauratio Magna was to comprise an entire natural history, diligently and scrupulously collected from experience of every kind; including under that name of natural history everything wherein the art of man has been employed on natural substances either for practice or experiment; no method of reasoning being sufficient to guide us to truth as to natural things, if they are not themselves clearly and exactly apprehended. It is unnecessary to observe that very little of this immense chart of nature could be traced by the hand of Bacon, or in his time. His Centuries of Natural History, containing about one thousand observed facts and experiments, are a very slender contribution towards such a description of universal nature as he contemplated: these form no part of the Instauratio Magna, and had been compiled before. But he enumerates one hundred and thirty particular histories which ought to be drawn up for his great work. A few of these he has given in a sort of skeleton, as samples rather of the method of collecting facts, than of the facts themselves; namely, the History of Winds, of Life and Death, of Density and Rarity, of Sound and Hearing.

39. The fourth part, called Scala Intellectûs, is also wanting, with the exception of a very few introductory

[a] Dicemus itaque primo loco de prærogativis instantiarum; secundo, de adminiculis inductionis; tertio, de rectificatione inductionis; quarto, de variatione inquisitionis pro natura subjecti; quinto, de prærogativis naturarum quatenus ad inquisitionem, sive de eo quod inquirendum est prius et posterius; sexto, de terminis inquisitionis, sive de synopsi omnium naturarum in universo; septimo, de deductione ad praxin, sive de eo quod est in ordine ad hominem; octavo, de parascevis ad inquisitionem; postremo autem, de scala ascensoria et descensoria axiomatum. lib. ii. 22

pages. "By these tables," says Bacon, "we mean not such examples as we subjoin to the several rules of our method, but types and models, which place before our eyes the entire process of the mind in the discovery of truth, selecting various and remarkable instances."[f] These he compares to the diagrams of geometry, by attending to which the steps of the demonstration become perspicuous. Though the great brevity of his language in this place renders it rather difficult to see clearly what he understood by these models, some light appears to be thrown on this passage by one in the treatise De Augmentis, where he enumerates among the desiderata of logic what he calls 'traditio lampadis,' or a delivery of any science or particular truth according to the order wherein it was discovered.[g] "The methods of geometers," he there says, "have some resemblance to this art;" which is not, however, the case as to the synthetical geometry with which we are generally conversant. It is the history of analytical investigation, and many beautiful illustrations of it have been given since the days of Bacon in all subjects to which that method of inquiry has been applied.

Fourth part: Scala Intellectûs.

40. In a fifth part of the Instauratio Magna, Bacon had designed to give a specimen of the new philosophy which he hoped to raise, after a due use of his natural history and inductive method, by way of anticipation or sample of the whole. He calls it Prodromi, sive Anticipationes Phi-

Fifth part: Anticipationes Philosophiæ.

[f] Neque de iis exemplis loquimur, quæ singulis præceptis ac regulis illustrandi gratia adjiciuntur, hoc enim in secunda operis parte abunde præstitimus, sed plane typos intelligimus ac plasmata, quæ universum mentis processum atque inveniendi continuatam fabricam et ordinem in certis subjectis, iisque variis et insignibus tanquam sub oculos ponant. Etenim nobis venit in mentem in mathematicis, astante machina, sequi demonstrationem facilem et perspicuam; contra absque hac commoditate omnia videri involuta et quam revera sunt subtiliora.

[g] Lib. vi. c. 2. Scientia quæ aliis tanquam tela pertexendo traditur, eadem methodo, si fieri possit, animo alterius est insinuanda, qua primitus inventa est. Atque hoc ipsum fieri sane potest in scientia per inductionem acquisita: sed in anticipata ista et præmatura scientia, qua utimur, non facile dicat quis quo itinere ad eam quam nactus est scientiam pervenerit. Attamen sane secundum majus et minus possit quis scientiam propriam revisere, et vestigia suæ cognitionis simul et consensûs remetiri; atque hoc facto scientiam sic transplantare in animum alienum, sicut crevit in suo. . . . . Cujus quidem generis traditionis, methodus mathematicorum in eo subjecto similitudinem quandam habet. I do not well understand the words, in eo subjecto; he may possibly have referred to analytical processes.

losophiæ Secundæ. And some fragments of this part are published by the names Cogitata et Visa, Cogitationes de Natura Rerum, Filum Labyrinthi, and a few more, being as much, in all probability, as he had reduced to writing. In his own metaphor, it was to be like the payment of interest till the principal could be raised; tanquam fœnus reddatur, donec sors haberi possit. For he despaired of ever completing the work by a sixth and last portion, which was to display a perfect system of philosophy, deduced and confirmed by a legitimate, sober, and exact inquiry according to the method which he had invented and laid down. "To perfect this last part is above our powers and beyond our hopes. We may, as we trust, make no despicable beginnings—the destinies of the human race must complete it; in such a manner, perhaps, as men, looking only at the present, would not readily conceive. For upon this will depend not only a speculative good, but all the fortunes of mankind, and all their power." And with an eloquent prayer that his exertions may be rendered effectual to the attainment of truth and happiness, this introductory chapter of the Instauratio, which announces the distribution of its portions, concludes. Such was the temple, of which Bacon saw in vision before him the stately front and decorated pediments, in all their breadth of light and harmony of proportion, while long vistas of receding columns and glimpses of internal splendour revealed a glory that it was not permitted him to comprehend. In the treatise De Augmentis Scientiarum, and in the Novum Organum, we have less, no doubt, than Lord Bacon, under different conditions of life, might have achieved: he might have been more emphatically the high-priest of nature, if he had not been the chancellor of James I.; but no one man could have filled up the vast outline which he alone, in that stage of the world, could have so boldly sketched.

Sixth part: Philosophiæ Secunda.

41. The best order of studying the Baconian philosophy would be to read attentively the Advancement of Learning; next, to take the treatise De Augmentis, comparing it all along with the former; and afterwards to proceed to the Novum Organum. A less degree of regard has usually been paid to the

Course of studying Lord Bacon.

Centuries of Natural History, which are the least important of his writings, or even to the other philosophical fragments, some of which contain very excellent passages; yet such, in great measure, as will be found substantially in other parts of his works. The most remarkable are the Cogitata et Visa. It must be said, that one who thoroughly venerates Lord Bacon will not disdain his repetitions, which sometimes, by variations of phrase, throw light upon each other. It is generally supposed that the Latin works were translated from the original English by several assistants, among whom George Herbert and Hobbes have been named, under the author's superintendence.[h] The Latin style of these writings is singularly concise, energetic, and impressive, but frequently crabbed, uncouth, and obscure; so that we read with more admiration of the sense than delight in the manner of delivering it. But Rawley, in his Life of Bacon, informs us that he had seen about twelve autographs of the Novum Organum, wrought up and improved year by year, till it reached the shape in which it was published, and he does not intimate that these were in English, unless the praise he immediately afterwards bestows on his English style may be thought to warrant that supposition.[i] I do not know that we have positive evidence as to any of the Latin works being translations from English, except the treatise De Augmentis.

42. The leading principles of the Baconian philosophy are contained in the Advancement of Learning. These are amplified, corrected, illustrated, and developed in the treatise De Augmentis Scientiarum, from the fifth book of which, with some help from other parts,

[h] The translation was made, as Archbishop Tenison informs us, "by Mr. Herbert and some others, who were esteemed masters in the Roman eloquence."

[i] Ipse reperi in archivis dominationis suæ, autographa plus minus duodecim Organi Novi de anno in annum elaborati, et ad incudem revocati, et singulis annis, ulteriore lima subinde politi et castigati, donec in illud tandem corpus adoleverat, quo in lucem editum fuit; sicut multa ex animalibus fœtus lambere consuescunt usque quo ad membrorum firmitudinem eos perducant. In libris suis componendis verborum vigorem et perspicuitatem præcipuè sectabatur, non elegantiam aut concinnitatem sermonis, et inter scribendum aut dictandum sæpe interrogavit, num sensus ejus clare admodum et perspicuè redditus esset? Quippe qui sciret æquum esse ut verba famularentur rebus, non res verbis. Et si in stylum forsitan politiorem incidisset, siquidem apud nostrates eloquii Anglicani artifex habitus est, id evenit, quia evitare arduum ei erat.

is taken the first book of the Novum Organum, and even a part of the second. I use this language, because, though earlier in publication, I conceive that the Novum Organum was later in composition. All that very important part of this fifth book which relates to Experientia Litterata, or Venatio Panis, as he calls it, and contains excellent rules for conducting experiments in natural philosophy, is new, and does not appear in the Advancement of Learning, except by way of promise of what should be done in it. Nor is this, at least so fully and clearly, to be found in the Novum Organum. The second book of this latter treatise he professes not to anticipate. De Novo Organo silemus, he says, neque de eo quicquam prælibamus. This can only apply to the second book, which he considered as the real exposition of his method, after clearing away the fallacies which form the chief subject of the first. Yet what is said of Topica particularis, in this fifth book De Augmentis (illustrated by "articles of inquiry concerning gravity and levity"), goes entirely on the principles of the second book of the Novum Organum.

Nature of the Baconian induction.

43. Let us now see what Lord Bacon's method really was. He has given it the name of induction, but carefully distinguishes it from what bore that name in the old logic, that is, an inference from a perfect enumeration of particulars to a general law of the whole. For such an enumeration, though of course conclusive, is rarely practicable in nature, where the particulars exceed our powers of numbering.[k] Nor, again, is the Baconian method to be con-

[k] Inductio quæ procedit per enumerationem simplicem, res puerilis est, et precario concludit, et periculo exponitur ab instantia contradictoria, et plerumque secundum pauciora quam par est, et ex his tantummodo quæ præsto sunt pronuntiat. At inductio quæ ad inventionem et demonstrationem scientiarum et artium erit utilis, naturam separare debet, per rejectiones et exclusiones debitas; ac deinde post negativas tot quot sufficiunt, super affirmativas concludere; quod adhuc factum non est, nec tentatum certe, nisi tantummodo a Platone, qui ad excutiendas definitiones et ideas, hac certe forma inductionis aliquatenus utitur. Nov. Org., i. 105. In this passage Bacon seems to imply that the enumeration of particulars in any induction is or may be imperfect. This is certainly the case in the plurality of physical inductions; but it does not appear that the logical writers looked upon this as the primary and legitimate sense. Induction was distinguished into the complete and incomplete. "The word," says a very modern writer, "is perhaps unhappy, as indeed it is taken in several vague senses; but to abolish it is impossible. It is the Latin translation of ἐπαγωγὴ, which word is used by Aristotle as a counterpart to συλλογισμὸς. He

founded with the less complete form of the inductive process, namely, inferences from partial experience in similar circumstances; though this may be a very sufficient ground for practical, which is probable, knowledge. His

seems to consider it in a perfect or dialectic, and in an imperfect or rhetorical sense. Thus if a genus (G.) contained four species (A. B. C. D.), syllogism would argue, that what is true of G. is true of any one of the four; but perfect induction would reason, that what we can prove true of A. B. C. D. separately, we may properly state as true of G., the whole genus. This is evidently a formal argument, as demonstrative as syllogism. But the imperfect or rhetorical induction will perhaps enumerate three only of the species, and then draw the conclusion concerning G., which virtually includes the fourth, or, what is the same thing, will argue, that what is true of the three is to be believed true likewise of the fourth." Newman's Lectures on Logic, p. 73, (1837.) The same distinction between perfect and imperfect induction is made in the Encyclopédie Françoise, art. Induction, and apparently on the authority of the ancients.

It may be observed, that this imperfect induction may be put in a regular logical form, and is only vicious in syllogistic reasoning when the conclusion asserts a higher probability than the premises. If, for example, we reason thus: Some serpents are venomous.—This unknown animal is a serpent.—Therefore this is venomous: we are guilty of an obvious paralogism. If we infer only, This may be venomous, our reasoning is perfectly valid in itself, at least in the common apprehension of all mankind, except dialecticians, but not regular in form. The only means that I perceive of making it so, is to put it in some such phrase as the following: All unknown serpents are affected by a certain probability of being venomous: This animal, &c. It is not necessary, of course, that the probability should be capable of being estimated, provided we mentally conceive it to be no other in the conclusion than in the major term. In the best treatises on the strict or syllogistic method, as far as I have seen, there seems a deficiency in respect to *probable* conclusions, which may have arisen from the practice of taking instances from universal or necessary, rather than contingent truths, as well as from the contracted views of reasoning which the Aristotelian school have always inculcated. No sophisms are so frequent in practice as the concluding generally from a partial induction, or assuming (most commonly tacitly) by what Archbishop Whately calls "a kind of logical fiction," that a few individuals are "adequate samples or representations of the class they belong to." These sophisms cannot, in the present state of things, be practised largely in physical science or natural history; but in reasonings on matter of fact they are of incessant occurrence. The "logical fiction" may indeed frequently be employed, even on subjects unconnected with the physical laws of nature; but to know when this may be, and to what extent, is just that which, far more than any other skill, distinguishes what is called a good reasoner from a bad one.

[I permit this note to remain as in former editions; but it might have been more fully and more correctly expressed. The proper nature of induction has been treated within a few years by Sir William Hamilton (Edinburgh Review, vol. lvii.), by Archbishop Whately in his Elements of Logic, by the author of the article "Organon" in the Penny Cyclopædia, by M. de Rémusat, Essais de Philosophie, vol. ii. p. 408, by Dr. Whewell in the "History," and again in the "Philosophy of the Inductive Sciences," and by Mr. Mill, System of Logic, vol. i. p. 352. The apparently various opinions of these writers, though in some degree resolving themselves into differences of definition, deserve attention from the philosophical reader; but it would be rather too extraneous from the character of the present work to examine them. I will only observe, that what has been called perfect induction, or a complete enumeration of particulars, is as barren of new truth as the syllogism itself, to which indeed, though with some variety

own method rests on the same general principle, namely, the uniformity of the laws of nature, so that in certain conditions of phænomena the same effects or the same causes may be assumed; but it endeavours to establish these laws on a more exact and finer process of reasoning than partial experience can effect. For the recurrence of antecedents and consequents does not prove a necessary connexion between them, unless we can exclude the presence of all other conditions which may determine the event. Long and continued experience of such a recurrence, indeed, raises a high probability of a necessary connexion; but the aim of Bacon was to supersede experience in this sense, and to find a shorter road to the result; and for this his methods of exclusion are devised. As complete and accurate a col-

in the formal rules, it properly belongs. For if we have already enumerated all species of fish, and asserted them to be cold-blooded, we advance not a step by saying this again of a herring or a haddock. Mr. Mill, therefore, has well remarked, that "Induction is a process of inference; it proceeds from the known to the unknown; and any operation involving no inference, any process in which what seems the conclusion is no wider than the premises from which it is drawn, does not fall within the meaning of the term."—System of Logic, vol. i. p. 352. But this inference is only rendered logically conclusive, or satisfactory to the reason, as any thing more than a probable argument, by means of a generalisation, which assumes, on some extra-logical ground, such as the uniformity of physical laws, that the partial induction might have been rendered universal. If the conclusion contains more than the premises *imply*, it is manifestly fallacious. But that the inductive syllogism, ὁ ἐξ ἐπαγωγῆς συλλογισμὸς (Analyt. Prin. l. ii. c. 23), can only lead, in *form*, to probable conclusions, even though the enumeration should be complete, appears from its being in the third figure, though after a general principle is once established by induction, when we come to apply it in new cases, the process will be in the first. Archbishop Whately and Sir W. Hamilton only differ in appearance as to this, since they look to different periods of reasoning: one, in which experience is generalised by the assumption of something unproved; another, in which a particular case is shown to fall within the generalisation. But the second is not the induction of Aristotle. What this was, I find no where more neatly delivered than in an Arabic treatise on logic, published, with a translation, in the eighth volume of the Asiatic Researches.

"Induction is the process of collecting particulars for the purpose of establishing a general rule respecting the nature of the whole class. Induction is of two kinds, viz. perfect and imperfect. It is perfect induction when the general rule is obtained from an examination of all the parts. For example, all animals are either endowed with speech, or not endowed with speech. But those endowed and those not endowed are both sentient; therefore all animals are sentient. This is an example of perfect induction, which produces certainty.

"It is imperfect induction when a number of individuals of a class being overlooked or excluded, a general rule is thus established respecting the whole. For instance, if it should be assumed that all animals move the under-jaw in eating, because this is the case with man, horses, goats, and sheep, this would be an example of imperfect induction, which does not afford certainty, because it is possible that some animals may not move the under-jaw in eating, as it is reported of the crocodile." p. 127.—1847.]

lection of facts, connected with the subject of inquiry, as possible, is to be made out by means of that copious natural history which he contemplated, or from any other good sources. These are to be selected, compared, and scrutinised, according to the rules of natural interpretation delivered in the second book of the Novum Organum, or such others as he designed to add to them; and if experiments are admissible, these are to be conducted according to the same rules. Experience and observation are the guides through the Baconian philosophy, which is the handmaid and interpreter of nature. When Lord Bacon seems to decry experience, which in certain passages he might be thought to do, it is the particular and empirical observation of individuals, from which many rash generalizations had been drawn, as opposed to that founded on an accurate natural history. Such hasty inferences he reckoned still more pernicious to true knowledge than the sophistical methods of the current philosophy; and in a remarkable passage, after censuring this precipitancy of empirical conclusions in the chemists, and in Gilbert's Treatise on the Magnet, utters a prediction that if ever mankind, excited by his counsels, should seriously betake themselves to seek the guidance of experience, instead of relying on the dogmatic schools of the sophists, the proneness of the human mind to snatch at general axioms would expose them to much risk of error from the theories of this superficial class of philosophers.[1]

His dislike of Aristotle.

44. The indignation, however, of Lord Bacon is more frequently directed against the predominant philosophy of his age, that of Aristotle and the schoolmen. Though he does justice to the great abilities of the former, and acknowledges the exact attention to facts displayed in his History of Animals, he deems him one of the most eminent adversaries to the only method that can guide us to the real laws of nature. The old Greek philosophers, Empedocles, Leucippus, Anaxagoras, and others of their age, who had been in the right track of investigation, stood much higher in the esteem of Bacon than their successors, Plato, Zeno, Aristotle, by whose lustre they had been so much superseded, that

[1] Nov. Organ., lib. 1. 64. It may be doubted whether Bacon did full justice to Gilbert.

both their works have perished, and their tenets are with difficulty collected. These more distinguished leaders of the Grecian schools were in his eyes little else than disputatious professors (it must be remembered that he had in general only physical science in his view) who seemed to have it in common with children, " ut ad garriendum prompti sint, generare non possint;" so wordy and barren was their mis-called wisdom.

His method much required.

45. Those who object to the importance of Lord Bacon's precepts in philosophy that mankind have practised many of them immemorially, are rather confirming their utility than taking off much from their originality in any fair sense of that term. Every logical method is built on the common faculties of human nature, which have been exercised since the creation in discerning, better or worse, truth from falsehood, and inferring the unknown from the known. That men might have done this more correctly is manifest from the quantity of error into which, from want of reasoning well on what came before them, they have habitually fallen. In experimental philosophy, to which the more special rules of Lord Bacon are generally referred, there was a notorious want of that very process of reasoning which he has supplied. It is more than probable, indeed, that the great physical philosophers of the seventeenth century would have been led to employ some of his rules, had he never promulgated them; but I believe they had been little regarded in the earlier period of science.[m] It is also a very defective view of the Baconian method to look only at the experimental rules given in the Novum Organum. The preparatory steps of completely exhausting the natural history of the subject of inquiry by a patient and sagacious consideration of it in every light are at least of equal importance, and equally prominent in the inductive philosophy.

Its objects.

46. The first object of Lord Bacon's philosophical writings is to prove their own necessity, by giving an unfavourable impression as to the actual state of most sciences, in consequence of the prejudices of the human mind, and of the mistaken methods

[m] It has been remarked, that the famous experiment of Pascal on the barometer by carrying it to a considerable elevation, was " a *crucial instance*, one of the first, if not the very first, on record in physics." Herschel, p. 229.

pursued in their cultivation. The second was to point out a better prospect for the future. One of these occupies the treatise De Augmentis, and the first book of the Novum Organum. The other, besides many anticipations in these, is partially detailed in the second book, and would have been more thoroughly developed in those remaining portions which the author did not complete. We shall now give a very short sketch of these two famous works, which comprise the greater part of the Baconian philosophy.

Sketch of the treatise De Augmentis.

47. The Advancement of Learning is divided into two books only; the treatise De Augmentis into nine. The first of these, in the latter, is introductory, and designed to remove prejudices against the search after truth, by indicating the causes which had hitherto obstructed it. In the second book, he lays down his celebrated partition of human learning into history, poetry, and philosophy, according to the faculties of the mind respectively concerned in them, the memory, imagination, and reason. History is natural or civil, under the latter of which ecclesiastical and literary histories are comprised. These again fall into regular subdivisions; all of which he treats in a summary manner, and points out the deficiencies which ought to be supplied in many departments of history. Poetry succeeds in the last chapter of the same book, but by confining the name to fictitious narrative, except as to ornaments of style, which he refers to a different part of his subject, he much limited his views of that literature: even if it were true, as it certainly is not, that the imagination alone, in any ordinary use of the word, is the medium of poetical emotion. The word emotion, indeed, is sufficient to show that Bacon should either have excluded poetry altogether from his enumeration of sciences and learning, or taken into consideration other faculties of the soul than those which are merely intellectual.

History.

Poetry.

Fine passage on Poetry.

48. Stewart has praised with justice a short but beautiful paragraph concerning poetry (under which title may be comprehended all the various creations of the faculty of imagination, at least as they are manifested by words), wherein Bacon "has exhausted everything that philosophy and good sense

have yet had to offer on the subject of what has since been called the *beau idéal*." The same eminent writer and ardent admirer of Bacon observes that D'Alembert improved on the Baconian arrangement by classing the fine arts together with poetry. Injustice had been done to painting and music, especially the former, when, in the fourth book De Augmentis, they were counted as mere "artes voluptariæ," subordinate to a sort of Epicurean gratification of the senses, and only somewhat more liberal than cookery or cosmetics.

Natural theology and metaphysics.

49. In the third book, science having been divided into theological and philosophical, and the former, or what regards revealed religion, being postponed for the present, he lays it down that all philosophy relates to God, to nature, or to man. Under natural theology, as a sort of appendix, he reckons the science or theory of angels and superhuman spirits; a more favourite theme, especially as treated independently of revelation, in the ages that preceded Lord Bacon, than it has been since. Natural philosophy is speculative or practical; the former divided into physics, in a particular sense, and metaphysics; "one of which inquireth and handleth the material and efficient causes; the other handleth the formal and final causes." Hence physics dealing with particular instances, and regarding only the effects produced, is precarious in its conclusions, and does not reach the stable principles of causation.

> "Limus ut hic durescit, et hæc ut cera liquescit
> Uno eodemque igni."

Metaphysics, to which word he gave a sense as remote from that which it bore in the Aristotelian schools as from that in which it is commonly employed at present, had for its proper object the investigation of forms. It was "a generally received and inveterate opinion, that the inquisition of man is not competent to find out essential forms or true differences." "Formæ inventio," he says in another place, "habetur pro desperata." The word *form* itself, being borrowed from the old philosophy, is not immediately intelligible to every reader.

Form of bodies

"In the Baconian sense," says Playfair, "form differs only from cause in being permanent, whereas we apply cause to that which exists in order of

time." Form (*natura naturans*, as it was barbarously called) is the general law, or condition of existence, in any substance or quality (*natura naturata*), which is wherever its form is.[n] The conditions of a mathematical figure, prescribed in its definition, might in this sense be called its form, if it did not seem to be Lord Bacon's intention to confine the word to the laws of particular sensible existences. In modern philosophy, it might be defined to be that particular combination of forces which impresses a certain modification upon matter subjected to their influence.

might sometimes be inquired into.

50. To a knowledge of such forms, or laws of essence and existence, at least in a certain degree, it might be possible, in Bacon's sanguine estimation of his own logic, for man to attain. Not that we could hope to understand the forms of complex beings, which are almost infinite in variety, but the simple and primary natures, which are combined in them. "To inquire the form of a lion, of an oak, of gold, nay of water, of air, is a vain pursuit; but to inquire the forms of sense, of voluntary motion, of vegetation, of colours, of gravity and levity, of density and tenuity, of heat, of cold, and all other natures and qualities, which, like an alphabet, are not many, and of which the essences, upheld by matter, of all creatures do consist; to inquire, I say, the true forms of these is that part of metaphysics which we now define of."[o] Thus, in the words he soon afterwards uses, "of natural philosophy, the basis is natural history; the stage next the basis is physic; the stage next the vertical point is metaphysic. As for the vertical point, 'Opus quod operatur Deus a principio usque ad finem,' the summary law of nature, we know not whether man's inquiry can attain unto it."[p]

[n] Licet enim in natura nihil vere existat præter corpora individua, edentia actus puros individuos ex lege, in doctrinis tamen illa ipsa lex, ejusque inquisitio, et inventio atque explicatio pro fundamento est tam ad sciendum quam operandum. Eam autem legem ejusque paragraphos Formarum nomine intelligimus; præsertim cum hoc vocabulum invaluerit et familiariter occurrat. Nov. Org., ii. 2.

[o] In the Novum Organum he seems to have gone a little beyond this, and to have hoped that the form itself of concrete things might be known. Datæ autem naturæ formam, sive differentiam veram, sive naturam naturantem, sive fontem emanationis (ista enim vocabula habemus, quæ ad indicationem rei proxime accedunt), invenire opus et intentio est Humanæ Scientiæ. Lib. ii. 1.

[p] Advancement of Learning, book ii. This sentence he has scarcely altered in the Latin.

51. The second object of metaphysics, according to Lord Bacon's notion of the word, was the investigation of final causes. It is well known that he has spoken of this in physics, with unguarded disparagement.[q] "Like a virgin consecrated to God, it bears nothing;" one of those witty conceits that sparkle over his writings, but will not bear a severe examination. It has been well remarked that almost at the moment he published this, one of the most important discoveries of his age, the circulation of the blood, had rewarded the acuteness of Harvey in reasoning on the final cause of the valves in the veins.

Final causes too much slighted.

52. Nature, or physical philosophy, according to Lord Bacon's partition, did not comprehend the human species. Whether this be not more consonant to popular language, adopted by preceding systems of philosophy, than to a strict and perspicuous arrangement, may by some be doubted; though a very respectable authority, that of Dugald

Man not included by him in physics.

[q] Causa finalis tantum abest ut prosit, ut etiam scientias corrumpat, nisi in hominis actionibus. Nov. Org., ii. 2. It must be remembered that Bacon had good reason to deprecate the admixture of theological dogmas with philosophy, which had been, and has often since been, the absolute perversion of all legitimate reasoning in science. See what Stewart has said upon Lord Bacon's objection to reasoning from final causes in *physics*. Philosophy of the Active and Moral Powers, book iii. chap. ii. sect. 4.

[It ought to be more remembered than sometimes it has been, that Bacon solely objects to the confusion of *final* with *efficient* causes, or, as some would say, with antecedent conditions. These alone he considered to fall within the province of physics. But as a part of metaphysical theology, he gives the former here a place. Stewart has quoted at length the passage, which entirely vindicates Bacon from the charge of depreciating the argument in favour of theism from the structure of the world: a charge not uncommonly insinuated against him in the seventeenth century, but repeated lately with the most dogmatic violence by a powerful writer, Count de Maistre, Examen de la Philos. de Bacon, c. 13, et alibi. Bruxelles, 1838. This work, little known perhaps in England, is from beginning to end a violent attack upon the Baconian philosophy and its author, by a man of extraordinary vigour as a polemical writer, quick to discover any weak point, and powerful to throw upon it the light of a remarkably masculine and perspicuous style; second only perhaps in these respects to Bossuet, or rather only falling short of him in elegance of language; but, like him, a mere sworn soldier of one party, utterly destitute of an eclectic spirit in his own philosophy, or even of the power of appreciating with ordinary candour the diversities of opinion in others; repulsive therefore not only to all who have looked with reverence upon those whom he labours to degrade, but to all who abhor party-spirit in the research of truth; yet not unworthy to be read even by them, since he has many just criticisms, and many acute observations; such, however, as ought always to be tried by comparison with the text of Bacon, whom he may not designedly have misrepresented, but, having set out with the conviction that he was a charlatan and an atheist, he naturally is led to exhibit in no other light.—1847.]

Stewart, is opposed to including man in the province of physics. For it is surely strange to separate the physiology of the human body, as quite a science of another class, from that of inferior animals; and if we place this part of our being under the department of physical philosophy, we shall soon be embarrassed by what Bacon has called the "doctrina de fœdere," the science of the connexion between the soul of man and his bodily frame, a vast and interesting field, even yet very imperfectly explored.

Man in body and mind.

53. It has pleased, however, the author to follow his own arrangement. The fourth book relates to the constitution, bodily and mental, of mankind. In this book he has introduced several subdivisions which, considered merely as such, do not always appear the most philosophical; but the pregnancy and acuteness of his observations under each head silence all criticism of this kind. This book has nearly double the extent of the corresponding pages in the Advancement of Learning. The doctrine as to the substance of the thinking principle having been very slightly touched, or rather passed over, with two curious disquisitions on divination and fascination, he advances in four ensuing books to the intellectual and moral faculties, and those sciences which immediately depend upon them. Logic and Ethics are the grand divisions, correlative to the reason and the will of man. Logic, according to Lord Bacon, comprises the sciences of inventing, judging, retaining, and delivering the conceptions of the mind. We invent, that is, discover new arts, or new arguments; we judge by induction or by syllogism; the memory is capable of being aided by artificial methods. All these processes of the mind are the subjects of several sciences, which it was the peculiar aim of Bacon, by his own logic, to place on solid foundations.

Logic;

extent given it by Bacon.

54. It is here to be remarked, that the sciences of logic and ethics, according to the partitions of Lord Bacon, are far more extensive than we are accustomed to consider them. Whatever concerned the human intellect came under the first; whatever related to the will and affections of the mind fell under the head of ethics. Logica de intellectu et ratione, ethica de voluntate appetitu et affectibus dis-

serit; altera decreta, altera actiones progignit. But it has been usual to confine logic to the methods of guiding the understanding in the search for truth; and some, though, as it seems to me, in a manner not warranted by the best usage of philosophers,[r] have endeavoured to exclude everything but the syllogistic mode of reasoning from the logical province. Whether, again, the nature and operations of the human mind, in general, ought to be reckoned a part of physics, has already been mentioned as a disputable question.

Grammar and rhetoric.

55. The science of delivering our own thoughts to others, branching into grammar and rhetoric, and including poetry, so far as its proper vehicles, metre and diction, are concerned, occupies the sixth book. In all this he finds more desiderata than, from the great attention paid to these subjects by the ancients, could have been expected. Thus his ingenious collection of antitheta, or common-places in rhetoric, though mentioned by Cicero as to the judicial species of eloquence, is first extended by Bacon himself, as he supposes, to deliberative or political orations. I do not, however, think it probable that this branch of topics could have been neglected by antiquity, though the writings relating to it may not have descended to us; nor can we by any means say there is nothing of the kind in Aristotle's Rhetoric. Whether the utility of these common-places, when collected in books, be very great, is another question. And a similar doubt might be suggested with respect to the elenchs, or refutations, of rhetorical sophisms, "colores boni et mali," which he reports as equally deficient, though a commencement had been made by Aristotle.

Ethics.

56. In the seventh book we come to ethical science. This he deems to have been insufficiently treated. He would have the different tempers and characters of mankind first considered, then their passions and affections; (neither of which, as he justly observes, find a place in the Ethics of Aristotle, though they are sometimes treated, not so appositely, in his Rhetoric;) lastly, the methods of altering and affecting the will and appetite, such as custom, education, imita-

[r] In altera philosophiæ parte, quæ est *quærendi* ac disserendi, quæ λογικη dicitur. Cic. de Fin., i. 14.

tion, or society. "The main and primitive division of moral knowledge seemeth to be into the exemplar or platform of good, and the regiment or culture of the mind; the one describing the nature of good, the other presenting rules how to subdue, apply, and accommodate the will of man thereunto." This latter he also calls "the Georgics of the mind." He seems to place "the platform or essence of good" in seeking the good of the whole, rather than that of the individual, applying this to refute the ancient theories as to the summum bonum. But perhaps Bacon had not thoroughly disentangled this question, and confounds, as is not unusual, the *summum bonum*, or personal felicity, with the object of moral action, or *commune bonum*. He is right, however, in preferring, morally speaking, the active to the contemplative life against Aristotle and other philosophers. This part is translated in De Augmentis, with little variation, from the Advancement of Learning; as is also what follows on the Georgics, or culture, of the mind. The philosophy of civil life, as it relates both to the conduct of men in their mutual intercourse, which is peculiarly termed prudence, and to that higher prudence which is concerned with the administration of communities, fills up the chart of the Baconian ethics. In the eighth book admirable reflections on the former of these subjects occur at almost every sentence. Many, perhaps most, of these will be found in the Advancement of Learning. But in this, he had been, for a reason sufficiently obvious and almost avowed, cautiously silent upon the art of government, the craft of his king.

Politics.

The motives for silence were still so powerful, that he treats, in the De Augmentis, only of two heads in political science; the methods of enlarging the boundaries of a state, which James I. could hardly resent as an interference with his own monopoly, and one of far more importance to the well-being of mankind, the principles of universal jurisprudence, or rather of universal legislation, according to which standard all laws ought to be framed. These he has sketched in ninety-seven aphorisms, or short rules, which, from the great experience of Bacon in the laws, as well as his peculiar vocation towards that part of philosophy, deserve to be studied at this day. Upon such topics, the

progressive and innovating spirit of his genius was less likely to be perceived; but he is here, as on all occasions, equally free from what he has happily called in one of his essays, the "froward retention of custom," the prejudice of mankind, like that of perverse children, against what is advised to them for their real good, and what they cannot deny to be conducive to it. This whole eighth book is pregnant with profound and original thinking. The ninth and last, which is short, glances only at some desiderata in theological science, and is chiefly remarkable as it displays a more liberal and catholic spirit than was often to be met with in a period signalised by bigotry and ecclesiastical pride. But as the abjuration of human authority is the first principle of Lord Bacon's philosophy, and the preparation for his logic, it was not expedient to say too much of its usefulness in theological pursuits.

Theology.

57. At the conclusion of the whole, we may find a summary catalogue of the deficiencies, which, in the course of this ample review, Lord Bacon had found worthy of being supplied by patient and philosophical inquiry. Of these desiderata, few, I fear, have since been filled up, at least in a collective and systematic manner, according to his suggestions. Great materials, useful intimations, and even partial delineations, are certainly to be found, as to many of the rest, in the writings of those who have done honour to the last two centuries. But with all our pride in modern science, very much even of what, in Bacon's time, was perceived to be wanting, remains for the diligence and sagacity of those who are yet to come.

Desiderata enumerated by him.

58. The first book of the Novum Organum, if it is not better known than any other part of Bacon's philosophical writings, has at least furnished more of those striking passages which shine in quotation. It is written in detached aphorisms; the sentences, even where these aphorisms are longest, not flowing much into one another, so as to create a suspicion, that he had formed adversaria, to which he committed his thoughts as they arose. It is full of repetitions; and indeed this is so usual with Lord Bacon, that whenever we find an acute reflection or brilliant analogy, it is more than an even chance that it will recur in

Novum Organum; first book.

some other place. I have already observed that he has hinted the Novum Organum to be a digested summary of his method, but not the entire system as he designed to develop it, even in that small portion which he has handled at all.

Fallacies. Idola;

59. Of the splendid passages in the Novum Organum none are perhaps so remarkable as his celebrated division of fallacies, not such as the dialecticians had been accustomed to refute, depending upon equivocal words, or faulty disposition of premises, but lying far deeper in the natural or incidental prejudices of the mind itself. These are four in number: *idola tribûs*, to which from certain common weaknesses of human nature we are universally liable; *idola specûs*, which from peculiar dispositions and circumstances of individuals mislead them in different manners; *idola fori*, arising from the current usage of words, which represent things much otherwise than as they really are; and *idola theatri*, which false systems of philosophy and erroneous methods of reasoning have introduced. Hence, as the refracted ray gives us a false notion as to the place of the object whose image it transmits, so our own minds are a refracting medium to the objects of their own contemplation, and require all the aid of a well-directed philosophy either to rectify the perception, or to make allowances for its errors.

confounded with idols.

60. These idola, ειδωλα, images, illusions, fallacies, or, as Lord Bacon calls them in the Advancement of Learning, false appearances, have been often named in English *idols* of the tribe, of the den, of the market-place. But it seems better, unless we retain the Latin name, to employ one of the synonymous terms given above. For the use of idol in this sense is little warranted by the practice of the language, nor is it found in Bacon himself; but it has misled a host of writers, whoever might be the first that applied it, even among such as are conversant with the Novum Organum. "Bacon proceeds," says Playfair, "to enumerate the causes of error, the *idols*, as he calls them, or false divinities to which the mind had so long been accustomed to bow." And with a similar misapprehension of the meaning of the word, in speaking of the *idola specûs*, he says, "Besides the causes of error which are common to all

mankind, each individual, according to Bacon, has his own dark cavern or den, into which the light is imperfectly admitted, and in the obscurity of which a tutelary idol lurks, at whose shrine the truth is often sacrificed."[s] Thus also Dr. Thomas Brown; "in the inmost sanctuaries of the mind were all the idols which he overthrew;" and a later author on the Novum Organum fancies that Bacon "strikingly, though in his usual quaint style, calls the prejudices that check the progress of the mind by the name of idols, because mankind are apt to pay homage to these, instead of regarding truth."[t] Thus, too, in the translation of the Novum Organum, published in Mr. Basil Montagu's edition, we find *idola* rendered by idols, without explanation. We may in fact say that this meaning has been almost universally given by later writers. By whom it was introduced I cannot determine. Cudworth, in a passage where he glances at Bacon, has said, "It is no *idol of the den*, to use that affected language." But, in the pedantic style of the seventeenth century, it is not impossible that idol may here have been put as a mere translation of the Greek ειδωλον, and in the same general sense of an idea or intellectual image.[u] Although the popular sense would not be inapposite to the general purpose of Bacon in the first part of the Novum Organum, it cannot be reckoned so exact and philosophical an illustration of the sources of human error as the unfaithful image, the shadow of reality, seen through a refracting surface, or reflected from an unequal mirror, as in the Platonic hypothesis of the cave, wherein we are placed with our backs to the light, to which he seems to allude in his *idola specûs*.[x] And as this is also

[s] Preliminary Dissertation to Encyclopædia.

[t] Introduction to the Novum Organum, published by the Society for the Diffusion of Useful Knowledge. Even Stewart seems to have fallen into the same error. "While these idols of the den maintain their authority, the cultivation of the philosophical spirit is impossible; or rather it is in a renunciation of this idolatry that the philosophical spirit essentially consists." Dissertation, &c.—The observation is equally true, whatever sense we may give to *idol*.

[u] In Todd's edition of Johnson's Dictionary this sense is not mentioned. But in that of the Encyclopædia Metropolitana we have these words: "An *idol* or image is also opposed to a reality; thus Lord Bacon (see the quotation from him) speaks of idols or false appearances." The quotation is from the translation of one of his short Latin tracts, which was not made by himself. It is, however, a proof that the word *idol* was once used in this sense.

[x] Quisque ex phantasiæ suæ cellulis tanquam ex specu Platonis, philosopha-

plainly the true meaning, as a comparison with the parallel passages in the Advancement of Learning demonstrates, there can be no pretence for continuing to employ a word which has served to mislead such men as Brown and Playfair.

Second book of Novum Organum.

61. In the second book of the Novum Organum we come at length to the new logic, the interpretation of nature, as he calls it, or the rules for conducting inquiries in natural philosophy according to his inductive method. It is, as we have said, a fragment of his entire system, and is chiefly confined to the "prerogative instances,"[y] or phænomena which are to be selected, for various reasons, as most likely to aid our investigations of nature. Fifteen of these are used to guide the intellect, five to assist the senses, seven to correct the practice. This second book is written with more than usual want of perspicuity, and though it is intrinsically the Baconian philosophy in a pre-eminent sense, I much doubt whether it is very extensively read, though far more so than it was fifty years since. Playfair, however, has given an excellent abstract of it in his Preliminary Dissertation to the Encyclopædia Britannica, with abundant and judicious illustrations from modern science. Sir John Herschel, in his admirable Discourse on Natural Philosophy, has added a greater number from still more recent discoveries, and has also furnished such a luminous development of the difficulties of the Novum Organum, as had been vainly hoped in former times. The commentator of Bacon should be himself of an original genius in philosophy. These novel illustrations are the more useful, because Bacon himself, from defective knowledge of natural phænomena, and from what, though

tur. Historia Naturalis, in præfatione. Coleridge has some fine lines in allusion to this hypothesis in that magnificent effusion of his genius, the introduction to the second book of Joan of Arc, but withdrawn, after the first edition, from that poem; where he describes us as "Placed with our backs to bright reality." I am not, however, certain that Bacon meant this precise analogy by his *idola specûs*. See De Augmentis, lib. v. c. 4.

[y] The allusion in "prærogativæ instantiarum" is not to the English word prerogative, as Sir John Herschel seems to suppose (Discourse on Natural Philosophy, p. 182), but to the prærogativa centuria in the Roman comitia, which being first called though by lot, was generally found, by some prejudice or superstition, to influence the rest, which seldom voted otherwise. It is rather a forced analogy, which is not uncommon with Bacon.

contrary to his precepts, his ardent fancy could not avoid, a premature hastening to explain the essences of things instead of their proximate causes, has frequently given erroneous examples. It is to be observed, on the other hand, that he often anticipates with marvellous sagacity the discoveries of posterity, and that his patient and acute analysis of the phænomena of heat has been deemed a model of his own inductive reasoning. "No one," observes Playfair, "has done so much in such circumstances." He was even ignorant of some things that he might have known; he wanted every branch of mathematics; and placed in this remote corner of Europe, without many kindred minds to animate his zeal for physical science, seems hardly to have believed the discoveries of Galileo.

Confidence of Bacon.

62. It has happened to Lord Bacon, as it has to many other writers, that he has been extolled for qualities by no means characteristic of his mind. The first aphorism of the Novum Organum, so frequently quoted, "Man, the servant and interpreter of nature, performs and understands so much as he has collected concerning the order of nature by observation or reason, nor do his power or his knowledge extend farther," has seemed to bespeak an extreme sobriety of imagination, a willingness to acquiesce in registering the phænomena of nature without seeking a revelation of her secrets. And nothing is more true than that such was the cautious and patient course of inquiry prescribed by him to all the genuine disciples of his inductive method. But he was far from being one of those humble philosophers who would limit human science to the enumeration of particular facts. He had, on the contrary, vast hopes of the human intellect under the guidance of his new logic. The Latens Schematismus, or intrinsic configuration of bodies, the Latens processus ad formam, or transitional operation through which they pass from one form, or condition of nature, to another, would one day, as he hoped, be brought to light; and this not, of course, by simple observation of the senses, nor even by assistance of instruments, concerning the utility of which he was rather sceptical, but by a rigorous application of exclusive and affirmative propositions to the actual phænomena by the inductive method. "It ap-

pears," says Playfair, "that Bacon placed the ultimate object of philosophy too high, and too much out of the reach of man, even when his exertions are most skilfully conducted. He seems to have thought, that by giving a proper direction to our researches, and carrying them on according to the inductive method, we should arrive at the knowledge of the essences of the powers and qualities residing in bodies; that we should, for instance, become acquainted with the essence of heat, of cold, of colour, of transparency. The fact however is, that, in as far as science has yet advanced, no one essence has been discovered, either as to matter in general, or as to any of its more extensive modifications. We are yet in doubt whether heat is a peculiar motion of the minute parts of bodies, as Bacon himself conceived it to be, or something emitted or radiated from their surfaces, or lastly, the vibrations of an elastic medium by which they are penetrated and surrounded."

Almost justified of late;

63. It requires a very extensive survey of the actual dominion of science, and a great sagacity, to judge, even in the loosest manner, what is beyond the possible limits of human knowledge. Certainly, since the time when this passage was written by Playfair, more steps have been made towards realising the sanguine anticipations of Bacon than in the two centuries that had elapsed since the publication of the Novum Organum. We do not yet *know* the real nature of heat, but few would pronounce it impossible or even unlikely that we may know it, in the same degree that we know other physical realities not immediately perceptible, before many years shall have expired. The atomic theory of Dalton, the laws of crystalline substances discovered by Haüy, the development of others still subtler by Mitscherlich, instead of exhibiting, as the older philosophy had done, the idola rerum, the sensible appearances of concrete substance, radiations from the internal glory, admit us, as it were, to stand within the vestibule of nature's temple, and to gaze on the very curtain of the shrine. If, indeed, we could know the internal structure of one primary atom, and could tell, not of course by immediate testimony of sense, but by legitimate inference from it, through what constant laws its component, though indiscerpible, molecules, the atoms

of atoms, attract, retain, and repel each other, we should have before our mental vision not only the Latens Schematismus, the real configuration of the substance, but its *form*, or efficient nature, and could give as perfect a definition of any such substance, of gold, for example, as we can of a cone or a parallelogram. The recent discoveries of animal and vegetable development, and especially the happy application of the microscope to observing chemical and organic changes in their actual course, are equally remarkable advances towards a knowledge of the Latens processus ad formam, the corpuscular motions by which all change must be accomplished, and are in fact a great deal more than Bacon himself would have deemed possible.[1]

but should be kept within bounds.

64. These astonishing revelations of natural mysteries, fresh tidings of which crowd in upon us every day, may be likely to overwhelm all sober hesitation as to the capacities of the human mind, and to bring back that confidence which Bacon, in so much less favourable circumstances, has ventured to feel. There seem, however, to be good reasons for keeping within bounds this expectation of future improvement, which, as it has sometimes been announced in unqualified phrases, is hardly more philosophical than the vulgar supposition that the capacities of mankind are almost stationary. The phænomena of nature, indeed, in all their possible combinations, are so infinite, in a popular sense of the word, that during no period, to which the human species can be conceived to reach, would they be entirely collected and registered. The case is still stronger as to the secret agencies and processes by means of which their phænomena are displayed. These have as yet, in no one instance, so far as I know, been fully ascertained. "Microscopes," says Herschel, "have been constructed which magnify more than one thousand times in linear dimension, so that the smallest visible grain of sand may be enlarged to the appearance of one million times more bulky; yet the only impression

[1] By the Latens processus, he meant only what is the natural operation by which one form or condition of being is induced upon another. Thus, when the surface of iron becomes rusty, or when water is converted into steam, some change has taken place, a *latent progress* from one form to another. This, in numberless cases, we can now answer, at least to a very great extent, by the science of chemistry.

we receive by viewing it through such a magnifier is that it reminds us of some vast fragment of a rock; while the intimate structure on which depend its colour, its hardness, and its chemical properties, remains still concealed; we do not seem to have made even an approach to a closer analysis of it by any such scrutiny."[a]

Limits to our knowledge by sense.

65. The instance here chosen is not the most favourable for the experimental philosopher. He might perhaps hope to gain more knowledge by applying the best microscope to a regular crystal or to an organized substance. But there is evidently a fundamental limitation of physical science, arising from those of the bodily senses and of muscular motions. The nicest instruments must be constructed and directed by the human hand; the range of the finest glasses must have a limit, not only in their own natural structure, but in that of the human eye. But no theory in science will be acknowledged to deserve any regard, except as it is drawn immediately, and by an exclusive process, from the phænomena which our senses report to us. Thus the regular observation of definite proportions in chemical combination has suggested the atomic theory; and even this has been sceptically accepted by our cautious school of philosophy. If we are ever to go farther into the molecular analysis of substances, it must be through the means and upon the authority of new discoveries exhibited to our senses in experiment. But the existing powers of exhibiting or compelling nature by instruments, vast as they appear to us, and wonderful as has been their efficacy in many respects, have done little for many years past in diminishing the number of substances reputed to be simple; and with strong reasons to suspect that some of these, at least, yield to the crucible of nature, our electric batteries have up to this hour played innocuously round their heads.

66. Bacon has thrown out, once or twice, a hint at a single principle, a summary law of nature, as if all subordinate causes resolved themselves into one great process, according to which God works his will in the universe: Opus quod operatur Deus a principio usque ad finem. The natural tendency towards simplification,

[a] Discourse on Nat. Philos., p. 191.

and what we consider as harmony, in our philosophical systems, which Lord Bacon himself reckons among the *idola tribûs*, the fallacies incident to the species, has led some to favour this unity of physical law. Impact and gravity have each had their supporters. But we are as yet at a great distance from establishing such a generalization, nor does it appear by any means probable that it will ever assume any simple form.

Inductive logic; whether confined to physics.

67. The close connexion of the inductive process recommended by Bacon with natural philosophy in the common sense of that word, and the general selection of his examples for illustration from that science, have given rise to a question, whether he comprehended metaphysical and moral philosophy within the scope of his inquiry.[b] That they formed a part of the Instauration of Sciences, and therefore of the Baconian philosophy in the fullest sense of the word, is obvious from the fact that a large proportion of the treatise De Augmentis Scientiarum is dedicated to those subjects; and it is not less so that the *idola* of the Novum Organum are at least as apt to deceive us in moral as in physical argument. The question, therefore, can only be raised as to the peculiar method of conducting investigations, which is considered as his own. This would, however, appear to have been decided by himself in very positive language: "It may be doubted, rather than objected, by some, whether we look to the perfection, by means of our method, of natural philosophy alone, or of the other sciences also, of logic, of ethics, of politics. But we certainly mean what has here been said to be understood as to them all; and as the ordinary logic, which proceeds by syllogism, does not relate to physical only, but to every other science, so ours, which proceeds by induction, comprises them all. For we as much collect a history and form tables concerning anger, fear, shame, and the like, and also concerning examples from civil life, and as much concerning the intellectual operations of memory, combination, and partition, judgment and the others, as concerning

[b] This question was discussed some years since by the late editor of the Edinburgh Review on one side, and by Dugald Stewart on the other. See Edinburgh Review, vol. iii. p. 273, and the Preliminary Dissertation to Stewart's Philosophical Essays.

heat and cold, or light, or vegetation, or such things."[c] But he proceeds to intimate, as far as I understand the next sentence, that although his method or logic, strictly speaking, is applicable to other subjects, it is his immediate object to inquire into the properties of natural things, or what is generally meant by physics. To this, indeed, the second book of the Novum Organum and the portions that he completed of the remaining parts of the Instauratio Magna bear witness.

Baconian philosophy built on observation and experiment.

68. It by no means follows, because the leading principles of the inductive philosophy are applicable to other topics of inquiry than what is usually comprehended under the name of physics, that we can employ all the "prærogativæ instantiarum," and still less the peculiar rules for conducting experiments which Bacon has given us, in moral or even psychological disquisitions. Many of them are plainly referable to particular manipulations, or at most to limited subjects of chemical theory. And the frequent occurrence of passages which show Lord Bacon's fondness for experimental processes, seems to have led some to consider his peculiar methods as more exclusively related to such modes of inquiry than they really are. But when the Baconian philosophy is said to be experimental, we are to remember that experiment is only better than what we may call passive observation, because it enlarges our capacity of observing with exactness and expedition. The reasoning is grounded on observation in both cases. In astronomy, where nature remarkably presents the objects of our observation without liability to error or uncertain delay, we may

[c] Etiam dubitabit quispiam potius quam objiciet, utrum nos de naturali tantum philosophia, an etiam de scientiis reliquis, logicis, ethicis, politicis, secundum viam nostram perficiendis loquamur. At nos certè de universis hæc, quæ dicta sunt, intelligimus; atque quemadmodum vulgaris logica, quæ regit res per syllogismum, non tantum ad naturales, sed ad omnes scientias pertinet, ita et nostra, quæ procedit per inductionem, omnia complectitur. Tam enim Historiam et Tabulas Inveniendi conficimus de ira, metu et verecundia et similibus, ac etiam de exemplis rerum civilium; nec minùs de motibus mentalibus memoriæ, compositionis et divisionis, judicii et reliquorum, quam de calido et frigido, aut luce, aut vegetatione aut similibus. Sed tamen cum nostra ratio interpretandi, post historiam præparatam et ordinatam, non mentis tantum motus et discursus, ut logica vulgaris, sed et rerum naturam intueatur, ita mentem regimus ut ad rerum naturam se aptis per omnia modis applicare possit. Atque propterea multa et diversa in doctrina interpretationis præcipimus, quæ ad subjecti, de quo inquirimus, qualitatem et conditionem modum inveniendi nonnulla ex parte applicent. Nov. Org., i. 127.

reason on the inductive principle as well as in sciences that require tentative operations. The inferences drawn from the difference of time in the occultation of the satellites of Jupiter at different seasons, in favour of the Copernican theory and against the instantaneous motion of light, are inductions of the same kind with any that could be derived from an *experimentum crucis*. They are exclusions of those hypotheses which might solve many phænomena, but fail to explain those immediately observed.

Advantages of the latter,

69. But astronomy, from the comparative solitariness, if we may so say, of all its phænomena, and the simplicity of their laws, has an advantage that is rarely found in sciences of mere observation. Bacon justly gave to experiment, or the interrogation of nature, compelling her to give up her secrets, a decided preference whenever it can be employed; and it is unquestionably true that the inductive method is tedious, if not uncertain, when it cannot resort to so compendious a process. One of the subjects selected by Bacon in the third part of the Instauration as specimens of the method by which an inquiry into nature should be conducted, the History of Winds, does not greatly admit of experiments; and the very slow progress of meteorology, which has yet hardly deserved the name of a science, when compared with that of chemistry or optics, will illustrate the difficulties of employing the inductive method without their aid. It is not, therefore, that Lord Bacon's method of philosophising is properly experimental, but that by experiment it is most successfully displayed.

sometimes applicable to philosophy of human mind.

70. It will follow from hence that in proportion as, in any matter of inquiry, we can separate, in what we examine, the determining conditions, or law of form, from every thing extraneous, we shall be more able to use the Baconian method with advantage. In metaphysics, or what Stewart would have called the philosophy of the human mind, there seems much in its own nature capable of being subjected to the inductive reasoning. Such are those facts which, by their intimate connexion with physiology, or the laws of the bodily frame, fall properly within the province of the physician. In these, though

exact observation is chiefly required, it is often practicable to shorten its process by experiment. And another important illustration may be given from the education of children, considered as a science of rules deduced from observation; wherein also we are frequently more able to substitute experiment for mere experience, than with mankind in general, whom we may observe at a distance, but cannot control. In politics, as well as in moral prudence, we can seldom do more than this. It seems, however, practicable to apply the close attention enforced by Bacon, and the careful arrangement and comparison of phænomena, which are the basis of his induction, to these subjects. Thus, if the circumstances of all popular seditions recorded in history were to be carefully collected with great regard to the probability of evidence, and to any peculiarity that may have affected the results, it might be easy to perceive such a connexion of antecedent and subsequent events in the great plurality of instances, as would reasonably lead us to form probable inferences as to similar tumults when they should occur. This has sometimes been done, with less universality, and with much less accuracy than the Baconian method requires, by such theoretical writers on politics as Machiavel and Bodin. But it has been apt to degenerate into pedantry, and to disappoint the practical statesman, who commonly rejects it with scorn; partly because civil history is itself defective, seldom giving a just view of events, and still less frequently of the motives of those concerned in them; partly because the history of mankind is far less copious than that of nature, and in much that relates to politics, has not yet had time to furnish the groundwork of a sufficient induction; but partly also from some distinctive circumstances which affect our reasonings in moral far more than in physical science, and which deserve to be considered, so far at least as to sketch the arguments that might be employed.

Less so to politics and morals.

71. The Baconian logic, as has been already said, deduces universal principles from select observation, that is, from particular, and, in some cases of experiment, from singular instances. It may easily appear to one conversant with the

Induction less conclusive in these subjects.

syllogistic method less legitimate than the old induction which proceeded by an exhaustive enumeration of particulars,[d] and at most warranting but a probable conclusion. The answer to this objection can only be found in the acknowledged uniformity of the laws of nature, so that whatever has once occurred will, under absolutely similar circumstances, always occur again. This may be called the suppressed premise of every Baconian enthymem, every inference from observation of phænomena, which extends beyond the particular case. When it is once ascertained that water is composed of one proportion of oxygen to one of hydrogen, we never doubt but that such are its invariable constituents. We may repeat the experiment to secure ourselves against the risk of error in the operation, or of some unperceived condition that may have affected the result; but when a sufficient number of trials has secured us against this, an invariable law of nature is inferred from the particular instance; nobody conceives that one pint of pure water *can* be of a different composition from another. All men, even the most rude, reason upon this primary maxim; but they reason inconclusively, from misapprehending the true relations of cause and effect in the phænomena to which they direct their attention. It is by the sagacity and ingenuity with which Bacon has excluded the various sources of error, and disengaged the true cause, that his method is distinguished from that which the vulgar practise.

Reasons for this difference.

72. It is required, however, for the validity of this method, first, that there should be a strict uniformity in the general laws of nature, from which we can infer that what has been will, in the same conditions, be again; and, secondly, that we shall be able to perceive and estimate all the conditions with an entire and exclusive knowledge. The first is granted in all physical phænomena; but in those which we cannot submit to experiment, or investigate by some such method as Bacon has pointed out, we often find our philosophy at fault for want of the second. Such is at present the case with respect to many parts of chemistry;

d [This is not quite an accurate account of the old induction, which seldom proceeded to an exhaustive enumeration, but *assumed* a general truth from a particular one.—1847.]

for example, that of organic substances, which we can analyse, but as yet can in very few instances recompose. We do not know, and, if we did know, could not probably command, the entire conditions of organic bodies, (even structurally, not as living,) the *form*, as Bacon calls it, of blood, or milk, or oak-galls. But in attempting to subject the actions of men to this inductive philosophy, we are arrested by the want of both the necessary requisitions. Matter can only be diverted from its obedience to unvarying laws by the control of mind; but we have to inquire whether mind is equally the passive instrument of any law. We have to open the great problem of human liberty, and must deny even a disturbing force to the will, before we can assume that all actions of mankind must, under given conditions, preserve the same necessary train of sequences as a molecule of matter. But if this be answered affirmatively, we are still almost as far removed from a conclusive result as before. We cannot, without contradicting every-day experience, maintain that all men are determined alike by the same *outward* circumstances; we must have recourse to the differences of temperament, of physical constitution, of casual or habitual association. The former alone, however, are, at the best, subject to our observation, either at the time, or, as is most common, through testimony; of the latter, no being, which does not watch the movements of the soul itself, can reach more than a probable conjecture. Sylla resigned the dictatorship—therefore all men, in the circumstances of Sylla, will do the same—is an argument false in one sense of the word circumstances, and useless at least in any other. It is doubted by many, whether meteorology will ever be well understood, on account of the complexity of the forces concerned, and their remoteness from the apprehension of the senses. Do not the same difficulties apply to human affairs? And while we reflect on these difficulties, to which we must add those which spring from the scantiness of our means of observation, the defectiveness and falsehood of testimony, especially what is called historical, and a thousand other errors to which the various "idola of the world and the cave" expose us, we shall rather be astonished that so many probable rules of civil prudence have been treasured up and con-

firmed by experience, than disposed to give them a higher place in philosophy than they can claim.

Considerations on the other side.

73. It might be alleged in reply to these considerations, that admitting the absence of a strictly scientific certainty in moral reasoning, we have yet, as seems acknowledged on the other side, a great body of probable inferences, in the extensive knowledge and sagacious application of which most of human wisdom consists. And all that is required of us in dealing either with moral evidence or with the conclusions we draw from it, is to estimate the probability of neither too high; an error from which the severe and patient discipline of the inductive philosophy is most likely to secure us. It would be added by some, that the theory of probabilities deduces a wonderful degree of certainty from things very uncertain, when a sufficient number of experiments can be made; and thus, that events depending upon the will of mankind, even under circumstances the most anomalous and apparently irreducible to principles, may be calculated with a precision inexplicable to any one who has paid little attention to the subject. This, perhaps, may appear rather a curious application of mathematical science, than one from which our moral reasonings are likely to derive much benefit, especially as the conditions under which a very high probability can mathematically be obtained involve a greater number of trials than experience will generally furnish. It is nevertheless a field that deserves to be more fully explored: the success of those who have attempted to apply analytical processes to moral probabilities has not hitherto been very encouraging, inasmuch as they have often come to results falsified by experience; but a more scrupulous regard to all the conditions of each problem may perhaps obviate many sources of error.[e]

[e] A calculation was published not long since, said to be on the authority of an eminent living philosopher, according to which, granting a moderate probability that each of twelve jurors would decide rightly, the chances in favour of the rectitude of their unanimous verdict were made something extravagantly high, I think about 8000 to 1. It is more easy to perceive the fallacies of this pretended demonstration, than to explain how a man of great acuteness should have overlooked them. One among many is, that it assumes the giving an unanimous verdict at all to be voluntary, whereas, in practice, the jury must decide one way or the other. We must deduct therefore a fraction expressing the probability that some of the twelve have wrongly conceded their opinions to the rest. One

74. It seems, upon the whole, that we should neither conceive the inductive method to be useless in regard to any subject but physical science, nor deny the peculiar advantages it possesses in those inquiries rather than others. What must in all studies be important, is the habit of turning round the subject of our investigation in every light, the observation of every thing that is peculiar, the exclusion of all that we find on reflection to be extraneous. In historical and antiquarian researches, in all critical examination which turns upon facts, in the scrutiny of judicial evidence, a great part of Lord Bacon's method, not, of course, all the experimental rules of the Novum Organum, has, as I conceive, a legitimate application.[f] I would refer

Result of the whole.

danger of this rather favourite application of mathematical principles to moral probabilities, as indeed it is of statistical tables (a remark of far wider extent), is that, by considering mankind merely as units, it practically habituates the mind to a moral and social levelling, as inconsistent with a just estimate of men as it is characteristic of the present age.

f The *principle* of Bacon's prerogative instances, and perhaps in some cases a very analogous application of them, appear to hold in our inquiries into historical evidence. The fact sought to be ascertained in the one subject corresponds to the physical law in the other. The testimonies, as we, though rather laxly, call them, or passages in books from which we infer the fact, correspond to the observations or experiments from which we deduce the law. The necessity of a sufficient induction by searching for all proof that may bear on the question, is as manifest in one case as in the other. The exclusion of precarious and inconclusive evidence is alike indispensable in both. The selection of prerogative instances, or such as carry with them satisfactory conviction, requires the same sort of inventive and reasoning powers. It is easy to illustrate this by examples. Thus, in the controversy concerning the Icon Basilike, the admission of Gauden's claim by Lord Clarendon is in the nature of a *prerogative instance;* it renders the supposition of the falsehood of that claim highly improbable. But the many secondhand and hearsay testimonies which may be alleged on the other side to prove that the book was written by King Charles, are not prerogative instances, because their falsehood will be found to involve very little improbability. So, in a different controversy, the silence of some of the fathers, as to the text, commonly called, of the three heavenly witnesses, even while expounding the context of the passage, may be reckoned a *prerogative instance;* a decisive proof that they did not know it, or did not believe it genuine; because, if they did, no motive can be conceived for the omission. But the silence of Laurentius Valla as to its absence from the manuscripts on which he commented is no prerogative instance to prove that it was contained in them; because it is easy to perceive that he might have motives for saying nothing; and, though the negative argument, as it is called, or inference that a fact is not true because such and such persons have not mentioned it, is, taken generally, weaker than positive testimony, it will frequently supply prerogative instances where the latter does not. Launoy, in a little treatise, De Auctoritate Negantis Argumenti, which displays more plain sense than ingenuity or philosophy, lays it down that a fact of a public nature, which is not mentioned by any writer within 200 years of the time, supposing, of course, that there is extant a competent number of writers who would naturally have mentioned it, is not to be believed. The period seems rather arbitrary, and was possibly so considered by himself; but the general principle is of

any one who may doubt this to his History of Winds, as one sample of what we mean by the Baconian method, and ask whether a kind of investigation, analogous to what is therein pursued for the sake of eliciting physical truths, might not be employed in any analytical process where general or even particular facts are sought to be known. Or if an example is required of such an investigation, let us look at the copious induction from the past and actual history of mankind upon which Malthus established his general theory of the causes which have retarded the natural progress of population. Upon all these subjects before mentioned, there has been an astonishing improvement in the reasoning of the learned, and perhaps of the world at large, since the time of Bacon, though much remains very defective. In what degree it may be owing to the prevalence of a physical philosophy founded upon his inductive logic, it might not be uninteresting to inquire.[g]

the highest importance in historical criticism. Thus in the once celebrated question of Pope Joan, the silence of all writers near the time, as to so wonderful a fact, was justly deemed a kind of *prerogative* argument, when set in opposition to the many repetitions of the story in later ages. But the silence of Gildas and Bede as to the victories of Arthur is no such argument against their reality, because they were not under an historical obligation, or any strong motive which would prevent their silence. Generally speaking, the more anomalous and interesting an event is, the stronger is the argument against its truth from the silence of contemporaries, on account of the propensity of mankind to believe and recount the marvellous; and the weaker is the argument from the testimony of later times for the same reason. A similar analogy holds also in jurisprudence. The principle of our law, rejecting hearsay and secondary evidence, is founded on the Baconian rule. Fifty persons may depose that they have heard of a fact or of its circumstances; but the eyewitness is the prerogative instance. It would carry us too far to develop this at length, even if I were fully prepared to do so; but this much may lead us to think, that whoever shall fill up that lamentable *desideratum*, the logic of evidence, ought to have familiarised himself with the Novum Organum.

[g] "The effects which Bacon's writings have hitherto produced have indeed been far more conspicuous in physics than in the science of mind. Even here, however, they have been great and most important, as well as in some collateral branches of knowledge, such as natural jurisprudence, political economy, criticism, and morals, which spring up from the same root, or rather which are branches of that tree of which the science of mind is the trunk." Stewart's Philosophical Essays, Prelim. Dissertation. The principal advantage, perhaps, of those habits of reasoning which the Baconian methods, whether learned directly or through the many disciples of that school, have a tendency to generate, is that they render men cautious and painstaking in the pursuit of truth, and therefore restrain them from deciding too soon. Nemo reperitur qui in rebus ipsis et experientia moram fecerit legitimam. These words are more frequently true of moral and political reasoners than of any others. Men apply historical or personal experience, but they apply it hastily, and without giving themselves time for either a copious or an exact induction; the great majority being too much influenced by passion, party-spirit, or vanity, or perhaps by affections morally right, but not the less dangerous in

Bacon's aptitude for moral subjects.

75. It is probable that Lord Bacon never much followed up in his own mind that application of his method to psychological, and still less to moral and political subjects, which he has declared himself to intend. The distribution of the Instauratio Magna, which he has prefixed to it, relates wholly to physical science. He has in no one instance given an example, in the Novum Organum, from moral philosophy, and one only, that of artificial memory, from what he would have called logic.[h] But we must constantly remember that the philosophy of Bacon was left exceedingly incomplete. Many lives would not have sufficed for what he had planned, and he gave only the leisure hours of his own. It is evident that he had turned his thoughts to physical philosophy rather for an exercise of his reasoning faculties, and out of his insatiable thirst for knowledge, than from any peculiar aptitude for their subjects, much less any advantage of opportunity for their cultivation. He was more eminently the philosopher of human, than of general nature. Hence he is exact as well as profound in all his reflections on civil life and mankind, while his conjectures in natural philosophy, though often very acute, are apt to wander far from the truth in consequence of his defective acquaintance with the phænomena of nature. His Centuries of Natural History give abundant proof of this. He is, in all these inquiries, like one doubtfully, and by degrees, making out a distant prospect, but often deceived by the haze. But if we compare what may be found in the sixth, seventh, and eighth books De Augmentis, in the Essays, the History of Henry VII., and the various short treatises contained in his works, on moral and political wisdom, and on human nature, from experience of which all such wisdom is drawn, with the Rhetoric, Ethics, and Politics of Aristotle, or with the historians most celebrated for their deep insight into civil society and human character, with Thucydides, Tacitus, Philip de Comines, Machiavel, Davila, Hume, we shall, I think, find that one man may

reasoning, to maintain the patient and dispassionate suspense of judgment which ought to be the condition of our inquiries.

[h] Nov. Organ., ii. 26. It may however be observed, that we find a few passages in the ethical part of De Augmentis, lib. vii. cap. 3, which show that he had some notions of moral induction germinating in his mind.

almost be compared with all of these together. When Galileo is named as equal to Bacon, it is to be remembered that Galileo was no moral or political philosopher, and in this department Leibnitz certainly falls very short of Bacon. Burke, perhaps, comes, of all modern writers, the nearest to him; but though Bacon may not be more profound than Burke, he is more copious and comprehensive.

Comparison of Bacon and Galileo.

76. The comparison of Bacon and Galileo is naturally built upon the influence which, in the same age, they exerted in overthrowing the philosophy of the schools, and in founding that new discipline of real science which has rendered the last centuries glorious. Hume has given the preference to the latter, who made accessions to the domain of human knowledge so splendid, so inaccessible to cavil, so unequivocal in their results, that the majority of mankind would perhaps be carried along with this decision. There seems, however, to be no doubt that the mind of Bacon was more comprehensive and profound. But these comparisons are apt to involve *incommensurable* relations. In their own intellectual characters, they bore no great resemblance to each other. Bacon had scarce any knowledge of geometry, and so far ranks much below not only Galileo, but Descartes, Newton, and Leibnitz, all signalized by wonderful discoveries in the science of quantity, or in that part of physics which employs it. He has, in one of the profound aphorisms of the Novum Organum, distinguished the two species of philosophical genius, one more apt to perceive the differences of things, the other their analogies. In a mind of the highest order neither of these powers will be really deficient, and his own inductive method is at once the best exercise of both, and the best safeguard against the excess of either. But upon the whole, it may certainly be said, that the genius of Lord Bacon was naturally more inclined to collect the resemblances of nature than to note her differences. This is the case with men like him of sanguine temper, warm fancy, and brilliant wit; but it is not the frame of mind which is best suited to strict reasoning.

77. It is no proof of a solid acquaintance with Lord Bacon's philosophy, to deify his name as the ancient schools did those of their founders, or even to exaggerate

the powers of his genius. Powers they were surprisingly great, yet limited in their range, and not in all respects equal; nor could they overcome every impediment of circumstance. Even of Bacon it may be said, that he attempted more than he has achieved, and perhaps more than he clearly apprehended. His objects appear sometimes indistinct, and I am not sure that they are always consistent. In the Advancement of Learning, he aspired to fill up, or at least to indicate, the deficiencies in every department of knowledge; he gradually confined himself to philosophy, and at length to physics. But few of his works can be deemed complete, not even the treatise De Augmentis, which comes nearer to this than most of the rest. Hence the study of Lord Bacon is difficult, and not, as I conceive, very well adapted to those who have made no progress whatever in the exact sciences, nor accustomed themselves to independent thinking. They have never been made a text-book in our universities; though, after a judicious course of preparatory studies, by which I mean a good foundation in geometry and the philosophical principles of grammar, the first book of the Novum Organum might be very advantageously combined with the instruction of an enlightened lecturer.[1]

[1] It by no means is to be inferred, that because the actual text of Bacon is not always such as can be well understood by very young men, I object to their being led to the real principles of inductive philosophy, which alone will teach them to think, firmly but not presumptuously, for themselves. Few defects, on the contrary, in our system of education are more visible than the want of an adequate course of logic; and this is not likely to be rectified so long as the Aristotelian methods challenge that denomination exclusively of all other aids to the reasoning faculties. The position that nothing else is to be called logic, were it even agreeable to the derivation of the word, which it is not, or to the usage of the ancients, which is by no means uniformly the case, or to that of modern philosophy and correct language, which is certainly not at all the case, is no answer to the question, whether what we call logic does not deserve to be taught at all.

A living writer of high reputation, who has at least fully understood his own subject, and illustrated it better than his predecessors, from a more enlarged reading and thinking, wherein his own acuteness has been improved by the writers of the Baconian school, has been unfortunately instrumental, by the very merits of his treatise on Logic, in keeping up the prejudices on this subject, which have generally been deemed characteristic of the university to which he belonged. All the reflection I have been able to give to the subject has convinced me of the inefficacy of the syllogistic art in enabling us to think rightly for ourselves, or, which is part of thinking rightly, to detect those fallacies of others which might impose on our understanding before we have acquired that art. It has been often alleged, and as far as I can judge, with perfect truth, that no man, who can be worth answering, ever commits, except through mere inadvertence, any paralogisms which the common logic

78. The ignorance of Bacon in mathematics, and what was much worse, his inadequate notions of their utility, must be reckoned among the chief defects in his philosophical writings. In a remarkable passage of the Advancement of

His prejudice against mathematics.

serves to point out. It is easy enough to construct syllogisms which sin against its rules; but the question is, by whom they were employed. For though it is not uncommon, as I am aware, to represent an adversary as reasoning illogically, this is generally effected by putting his argument into our own words. The great fault of all, over induction, or the assertion of a general premise upon an insufficient examination of particulars, cannot be discovered or cured by any *logical* skill; and this is the error into which men really fall, not that of omitting to *distribute the middle term*, though it comes in effect, and often in appearance, to the same thing. I do not contend that the rules of syllogism, which are very short and simple, ought not to be learned; or that there may not be some advantage in occasionally stating our own argument, or calling on another to state his, in a regular form (an advantage, however, rather dialectical, which is, in other words, rhetorical, than one which affects the reasoning faculties themselves); nor do I deny that it is philosophically worth while to know that all *general reasoning by words* may be reduced into syllogism, as it is to know that most of plane geometry may be resolved into the superposition of equal triangles; but to represent this portion of logical science as the whole, appears to me almost like teaching the scholar Euclid's axioms, and the axiomatic theorem to which I have alluded, and calling this the science of geometry. The following passage from the Port-Royal logic is very judicious and candid, giving as much to the Aristotelian system as it deserves: "Cette partie, que nous avons maintenant à traiter, qui comprend les règles du raisonnement, est estimée la plus importante de la logique, et c'est presque l'unique qu'on y traite avec quelque soin; mais il y a sujet de douter si elle est aussi utile qu'on se l'imagine. La plupart des erreurs des hommes, comme nous avons déjà dit ailleurs, viennent bien plus de ce qu'ils raisonnent sur de faux principes, que non pas de ce qu'ils raisonnent mal suivant leurs principes. Il arrive rarement qu'on se laisse tromper par des raisonnemens qui ne soient faux que parceque la conséquence en est mal tirée; et ceux qui ne seroient pas capables d'en reconnoître la fausseté par la seule lumière de la raison, ne le seroient pas ordinairement d'entendre les règles que l'on en donne, et encore moins de les appliquer. Néanmoins, quand on ne considéreroit ces règles que comme des vérités spéculatives, elles serviroient toujours à exercer l'esprit; et de plus, on ne peut nier qu'elles n'aient quelque usage en quelques rencontres, et à l'égard de quelques personnes, qui, étant d'un naturel vif et pénétrant, ne se laissent quelquefois tromper par des fausses conséquences, que faute d'attention, à quoi la réflexion qu'ils feroient sur ces règles seroit capable de remédier." Art de Penser, part iii. How different is this sensible passage from one quoted from some anonymous writer in Whately's Logic, p. 34!—"A fallacy consists of an ingenious mixture of truth and falsehood so entangled, so intimately blended, that the fallacy is, in the chemical phrase, held in solution; *one drop of sound logic* is that test which immediately disunites them, makes the foreign substance visible, and precipitates it to the bottom." One fallacy, it might be answered, as common as any, is the *false analogy*, the misleading the mind by a comparison where there is no real proportion or resemblance. The chemist's test is the *necessary* means of detecting the foreign substance; if the "drop of sound logic" be such, it is strange that lawyers, mathematicians, and mankind in general, should so sparingly employ it; the fact being notorious, that those most eminent for strong reasoning powers are rarely conversant with the syllogistic method. It is also well known, that these "intimately blended mixtures of truth and falsehood" perplex no man of plain sense

Learning, he held mathematics to be a part of metaphysics; but the place of this is altered in the Latin, and they are treated as merely auxiliary or instrumental to physical inquiry. He had some prejudice against pure mathematics, and thought they had been unduly elevated in comparison with the realities of nature. "I know not," he says, "how it has arisen that mathematics and logic, which ought to be the serving-maids of physical philosophy, yet affecting to vaunt the certainty that belongs to them, presume to exercise a dominion over her." It is, in my opinion, erroneous to speak of geometry, which relates to the realities of space, and to natural objects so far as extended, as a mere hand-maid of physical philosophy, and not rather a part of it. Playfair has made some good remarks on the advantages derived to experimental philosophy itself from the mere application of geometry and algebra. And one of the reflections which this ought to excite is, that we are not to conceive, as some hastily do, that there can be no real utility to mankind, even of that kind of utility which consists in multiplying the conveniences and luxuries of

except when they are what is called *extra-logical*; cases wherein the art of syllogism is of no use.

[The syllogistic logic appears to have been more received into favour of late among philosophers, both here and on the Continent, than it was in the two preceding centuries. The main question, it is to be kept in mind, does not relate to its principles as a science, but to the practical usefulness of its rules as an art. An able writer has lately observed, that "he must be fortunate in the clearness of his mind, who, knowing the logical mode, is never obliged to have recourse to it to destroy ambiguity or heighten evidence, and particularly so in his opponents, who, in verbal or written controversy, never finds it necessary to employ it in trying their arguments." Penny Cyclopædia, art. Syllogism. Every one must judge of this by his own experience: the profound thinker whose hand seems discernible in this article, has a strong claim to authority in favour of the utility of the syllogistic method; yet we cannot help remembering that it is very rarely employed even in controversy, where I really believe it to be a valuable weapon against an antagonist, and capable of producing no small effect on the indifferent reader or hearer, especially if he is not of a very sharp apprehension; and moreover that, as I at least believe, the proportion of mathematical, political, or theological reasoners, who have acquired or retained any tolerable expertness in the *technical* part of logic, is far from high, nor am I aware that they fall into fallacies for want of knowledge of it; but I mean strictly such fallacies as the syllogistic method alone seems to correct. What comes nearest to syllogistic reasoning in practice is that of geometry; as thus, A=B; but C=A; ergo, C=B, is essentially a syllogism, but not according to form. If, however, equality of magnitude may be considered as identity, according to the dictum of Aristotle, ἐν τουτοῖς ἡ ἰσότης ἑνότης, the foregoing is regular in logical form; and if we take A, B, and C for *ratios*, which are properly identical, not equal, this may justly be called a syllogism. But those who contend most for the formal logic, seldom much regard its use in geometrical science.—1847.]

life, springing from theoretical and speculative inquiry. The history of algebra, so barren in the days of Tartaglia and Vieta, so productive of *wealth*, when applied to dynamical calculations in our own, may be a sufficient answer.

79. One of the petty blemishes, which, though lost in the splendour of Lord Bacon's excellences, it is not unfair to mention, is connected with the peculiar characteristics of his mind; he is sometimes too metaphorical and witty. His remarkable talent for discovering analogies seems to have inspired him with too much regard to them as arguments, even when they must appear to any common reader fanciful and far-fetched. His terminology, chiefly for the same reason, is often a little affected, and, in Latin, rather barbarous. The divisions of his prerogative instances in the Novum Organum are not always founded upon intelligible distinctions. And the general obscurity of the style, neither himself nor his assistants being good masters of the Latin language, which at the best is never flexible or copious enough for our philosophy, renders the perusal of both his great works too laborious for the impatient reader. Brucker has well observed that the Novum Organum has been neglected by the generality, and proved of far less service than it would otherwise have been in philosophy, in consequence of these very defects, as well as the real depth of the author's mind.[k]

Bacon's excess of wit.

80. What has been the fame of Bacon, "the wisest, greatest, of mankind," it is needless to say. What has been his real influence over mankind, how much of our enlarged and exact knowledge may be attributed to his inductive method, what of this again has been due to a thorough study of his writings, and what to an indirect and secondary acquaintance with them, are questions of another kind, and less easily solved. Stewart, the philosopher who has dwelt most on the praises of Bacon, while he conceives him to have exercised a considerable influence over the English men

Fame of Bacon on the Continent.

[k] Legenda ipsa nobilissima tractatio ab illis est, qui in rerum naturalium inquisitione feliciter progredi cupiunt. Quæ si paulo plus luminis et perspicuitatis haberet, et novorum terminorum et partitionum artificio lectorem non remoraretur, longè plura, quam factum est, contulisset ad philosophiæ emendationem. His enim obstantibus a plerisque hoc organum neglectum est. Hist. Philos., v. 99.

of science in the seventeenth century, supposes, on the authority of Montucla, that he did not "command the general admiration of Europe," till the publication of the preliminary discourse to the French Encyclopædia by Diderot and D'Alembert. This, however, is by much too precipitate a conclusion. He became almost immediately known on the Continent. Gassendi was one of his most ardent admirers. Descartes mentions him, I believe, once only, in a letter to Mersenne in 1632;[m] but he was of all men the most unwilling to praise a contemporary. It may be said that these were philosophers, and that their testimony does not imply the admiration of mankind. But writers of a very different character mention him in a familiar manner. Richelieu is said to have highly esteemed Lord Bacon.[n] And it may in some measure be due to this, that in the Sentimens de l'Académie Française sur le Cid, he is alluded to simply by the name Bacon, as one well known.[o] Voiture, in a letter to Costar, about the same time, bestows high eulogy on some passages of Bacon which his correspondent had sent to him, and observes that Horace would have been astonished to hear a barbarian Briton discourse in such a style.[p] The treatise De Augmentis was republished in France in 1624, the year after its appearance in England. It was translated into French as early as 1632; no great proofs of neglect. Editions came out in Holland, 1645, 1652, and 1662. Even the Novum Organum, which, as has been said, never became so popular as his other writings, was thrice printed in Holland, in 1645, 1650, and 1660.[q] Leib-

[m] Vol. vi. p. 210, edit. Cousin.

[n] The only authority that I can now quote for this is not very good, that of Aubrey's Manuscripts, which I find in Seward's Anecdotes, iv. 328. But it seems not improbable. The same book quotes Balzac as saying, "Croyons donc, pour l'amour du Chancelier Bacon, que toutes les folies des anciens sont sages; et tous leurs songes mystères, et de celles-là qui sont estimées pures fables, il n'y en a pas une, quelque bizarre et extravagante qu'elle soit, qui n'ait son fondement dans l'histoire, *si l'on en veut croire Bacon*, et qui n'ait été déguisé de la sorte par les sages du vieux temps pour la rendre plus utile aux peuples."

[o] P. 44 (1633).

[p] J'ai trouvé parfaitement beau tout ce que vous me mandez de Bacon. Mais ne vous semble t'il pas qu'Horace, qui disoit, Visam Britannos hospitibas feros, seroit bien étonné d'entendre un barbare discourir comme cela? Costar is said by Bayle to have borrowed much from Bacon. La Mothe le Vayer mentions him in his Dialogues; in fact, instances are numerous.

[q] Montagu's Life of Bacon, p. 407. He has not mentioned an edition at Strasburg, 1635, which is in the British Museum. [There

nitz and Puffendorf are loud in their expressions of admiration, the former ascribing to him the revival of true philosophy as fully as we can at present.[r] I should be more inclined to doubt whether he were adequately valued by his countrymen in his own time, or in the immediately subsequent period. Under the first Stuarts, there was little taste among studious men but for theology, and chiefly for a theology which, proceeding with an extreme deference to authority, could not but generate a disposition of mind, even upon other subjects, alien to the progressive and inquisitive spirit of the inductive philosophy.[s] The institution of the Royal Society, or rather the love of physical science out of which that institution arose, in the second part of the seventeenth century, made England resound with the name of her illustrious chancellor. Few now spoke of

There is also an edition without time or place, in the catalogue of the British Museum.

[r] Brucker, v. 95. Stewart says that "Bayle does not give above twelve lines to Bacon;" but he calls him one of the greatest men of his age, and the length of an article in Bayle was never designed to be a measure of the merit of its subject.—[The reception of Bacon's philosophical writings on the Continent has been elaborately proved against Stewart, in a dissertation by Mr. Macvey Napier, published in the eighth volume of the Transactions of the Royal Society of Edinburgh.—1842.]

[s] It is not uncommon to meet with persons, especially who are or have been engaged in teaching others dogmatically what they have themselves received in the like manner, to whom the inductive philosophy appears a mere school of scepticism, or at best wholly inapplicable to any subjects which require entire conviction. A certain deduction from certain premises is the only reasoning they acknowledge. Lord Bacon has a remarkable passage on this in the 9th book De Augmentis. Postquam articuli et principia religionis jam in sedibus suis fuerint locata, ita ut a rationis examine penitus eximantur, tum demum conceditur ab illis illationes derivare ac deducere secundum analogiam ipsorum. In rebus quidem naturalibus hoc non tenet. Nam et ipsa principia examini subjiciuntur; per inductionem, inquam, licet minime per syllogismum. Atque eadem illa nullam habent cum ratione repugnantiam, ut ab eodem fonte cum primæ propositiones, tum mediæ, deducantur. Aliter fit in religione: ubi et primæ propositiones authopystatæ sunt atque per se subsistentes; et rursus non reguntur ab illa ratione quæ propositiones consequentes deducit. Neque tamen hoc fit in religione sola, sed etiam in aliis scientiis, tam gravioribus, quam levioribus, ubi scilicet propositiones humanæ placita sunt, non posita; siquidem et in illis rationis usus absolutus esse non potest. Videmus enim in ludis, puta schaccorum, aut similibus, priores ludi normas et leges merè positivas esse, et ad placitum; quas recipi, non in disputationem vocari, prorsus oporteat; ut vero vincas, et peritè lusum instituas, ad artificiosum est et rationale. Eodem modo fit et in legibus humanis; in quibus haud paucæ sunt maximæ, ut loquuntur, hoc est, placita mera juris, quæ auctoritate magis quam ratione nituntur, neque in disceptationem veniunt. Quid vero sit justissimum, non absolutè, sed relativè, hoc est ex analogiâ illarum maximarum, id demum rationale est, et latum disputationi campum præbet. This passage, well weighed, may show us where, why, and by whom, the synthetic and syllogistic methods have been preferred to the inductive and analytical.

him without a kind of homage that only the greatest men receive. Yet still it was by natural philosophers alone that the writings of Bacon were much studied. The editions of his works, except the Essays, were few; the Novum Organum never came separately from the English press.[t] They were not even frequently quoted; for I believe it will be found that the fashion of referring to the brilliant passages of the De Augmentis and the Novum Organum, at least in books designed for the general reader, is not much older than the close of the last century. Scotland has the merit of having led the way; Reid, Stewart, Robison, and Playfair turned that which had been a blind veneration into a rational worship; and I should suspect that more have read Lord Bacon within these thirty years than in the two preceding centuries. It may be an usual consequence of the enthusiastic panegyrics lately poured upon his name, that a more positive efficacy has sometimes been attributed to his philosophical writings than they really possessed, and it might be asked whether Italy, where he was probably not much known, were not the true school of experimental philosophy in Europe, whether his methods of investigation were not chiefly such as men of sagacity and lovers of truth might simultaneously have devised. But, whatever may have been the case with respect to actual discoveries in science, we must give to written wisdom its proper meed; no books prior to those of Lord Bacon carried mankind so far on the road to truth; none have obtained so thorough a triumph over arrogant usurpation without seeking to substitute another; and he may be compared to those liberators of nations, who have given them laws by which they might govern themselves, and retained no homage but their gratitude.[u]

[t] The De Augmentis was only once published after the first edition, in 1638. An indifferent translation, by Gilbert Watts, came out in 1640. No edition of Bacon's Works was published in England before 1730; another appeared in 1740, and there have been several since. But they had been printed at Frankfort in 1665. It is unnecessary to observe, that many copies of the foreign editions were brought to this country. This is mostly taken from Mr. Montagu's account.

[u] I have met, since this passage was written, with one in Stewart's Life of Reid, which seems to state the *effects* of Bacon's philosophy in a just and temperate spirit, and which I rather quote because this writer has, by his eulogies on that philosophy, led some to an exaggerated notion. "The influence of Bacon's genius on the subsequent progress

SECT. III.

On the Metaphysical Philosophy of Descartes.

Early life of Descartes.

81. RENÉ DESCARTES was born in 1596, of an ancient family in Touraine. An inquisitive curiosity into the nature and causes of all he saw is said to have distinguished his childhood, and this was certainly accompanied by an uncommon facility and clearness of apprehension. At a very early age he entered the college of the Jesuits at La Flêche, and passed through their entire course of literature and philosophy. It was now, at the age of sixteen, as he tells us, that he began to reflect, with little satisfaction, on his studies, finding his mind beset with error, and obliged to confess that he had learned nothing but the conviction of his ignorance. Yet he knew that he had been educated in a famous school, and that he was not deemed behind his contemporaries. The ethics, the logic, even the geometry of the ancients, did not fill his mind with that

of physical discovery has been seldom duly appreciated; by some writers almost entirely overlooked, and by others considered as the sole cause of the reformation in science which has since taken place. Of these two extremes, the latter certainly is the least wide of the truth: for in the whole history of letters no other individual can be mentioned whose exertions have had so indisputable an effect in forwarding the intellectual progress of mankind. On the other hand it must be acknowledged, that before the era when Bacon appeared, various philosophers in different parts of Europe had struck into the right path; and it may perhaps be doubted, whether any one important rule with respect to the true method of investigation be contained in his works, of which no hint can be traced in those of his predecessors. His great merit lay in concentrating their feeble and scattered lights; fixing the attention of philosophers on the distinguishing characteristics of true and of false science, by a felicity of illustration peculiar to himself, seconded by the commanding powers of a bold and figurative eloquence. The method of investigation which he recommended had been previously followed in every instance in which any solid discovery had been made with respect to the laws of nature; but it had been followed accidentally and without any regular preconceived design; and it was reserved for him to reduce to rule and method what others had effected, either fortuitously, or from some momentary glimpse of the truth. These remarks are not intended to detract from the just glory of Bacon; for they apply to all those, without exception, who have systematised the principles of any of the arts. Indeed they apply less forcibly to him than to any other philosopher whose studies have been directed to objects analogous to his; inasmuch as we know of no art of which the rules have been reduced successfully into a didactic form, when the art itself was as much in infancy as experimental philosophy was when Bacon wrote." Account of Life and Writings of Reid, sect. 2.

clear stream of truth for which he was ever thirsting. On leaving La Flêche, the young Descartes mingled for some years in the world, and served as a volunteer both under Prince Maurice, and in the Imperial army. Yet during this period there were intervals when he withdrew himself wholly from society, and devoted his leisure to mathematical science. Some germs also of his peculiar philosophy were already ripening in his mind.

His beginning to philosophise.

82. Descartes was twenty-three years old when, passing a solitary winter in his quarters at Neuburg, on the Danube, he began to revolve in his mind the futility of all existing systems of philosophy, and the discrepancy of opinions among the generality of mankind, which rendered it probable that no one had yet found out the road to real science. He determined, therefore, to set about the investigation of truth for himself, erasing from his mind all preconceived judgments, as having been hastily and precariously taken up. He laid down for his guidance a few fundamental rules of logic, such as to admit nothing as true which he did not clearly perceive, and to proceed from the simpler notions to the more complex, taking the method of geometers, by which they had gone so much farther than others, for the true art of reasoning. Commencing, therefore, with the mathematical sciences, and observing that, however different in their subjects, they treat properly of nothing but the relations of quantity, he fell, almost accidentally, as his words seem to import, on the great discovery that geometrical curves may be expressed algebraically.[x] This gave him more hope of success in applying his method to other parts of philosophy.

He retires to Holland.

83. Nine years more elapsed, during which Descartes, though he quitted military service, continued to observe mankind in various parts of Europe, still keeping his heart fixed on the great aim he had proposed to himself, but, as he confesses, without having framed the scheme of any philosophy beyond those of his contemporaries. He deemed his time of life immature for so stupendous a task. But at the age of thirty-three, with little notice to his friends, he quitted Paris,

[x] Œuvres de Descartes, par Cousin, Paris, 1824, vol. i. p. 143.

convinced that absolute retirement was indispensable for that rigorous investigation of first principles which he now determined to institute, and retired into Holland. In this country he remained eight years so completely aloof from the distractions of the world that he concealed his very place of residence, though preserving an intercourse of letters with many friends in France.

His publications.

84. In 1637 he broke upon the world with a volume containing the Discourse upon Method, the Dioptrics, the Meteors, and the Geometry. It is only with the first that we are for the present concerned.[y] In this discourse, the most interesting, perhaps, of Descartes' writings, on account of the picture of his life and of the progress of his studies that it furnishes, we find the Cartesian metaphysics, which do not consist of many articles, almost as fully detailed as in any of his later works. In the Meditationes de Prima Philosophia, published in 1641, these fundamental principles are laid down again more at length. He invited the criticism of philosophers on these famous Meditations. They did not refuse the challenge, and seven sets of objections from as many different quarters, with seven replies from Descartes himself, are subjoined to the later editions of the Meditations. The Principles of Philosophy, published in Latin in 1644, contains what may be reckoned the final statement, which occupies most of the first book, written with uncommon conciseness and precision. The beauty of philosophical style which distinguishes Descartes is never more seen than in this first book of the Principia, the translation of which was revised by Clerselier, an eminent friend of the author. It is a contrast at once to the elliptical brevity of Aristotle, who hints, or has been supposed to hint, the most important positions in a short clause, and to the verbose, figurative declamation of many modern metaphysicians. In this admirable perspicuity Descartes was imitated by his disciples Arnauld and Malebranche, especially the former. His unfinished posthumous treatise, the "Inquiry after Truth by Natural Reason," is not carried farther than a partial developement of the same leading principles of Cartesianism. There is, consequently, a great deal of apparent repeti-

[y] Œuvres de Descartes, par Cousin, Paris, 1824, vol. 1. p. 121-212.

tion in the works of Descartes, but such as on attentive consideration will show, not perhaps much real variance, but some new lights that had occurred to the author in the course of his reflections.[z]

He begins by doubting all.

85. In pursuing the examination of the first principles of knowledge, Descartes perceived not only that he had cause to doubt of the various opinions which he had found current among men, from that very circumstance of their variety, but that the sources of all which he had received for truth themselves, namely, the senses, had afforded him no indisputable certainty. He began to recollect how often he had been misled by appearances, which had at first sight given no intimation of their fallacy, and asked himself in vain by what infallible test he could discern the reality of external objects, or at least their conformity to his idea of them. The strong impressions made in sleep led him to inquire whether all he saw and felt might not be in a dream. It was true that there seemed to be some notions more elementary than the rest, such as extension, figure, duration, which could not be reckoned fallacious; nor could he avoid owning that, if there were not an existing triangle in the world, the angles of one conceived by the mind, though it were in sleep, must appear equal to two right angles. But even in this certitude of demonstration he soon found something deficient; to err in geometrical reasoning is not impossible; why might he not err in this? especially in a train of consequences, the particular terms of which are not at the same instant present to the mind. But, above all, there might be a superior being, powerful enough and willing to deceive him. It was no kind of answer to treat this as improbable, or as an arbitrary hypothesis. He had laid down as a maxim that nothing could be received as truth which was not demonstrable; and in one place, rather hyperbolically, and indeed extravagantly in appearance, says that he

[z] A work has lately been published, Essais Philosophiques, suivis de la Métaphysique de Descartes, assemblée et mise en ordre par L. A. Gruyer, 4 vols., Bruxelles, 1832. In the fourth volume we find the metaphysical passages in the writings of Descartes, including his correspondence, arranged methodically in his own words, but with the omission of a large part of the objections to the Meditations and of his replies. I did not, however, see this work in time to make use of it.

made little difference between merely probable and false suppositions; meaning this, however, as we may presume, in the sense of geometers, who would say the same thing.

86. But, divesting himself thus of all belief in what the world deemed most unquestionable, plunged in an abyss, as it seemed for a time, he soon found his feet on a rock, from which he sprang upwards to an unclouded sun. Doubting all things, abandoning all things, he came to the question, what is it that doubts and denies? Something it must be; he might be deceived by a superior power, but it was he that was deceived. He felt his own existence; the proof of it was that he did feel it; that he had affirmed, that he now doubted, in a word, that he was a thinking substance. *Cogito; Ergo sum*—this famous enthymem of the Cartesian philosophy veiled in rather formal language that which was to him, and must be to us all, the eternal basis of conviction, which no argument can strengthen, which no sophistry can impair, the consciousness of a self within, a percipient indivisible Ego.[a] The only proof of this is that it admits of no proof, that no man can pretend to doubt of his own existence with sincerity, or to express a doubt without absurd and inconsistent language.

His first step in knowledge.

87. The scepticism of Descartes, it appears, which is merely provisional, is not at all similar to that of the Pyrrhonists, though some of his arguments may have been shafts from their quiver. Nor did he make use, which is somewhat remarkable, of the reasonings afterwards employed by Berkeley against the material world, though no one more frequently distinguished than Descartes between the objective reality, as it was then supposed to be, of ideas in the mind, and the external or sensible reality of

His mind not sceptical.

[a] This word, introduced by the Germans, or originally perhaps by the old Cartesians, is rather awkward, but far less so than the English pronoun I, which is also equivocal in sound. Stewart has adopted it as the lesser evil, and it seems reasonable not to scruple the use of a word so convenient, if not necessary, to express the unity of the conscious principle. If it had been employed earlier, I am apt to think that some great metaphysical extravagances would have been avoided, and some fundamental truths more clearly apprehended. Fichte is well known to have made the grand division of *Ich* and *Nicht Ich*, *Ego* and *Non Ego*, the basis of his philosophy; in other words, the difference of subjective and objective reality.

things. Scepticism, in fact, was so far from being characteristic of his disposition, that his errors sprang chiefly from the opposite source, little as he was aware of it, from an undue positiveness in theories which he could not demonstrate, or even render highly probable.[b]

88. The certainty of an existing Ego easily led him to that of the operations of the mind, called afterwards by Locke ideas of reflection, the believing, doubting, willing, loving, fearing, which he knew by consciousness, and indeed by means of which alone he knew that the Ego existed. He now proceeded a step farther; and, reflecting on the simplest truths of arithmetic and geometry, saw that it was as impossible to doubt of them as of the acts of his mind. But as he had before tried to doubt even of these, on the hypothesis that he might be deceived by a superior intelligent power, he resolved to inquire whether such a power existed, and if it did, whether it could be a deceiver. The affirmative of the former and the negative of the latter question Descartes established by that extremely subtle reasoning so much celebrated in the seventeenth century, but which has less frequently been deemed conclusive in later times. It is at least that which no man, not fitted by long practice for metaphysical researches, will pretend to embrace.

He arrives at more certainty.

89. The substance of his argument was this. He found within himself the idea of a perfect Intelligence, eternal, infinite, necessary. This

His proof of a Deity.

[b] One of the rules Descartes lays down in his posthumous art of logic, is that we ought never to busy ourselves except about objects concerning which our understanding appears capable of acquiring an unquestionable and certain knowledge, vol. xi. p. 204. This is at least too unlimited a proposition, and would exclude, not indeed all probability, but all inquiries which must by necessity end in nothing more than probability. Accordingly we find in the next pages that he made little account of any sciences but arithmetic and geometry, or such others as equal them in certainty. "From all this," he concludes, "we may infer, not that arithmetic and geometry are the only sciences which we must learn, but that he who seeks the road to truth should not trouble himself with any object of which he cannot have as certain a knowledge as of arithmetical and geometrical demonstrations." It is unnecessary to observe what havoc this would make with investigations, even in physics, of the highest importance to mankind.

Beattie, in the essay on Truth, part ii. chap. 2, has made some unfounded criticisms on the scepticism of Descartes, and endeavours to turn into ridicule his Cogito; Ergo sum. Yet if any one should deny his own, or our existence, I do not see how we could refute him, were he worthy of refutation, but by some such language; and, in fact, it is what Beattie himself says, more paraphrastically, in answering Hume.

could not come from himself, nor from external things, because both were imperfect, and there could be no more in the effect than there is in the cause. And this idea requiring a cause, it could have none but an actual being, not a possible being, which is undistinguishable from mere non-entity. If, however, this should be denied, he inquires whether he, with this idea of God, could have existed by any other cause, if there were no God. Not, he argues, by himself; for if he were the author of his own being, he would have given himself every perfection, in a word, would have been God. Not by his parents, for the same might be said of them, and so forth, if we remount to a series of productive beings. Besides this, as much power is required to preserve as to create, and the continuance of existence in the effect implies the continued operation of the cause.

90. With this argument, in itself sufficiently refined, Descartes blended another still more distant from common apprehension. Necessary existence is involved in the idea of God. All other beings are conceivable in their essence, as things possible; in God alone his essence and existence are inseparable. Existence is necessary to perfection; hence a perfect being, or God, cannot be conceived without necessary existence. Though I do not know that I have misrepresented Descartes in this result of his very subtle argument, it is difficult not to treat it as a sophism. And it was always objected by his adversaries, that he inferred the necessity of the thing from the necessity of the idea, which was the very point in question. It seems impossible to vindicate many of his expressions, from which he never receded in the controversy to which his Meditations gave rise. But the long habit of repeating in his mind the same series of reasonings gave Descartes, as it will always do, an inward assurance of their certainty, which could not be weakened by any objection. The former argument for the being of God, whether satisfactory or not, is to be distinguished from the present.[c]

Another proof of it.

[c] "From what is said already of the ignorance we are in of the essence of mind, it is evident that we are not able to know whether any mind be necessarily existent by a necessity à priori founded in its essence, as we have showed time and space to be. Some philosophers think that such a necessity may be demonstrated of God from the nature of perfection. For God being infinitely, that is,

91. From the idea of a perfect being Descartes immediately deduced the truth of his belief in an external world, and in the inferences of his reason. For to deceive his creatures would be an imperfection in God; but God is perfect. Whatever, therefore, is clearly and distinctly apprehended by our reason must be true. We have only to be on our guard against our own precipitancy and prejudice, or surrender

His deductions from this.

absolutely perfect, they say he must needs be necessarily existent; because, say they, necessary existence is one of the greatest of perfections. But I take this to be one of those false and imaginary arguments, that are founded in the abuse of certain terms; and of all others this word, perfection, seems to have suffered most this way. I wish I could clearly understand what these philosophers mean by the word perfection, when they thus say that necessity of existence is perfection. Does perfection here signify the same thing that it does when we say that God is infinitely good, omnipotent, omniscient? Surely perfections are properly asserted of the several powers that attend the essences of things and not of anything else, but in a very unnatural and improper sense. Perfection is a term of relation, and its sense implies a fitness or agreement to some certain end, and most properly to some power in the thing that is denominated perfect. The term, as the etymology of it shows, is taken from the operation of artists. When an artist proposes to himself to make anything that shall be serviceable to a certain effect, his work is called more or less perfect, according as it agrees more or less with the design of the artist. From arts, by a similitude of sense, this word has been introduced into morality, and signifies that quality of an agent by which it is able to act agreeable to the end its actions tend to. The metaphysicians who reduce everything to transcendental considerations have also translated this term into their science, and use it to signify the agreement that any thing has with that idea, which it is required that thing should answer to. This perfection, therefore, belongs to those attributes that constitute the essence of a thing; and that being is properly called the most perfect which has all, the best, and each the completest in its kind of those attributes, which can be united in one essence. Perfection, therefore, belongs to the essence of things, and not properly to their existence; which is not a perfection of any thing, no attribute of it, but only the mere constitution of it *in rerum natura*. Necessary existence, therefore, which is a mode of existence, is not a perfection, it being no attribute of the thing no more than existence is, which it is a mode of. But it may be said, that though necessary existence is not a perfection in itself, yet it is so in its cause, upon account of that attribute of the entity from whence it flows; that that attribute must of all others be the most perfect and most excellent, which necessary existence flows from, it being such as cannot be conceived otherwise than as existing. But what excellency, what perfection is there in all this? Space is necessarily existent on account of extension, which cannot be conceived otherwise than as existing. But what perfection is there in space upon this account, which can in no manner act on any thing, which is entirely devoid of all power, wherein I have showed all perfections to consist? Therefore necessary existence, abstractedly considered, is no perfection; and therefore the idea of infinite perfection does not include, and consequently not prove, God to be necessarily existent. If he be so, it is on account of those attributes of his essence which we have no knowledge of."

I have made this extract from a very short tract, called Contemplatio Philosophica, by Brook Taylor, which I found in an unpublished memoir of his life printed by the late Sir William Young in 1793. It bespeaks the clear and acute understanding of this celebrated philosopher, and appears to me an entire refutation of the scholastic argument of Descartes; one more fit for the Anselms and such dealers in words, from whom it came, than for himself.

of our reason to the authority of others. It is not by our understanding, such as God gave it to us, that we are deceived; but the exercise of our free-will, a high prerogative of our nature, is often so incautious as to make us not discern truth from falsehood, and affirm or deny, by a voluntary act, that which we do not distinctly apprehend. The properties of quantity, founded on our ideas of extension and number, are distinctly perceived by our minds, and hence the sciences of arithmetic and geometry are certainly true. But when he turns his thoughts to the phænomena of external sensation, Descartes cannot wholly extricate himself from his original concession, the basis of his doubt, that the senses do sometimes deceive us. He endeavours to reconcile this with his own theory, which had built the certainty of all that we clearly hold certain on the perfect veracity of God.

Primary and secondary qualities.

92. It is in this inquiry that he reaches that important distinction between the primary and secondary properties of matter, (the latter being modifications of the former, relative only to our apprehension, but not inherent in things,) which, without being wholly new, contradicted the Aristotelian theories of the schools;[d] and he remarked that we are never,

[d] See Stewart's First Dissertation on the Progress of Philosophy. This writer has justly observed, that many persons conceive *colour* to be inherent in the object, so that the censure of Reid on Descartes and his followers, as having pretended to discover what no one doubted, is at least unreasonable in this respect. A late writer has gone so far as to say, "Nothing at first can seem a more rational, obvious, and incontrovertible conclusion, than that the colour of a body is an inherent quality, like its weight, hardness, &c.; and that to *see* the object, and to see it of *its own colour*, when nothing intervenes between our eyes and it, are one and the same thing. Yet this is only a prejudice," &c. Herschel's Discourse on Nat. Philos., p. 82. I almost even suspect that the notion of sounds and smells, being secondary or merely sensible qualities, is not distinct in all men's minds. But after we are become familiar with correct ideas, it is not easy to revive prejudices in our imagination. In the same page of Stewart's Dissertation, he has been led by dislike of the university of Oxford to misconceive, in an extraordinary manner, a passage of Addison in the Guardian, which is evidently a sportive ridicule of the Cartesian theory, and is absolutely inapplicable to the Aristotelian.

[The most remarkable circumstance in Reid's animadversion on Descartes, as having announced nothing but what was generally known, is that he had himself, in his Inquiry into the Human Mind, contended very dogmatically in favour of the vulgar notion that secondary qualities exist in bodies, independently of sensation. "This scarlet rose which is before me, is still a scarlet rose when I shut my eyes, and was so at midnight when no eye saw it. The colour remains when the appearance ceases; it remains the same when the appearance changes." Chap. vi. § 4. He even uses similar language as to perfumes, which, indeed, stand on the same ground, though we feel less of the

strictly speaking, deceived by our senses, but by the inferences which we draw from them.

93. Such is nearly the substance, exclusive of a great variety of more or less episodical theories, of the three metaphysical works of Descartes, the history of the soul's progress from opinion to doubt, and from doubt to certainty. Few would dispute, at the present day, that he has destroyed too much of his foundations to render his superstructure stable; and to readers averse from metaphysical reflection, he must seem little else than an idle theorist, weaving cobwebs for pastime which common sense sweeps away. It is fair, however, to observe, that no one was more careful than Descartes to guard against any practical scepticism in the affairs of life. He even goes so far as to maintain, that a man having adopted any practical opinion on such grounds as seem probable, should pursue it with as much steadiness as if it were founded on demonstration; observing, however, as a general rule, to choose the most moderate opinions among those which he should find current in his own country.[e]

Objections made to his Meditations.

94. The objections adduced against the Meditations are in a series of seven. The first are by a theologian named Caterus, the second by Mersenne, the third by Hobbes, the fourth by Arnauld, the fifth by Gassendi, the sixth by some anonymous writers, the seventh by a Jesuit of the name of Bourdin. To all of these Descartes replied with spirit and acuteness. By far the most important controversy was with Gassendi, whose objections were stated more briefly, and, I think, with less skill, by Hobbes. It was

prejudice in favour of their reality than of that of colours. Nothing can be more obvious than the reply: the colour remains only on the tacit hypothesis that some one is looking at the object; at midnight we can hardly say that the rose is red, except by an additional hypothesis, that the day should break. "We never," he proceeds, "as far as I can judge, give the name of colour to the sensation, but to the quality only." How then do we talk of bright, dull, glaring, gay, dazzling colours? Do not these words refer to a sensation, rather than to a configuration of parts in the coloured body, by which it reflects or refracts light? But this first production of Reid, though abounding with acute and original remarks, is too much disfigured by a tendency to halloo on the multitude against speculative philosophy. The appeal to common sense, that is, the crude notions of men who had never reflected, even enough to use language with precision, would have been fatal to psychology. Reid afterwards laid aside the popular tone in writing on philosophy, though, perhaps, he was always too much inclined to cut knots when he could not untie them.—1847.]

[e] Vol. i. p. 147; vol. iii. p. 64.

the first trumpet in the new philosophy of an ancient war between the sensual and ideal schools of psychology. Descartes had revived, and placed in a clearer light, the doctrine of mind, as not absolutely dependent upon the senses, nor of the same nature as their objects. Stewart does not acknowledge him as the first teacher of the soul's immateriality. "That many of the schoolmen, and that the wisest of the ancient philosophers, when they described the mind as a spirit, or as a spark of celestial fire, employed these expressions, not with any intention to materialise its essence, but merely from want of more unexceptionable language, might be shown with demonstrative evidence, if this were the proper place for entering into the discussion."[f] But though it cannot be said that Descartes was absolutely the first who maintained the strict immateriality of the soul, it is manifest to any one who has read his correspondence, that the tenet, instead of being general, as we are apt to presume, was by no means in accordance with the common opinion of his age. The fathers, with the exception, perhaps the single one, of Augustin, had taught the corporeity of the thinking substance. Arnauld seems to consider the doctrine of Descartes as almost a novelty in modern times. "What you have written concerning the distinction between the soul and body appears to me very clear, very evident, and quite divine; and as nothing is older than truth, I have had singular pleasure to see that almost the same things have formerly been very perspicuously and agreeably handled by St. Augustin in all his tenth book on the Trinity, but chiefly in the tenth chapter."[g] But Arnauld himself, in his objections to the Meditations, had put it as at least questionable, whether that which thinks is not something extended, which, besides the usual properties of extended substances, such as mobility and figure, has also this particular virtue and power of thinking.[h] The reply of Descartes removed the difficulties of the illustrious Jansenist, who became an ardent and almost complete disciple of the new philosophy. In a placard against the Cartesian philosophy, printed in 1647, which seems to have come from Revius, professor of theology at Leyden,

[f] Dissertation, ubi suprà. [g] Descartes, x. 138.
[h] Descartes, ii. 14.

it is said, "As far as regards the nature of things, nothing seems to hinder but that the soul may be either a substance, or a mode of corporeal substance."[i] And More, who had carried on a metaphysical correspondence with Descartes, whom he professed to admire, at least at that time, above all philosophers that had ever existed, without exception of his favourite Plato, extols him after his death in a letter to Clerselier, as having best established the foundations of religion. "For the peripatetics," he says, "pretend that there are certain substantial forms emanating from matter, and so united to it that they cannot subsist without it, to which class these philosophers refer the souls of almost all living beings, even those to which they allow sensation and thought; while the Epicureans, on the other hand, who laugh at substantial forms, ascribe thought to matter itself, so that it is M. Descartes alone, of all philosophers, who has at once banished from philosophy all these substantial forms or souls derived from matter, and absolutely divested matter itself of the faculty of feeling and thinking."[k]

Theory of memory and imagination.

95. It must be owned that the firm belief of Descartes in the immateriality of the Ego, or thinking principle, was accompanied with what in later times would have been deemed rather too great concessions to the materialists. He held the imagination and the memory to be portions of the brain, wherein the images of our sensations are bodily preserved; and even assigned such a motive force to the imagination, as to produce those involuntary actions which we often perform, and all the movements of

[i] Descartes, x. 73.

[k] Descartes, x. 386. Even More seems to have been perplexed at one time by the difficulty of accounting for the knowledge and sentiment of disembodied souls, and almost inclined to admit their corporeity. "J'aimerois mieux dire avec les Platoniciens, les anciens pères, et presque tous les philosophes, que les âmes humaines, tous les génies tant bons que mauvais, sont corporels, et que par conséquent ils ont un sentiment réel, c'est à dire, qui leur vient du corps dont ils sont revêtus." This is in a letter to Descartes in 1649, which I have not read in Latin (vol. x. p. 249). I do not quite understand whether he meant only that the soul, when separated from the gross body, is invested with a substantial clothing, or that there is what we may call an interior body, a supposed monad, to which the thinking principle is indissolubly united. This is what all materialists mean, who have any clear notions whatever; it is a possible, perhaps a plausible, perhaps even a highly probable, hypothesis, but one which will not prove their theory. The former seems almost an indispensable supposition, if we admit sensibility to phænomena at all in the soul after death; but it is rather, perhaps, a theological than a metaphysical speculation.

brutes. "This explains how all the motions of all animals arise, though we grant them no knowledge of things, but only an imagination entirely corporeal, and how all those operations which do not require the concurrence of reason are produced in us." But the whole of his notions as to the connexion of the soul and body, and indeed all his physiological theories, of which he was most enamoured, do little credit to the Cartesian philosophy. They are among those portions of his creed which have lain most open to ridicule, and which it would be useless for us to detail. He seems to have expected more advantage to psychology from anatomical researches than in that state of the science, or even probably in any future state of it, anatomy could afford. When asked once where was his library, he replied, showing a calf he was dissecting, This is my library.[m] His treatise on the passions, a subject so important in the philosophy of the human mind, is made up of crude hypotheses, or at best irrelevant observations, on their physical causes and concomitants.

Seat of soul in pineal gland.

96. It may be considered as a part of this syncretism, as we may call it, of the material and immaterial hypotheses, that Descartes fixed the seat of the soul in the conarion, or pineal gland, which he selected as the only part of the brain which is not double. By some means of communication which he did not profess to explain, though later metaphysicians have attempted to do so, the unextended intelligence, thus confined to a certain spot, receives the sensations which are immediately produced through impressions on the substance of the brain. If he did not solve the problem, be it remembered that the problem has never since been solved. It was objected by a nameless correspondent, who signs himself Hyperaspistes, that the soul being incorporeal could not leave by its operations a trace on the brain, which his theory seemed to imply. Descartes answered, in rather a remarkable passage, that as to things purely intellectual, we do not, properly speaking, remember them at all, as they are equally original thoughts every time they present themselves to the mind, except that

[m] Descartes was very fond of dissection: C'est un exercice où je me suis souvent occupé depuis onze ans, et je crois qu'il n'y a guère de médecins qui y ait regardé de si près que moi. Vol. viii. p. 100, also p. 174 and 180.

they are habitually joined as it were, and associated with certain names, which, being bodily, make us remember them.[n]

Gassendi's attacks on the Meditations.

97. If the orthodox of the age were not yet prepared for a doctrine which seemed so favourable at least to natural religion as the immateriality of the soul, it may be readily supposed, that Gassendi, like Hobbes, had imbibed too much of the Epicurean theory to acquiesce in the spiritualising principles of his adversary. In a sportive style he addresses him, *O anima!* and Descartes replying more angrily, retorts upon him the name *O caro!* which he frequently repeats. Though we may lament such unhappy efforts at wit in these great men, the names do not ill represent the spiritual and carnal philosophies; the school that produced Leibnitz, Kant, and Stewart, contrasted with that of Hobbes, Condillac, and Cabanis.

Superiority of Descartes.

98. It was a matter of course that the vulnerable passages of the six Meditations would not escape the spear of so skilful an antagonist as Gassendi. But many of his objections appear to be little more than cavils; and upon the whole, Descartes leaves me with the impression of his great superiority in metaphysical acuteness. It was indeed impossible that men should agree, who persisted in using a different definition of the important word, *idea;* and the same source of interminable controversy has flowed ever since for their disciples. Gassendi adopting the scholastic maxim, "Nothing is in the understanding, which has not been in the sense," carried it so much farther than those from whom it came that he denied anything to be an idea but what was imagined by the mind. Descartes repeatedly desired both him and Hobbes, whose philosophy was built on the same notion, to remark that he meant by idea, whatever can be conceived by the understanding, though not capable of being represented by the imagination.[o]

[n] This passage I must give in French, finding it obscure, and having translated more according to what I guess than literally. Mais pour ce qui est des choses purement intellectuelles, à proprement parler on n'en a aucun ressouvenir; et la première fois qu'elles se présentent à l'esprit, on les pense aussi-bien que la seconde, si ce n'est peut-être qu'elles ont coûtume d'être jointes et comme attachées à certains noms qui, étant corporels, font que nous nous ressouvenons aussi d'elles. Vol. viii. p. 271.

[o] Par le nom d'idée, il veut seulement qu'on entende ici les images des choses matérielles dépeintes en la fantaisie corporelle; et cela étant supposé, il lui est aisé de montrer qu'on ne peut avoir

Thus we imagine a triangle, but we can only conceive a figure of a thousand sides; we know its existence, and can reason about its properties, but we have no image whatever in the mind, by which we can distinguish such a polygon from one of a smaller or greater number of sides. Hobbes in answer to this threw out a paradox which he has not, perhaps at least in so unlimited a manner, repeated, that by reason, that is, by the process of reasoning, we can infer nothing as to the nature of things, but only as to their names.[p] It is singular that a man conversant at least with the elements of geometry should have fallen into this error. For it does not appear that he meant to speak only of natural substances, as to which his language might seem to be a bad expression of what was afterwards clearly shown by Locke. That the understanding can conceive and reason upon that which the imagination cannot deli-

propre et véritable idée de Dieu ni d'un ange; mais j'ai souvent averti, et principalement en celui là même, que je prends le nom d'idée pour tout ce qui est conçu immédiatement par l'esprit; en sorte que, lorsque je veux et que je crains, parceque je conçois en même temps, que je veux et que je crains, ce vouloir et cette crainte sont mis par moi en nombre des idées; et je me suis servi de ce mot, parcequ'il étoit déjà communément reçu par les philosophes pour signifier les formes des conceptions de l'entendement divin, encore que nous ne reconnoissions en Dieu aucune fantaisie ou imagination corporelle, et je n'en savois point de plus propre. Et je pense avoir assez expliqué l'idée de Dieu pour ceux qui veulent concevoir les sens que je donne à mes paroles; mais pour ceux qui s'attachent à les entendre autrement que je ne fais, je ne le pourrais jamais assez. Vol. i. p. 404. This is in answer to Hobbes; the objections of Hobbes, and Descartes' replies, turn very much on this primary difference between ideas as images, which alone our countryman could understand, and ideas as intellections, conceptions, *νοούμενα*, incapable of being imagined, but not less certainly known and reasoned upon. The French is a translation, but made by Clerselier under the eye of Descartes, so that it may be quoted as an original.

p Que dirons-nous maintenant si peut-être le raisonnement n'est rien autre chose qu'un assemblage et un enchaînement de noms par ce mot *est?* D'où il s'ensuivroit que par la raison nous ne concluons rien de tout touchant la nature des choses, mais seulement touchant leurs appellations, c'est à dire que par elle nous voyons simplement si nous assemblons bien ou mal les noms des choses, selon les conventions que nous avons faites à notre fantaisie touchant leurs significations. P. 476. Descartes merely answered:— L'assemblage qui se fait dans le raisonnement n'est pas celui des noms, mais bien celui des choses, signifiées par les noms; et je m'étonne que le contraire puisse venir en l'esprit de personne. Descartes treated Hobbes, whom he did not esteem, with less attention than his other correspondents. Hobbes could not understand what have been called ideas of reflection, such as fear, and thought it was nothing more than the idea of the object feared. "For what else is the fear of a lion," he says, "than the idea of this lion, and the effect which it produces in the heart, which leads us to run away? But this running is not a thought; so that nothing of thought exists in fear but the idea of the object." Descartes only replied, "It is self-evident that it is not the same thing to see a lion and fear him, that it is to see him only." P. 483.

neate, is evident not only from Descartes' instance of a polygon, but more strikingly by the whole theory of infinites, which are certainly somewhat more than bare words, whatever assistance words may give us in explaining them to others or to ourselves.[q]

Stewart's remarks on Descartes.

99. Dugald Stewart has justly dwelt on the signal service rendered by Descartes to psychological philosophy, by turning the mental vision inward upon itself, and accustoming us to watch the operations of our intellect, which, though employed upon ideas obtained through the senses, are as distinguishable from them as the workman from his work. He has given, indeed, to Descartes a very proud title, Father of the experimental philosophy of the human mind, as if he were to man what Bacon was to nature.[r] By patient observation of what passed within him, by holding his soul, as it were, like an object in a microscope, which is the only process of a good metaphysician, he became habituated to throw away those integuments of

[q] I suspect, from what I have since read, that Hobbes had a different, and what seems to me a very erroneous view of infinite, or infinitesimal quantities in geometry. For he answers the old sophism of Zeno, Quicquid dividi potest in partes infinitas est infinitum, in a manner which does not meet the real truth of the case: Dividi posse in partes infinitas nihil aliud est quam dividi posse in partes *quotcunque quis velit*. Logica sive Computatio, c. 5, p. 38 (edit. 1667).

[r] Dissertation on Progress of Philosophy. The word experiment must be taken in the sense of observation. Stewart very early took up his admiration for Descartes. "He was the first philosopher who stated in a clear and satisfactory manner the distinction between mind and matter, and who pointed out the proper plan for studying the intellectual philosophy. It is chiefly in consequence of his precise ideas with respect to this distinction, that we may remark in all his metaphysical writings a perspicuity which is not observable in those of any of his predecessors." Elem. of Philos. of Human Mind, vol. i. (published in 1792), note A. "When Descartes," he says in the dissertation before quoted, "established it as a general principle, that *nothing conceivable by the power of imagination could throw any light on the operations of thought*, a principle which I consider as exclusively his own, he laid the foundations of the experimental philosophy of the human mind. That the same truth had been previously perceived more or less distinctly by Bacon and others, appears probable from the general complexion of their speculations; but which of them has expressed it with equal precision, or laid it down as a fundamental maxim in their logic?" The words which I have put in italics seem too vaguely and not very clearly expressed, nor am I aware that they are borne out in their literal sense by any position of Descartes; nor do I apprehend the allusion to Bacon. But it is certain that Descartes, and still more his disciples Arnauld and Malebranche, take better care to distinguish what can be imagined from what can be conceived or understood, than any of the school of Gassendi in this or other countries. One of the great merits of Descartes as a metaphysical writer, not unconnected with this, is that he is generally careful to avoid figurative language in speaking of mental operations, wherein he has much the advantage over Locke.

sense which hide us from ourselves. Stewart has censured him for the paradox, as he calls it, that the *essence* of mind consists in thinking, and that of matter in extension. That the act of thinking is as inseparable from the mind as extension is from matter, cannot, indeed, be proved; since, as our thoughts are successive, it is not inconceivable that there may be intervals of duration between them; but it can hardly be reckoned a paradox. But whoever should be led by the word essence to suppose that Descartes confounded the percipient thinking substance, the Ego, upon whose bosom, like that of the ocean, the waves of perception are raised by every breeze of sense, with the perception itself, or even, what is scarcely more tenable, with the reflective action, or thought; that he anticipated this strange paradox of Hume in his earliest work, from which he silently withdrew in his Essays, would not only do great injustice to one of the acutest understandings that ever came to the subject, but overlook several clear assertions of the distinction, especially in his answer to Hobbes. "The thought," he says, "differs from that which thinks, as the mode from the substance."[s] And Stewart has in his earliest work justly corrected Reid in this point as to the Cartesian doctrine.[t]

Paradoxes of Descartes.

100. Several singular positions which have led to an undue depreciation of Descartes in general as a philosopher occur in his metaphysical writings. Such was his denial of thought, and, as is commonly said, sensation to brutes, which he seems to have founded on the mechanism of the bodily organs, a cause sufficient, in his opinion, to explain all the phænomena of the motions of animals, and to obviate the difficulty of assigning to them immaterial souls;[u] his rejection

[s] Vol. i. p. 470. Arnauld objected, in a letter to Descartes, Comment se peut-il faire que la pensée constitue l'essence de l'esprit, puisque l'esprit est une substance, et que la pensée semble n'en être qu'un mode? Descartes replied that thought in general, la pensée, ou la nature qui pense, in which he placed the essence of the soul, was very different from such or such particular acts of thinking. Vol. vi. p. 153, 160.

[t] Philosophy of Human Mind, vol. i. note A. See the Principia, § 63.

[u] It is a common opinion that Descartes denied all life and sensibility to brutes. But this seems not so clear. Il faut remarquer, he says in a letter to More, where he has been arguing against the existence in brutes of any thinking principle, que je parle de la pensée, non de la vie ou du sentiment; car je n'ôte la vie à aucun animal, ne la faisant consister que dans la seule chaleur du cœur. Je ne leur refuse pas même le sentiment autant qu'il dépend des organes du corps. Vol. x. p. 208. In a longer passage, if

of final causes in the explanation of nature as far above our comprehension, and unnecessary to those who had the internal proof of God's existence; his still more paradoxical tenet, that the truth of geometrical theorems, and every other axiom of intuitive certainty, depended upon the will of God; a notion that seems to be a relic of his original scepticism, but which he pertinaciously defends throughout his letters.[x] From remarkable errors men of original and independent genius are rarely exempt; Descartes had pulled down an edifice constructed by the labours of near two thousand years, with great reason in many respects, yet perhaps with too unlimited a disre-

he does not express himself very clearly, he admits passions in brutes, and it seems impossible that he could have ascribed passions to what has no sensation. Much of what he here says is very good. Bien que Montaigne et Charron aient dit, qu'il y a plus de différence d'homme à homme que d'homme à bête, il n'est toutefois jamais trouvé aucune bête si parfaite, qu'elle ait usé de quelque signe pour faire entendre à d'autres animaux quelque chose qui n'eût point de rapport à ses passions; et il n'y a point d'homme si imparfait qu'il n'en use; en sorte que ceux qui sont sourds et muets inventent des signes particuliers par lesquels ils expriment leurs pensées; ce qui me semble un très-fort argument pour prouver que ce qui fait que les bêtes ne parlent point comme nous, est qu'elles n'ont aucune pensée, et non point que les organes leur manquent. Et on ne peut dire qu'elles parlent entre elles, mais que nous ne les entendons pas; car *comme les chiens et quelques autres animaux nous expriment leurs passions*, ils nous exprimeroient aussi-bien leurs pensées s'ils en avoient. Je sais bien que les bêtes font beaucoup de choses mieux que nous, mais je ne m'en étonne pas; car cela même sert à prouver qu'elles agissent naturellement, et par ressorts, ainsi qu'un horloge; laquelle montre bien mieux l'heure qu'il est, que notre jugement nous l'enseigne. . . . . . On peut seulement dire que, bienque les bêtes ne fassent aucune action qui nous assure qu'elles pensent, toutefois, à cause que les organes de leurs corps ne sont pas fort différens des nôtres, on peut conjecturer qu'il y a quelque pensée jointe à ces organes, ainsi que nous experimentons en nous, bienque la leur soit beaucoup moins parfaite; à quoi je n'ai rien à répondre, si non que si elles pensoient aussi que nous, elles auroient une âme immortelle aussi bien que nous; ce qui n'est pas vraisemblable, à cause qu'il n'y a point de raison pour le croire de quelques animaux, sans le croire de tous, et qu'il y en a plusieurs trop imparfaits pour pouvoir croire cela d'eux, comme sont les huîtres, les éponges, &c. Vol. ix. p. 425. I do not see the meaning of une âme immortelle in the last sentence; if the words had been une âme immatérielle, it would be to the purpose. More, in a letter to which this is a reply, had argued as if Descartes took brutes for insensible machines, and combats the paradox with the arguments which common sense furnishes. He would even have preferred ascribing immortality to them, as many ancient philosophers did. But surely Descartes, who did not acknowledge any proofs of the immortality of the human soul to be valid, except those founded on revelation, needed not to trouble himself much about this difficulty.

[x] C'est en effet parler de Dieu comme d'un Jupiter ou d'un Saturne, et l'assujettir au Styx et aux destinées, que de dire que ces vérités sont indépendantes de lui. Ne craignez point, je vous prie, d'assurer et de publier partout que c'est Dieu qui a établi ces lois en la nature; ainsi qu'un roi établit les lois en son royaume. Vol. vi. p. 109. He argues as strenuously the same point in p. 132 and p. 307.

gard of his predecessors; it was his destiny, as it had been theirs, to be sometimes refuted and depreciated in his turn. But the single fact of his having first established, both in philosophical and popular belief, the proper immateriality of the soul, were we even to forget the other great accessions which he made to psychology, would declare the influence he has had on human opinion. From this immateriality, however, he did not derive the tenet of its immortality. He was justly contented to say, that from the intrinsic difference between mind and body, the dissolution of the one could not necessarily take away the existence of the other, but that it was for God to determine whether it should continue to exist; and this determination, as he thought, could only be learned from his revealed will. The more powerful arguments, according to general apprehension, which reason affords for the sentient being of the soul after death, did not belong to the metaphysical philosophy of Descartes, and would never have been very satisfactory to his mind. He says, in one of his letters, that "laying aside what faith assures us of, he owns that it is more easy to make conjectures for our own advantage, and entertain promising hopes, than to feel any confidence in their accomplishment."[y]

His just notion of definitions.

101. Descartes was perhaps the first who saw that definitions of words, already as clear as they can be made, are nugatory or impracticable. This alone would distinguish his philosophy from that of the Aristotelians, who had wearied and confused themselves for twenty centuries with unintelligible endeavours to grasp by definition what refuses to be defined. "Mr. Locke," says Stewart, "claims this improvement as entirely his own, but the merit of it unquestionably belongs to Descartes, although it must be owned that he has not always sufficiently attended to it in his researches."[z] A still more decisive passage to this effect

[y] Vol. ix. p. 369.

[z] Dissertation, ubi suprà. Stewart, in his Philosophical Essays, note A, had censured Reid for assigning this remark to Descartes and Locke, but without giving any better reason than that it is found in a work written by Lord Stair; earlier, certainly, than Locke, but not before Descartes. It may be doubtful, as we shall see hereafter, whether Locke has not gone beyond Descartes, or at least distinguished undefinable words more strictly.

[Sir William Hamilton remarks on this passage, where Reid assigns the observation to Descartes and Locke: "This is incorrect. Descartes has little, and Locke no praise for this observation. It

than that referred to by Stewart in the Principia will be found in the posthumous dialogue on the Search after Truth. It is objected by one of the interlocutors, as it had actually been by Gassendi, that, to prove his existence by the act of thinking, he should first know what existence and what thought is. "I agree with you," the representative of Descartes replies, "that it is necessary to know what doubt is, and what thought is, before we can be fully persuaded of this reasoning—I doubt, therefore I am—or, what is the same—I think, therefore I am. But do not imagine that for this purpose you must torture your mind to find out the next genus, or the essential differences, as the logicians talk, and so compose a regular definition. Leave this to such as teach or dispute in the schools. But whoever will examine things by himself, and judge of them according to his understanding, cannot be so senseless as not to see clearly, when he pays attention, what doubting, thinking, being, are, or to have any need to learn their distinctions. Besides, there are things which we render more obscure in attempting to define them, because, as they are very simple and very clear, we cannot know and comprehend them better than by themselves. And it should be reckoned among the chief errors that can be committed in science for men to fancy that they can define that which they can only conceive, and distinguish what is clear in it from what is obscure, while they do not see the difference between that which must be defined before it is understood, and that which can be fully known by itself. Now, among things which can thus be clearly known by themselves, we must put doubting, thinking, being. For I do not believe any one ever existed so stupid as to need to know what being is before he could affirm that he is; and it is the same of thought and doubt. Nor can he learn these things except

had been made by Aristotle, and after him by many others; while, subsequently to Descartes, and previous to Locke, Pascal, and the Port-Royal logicians, to say nothing of a paper of Leibnitz in 1684, had reduced it to a matter of common-place. In this instance, Locke can indeed be proved a borrower." Hamilton's edition of Reid, p. 220. But this very learned writer quotes no passage from Aristotle to this effect, and certainly the practice of that philosopher and his followers was to attempt definitions of every thing. Nor could Aristotle, or even Descartes, have distinguished undefinable words by their expressing simple ideas of sense or reflection, as Locke has done, when they have not made that classification of ideas into simple and complex, which forms so remarkable a part of his philosophy.—1847.]

by himself, nor be convinced of them but by his own experience, and by that consciousness and inward witness which every man finds in himself when he examines the subject. And as we should define whiteness in vain to a man who can see nothing, while one who can open his eyes and see a white object requires no more, so to know what doubting is, and what thinking is, it is only necessary to doubt and to think."[a] Nothing could more tend to cut short the verbal cavils of the schoolmen, than this limitation of their favourite exercise, definition. It is due, therefore, to Descartes, so often accused of appropriating the discoveries of others, that we should establish his right to one of the most important that the new logic has to boast.

His notion of substances

102. He seems, at one moment, to have been on the point of taking another step very far in advance of his age. "Let us take," he says, "a piece of wax from the honey-comb: it retains some taste and smell, it is hard, it is cold, it has a very marked colour, form, and size. Approach it to the fire; it becomes liquid, warm, inodorous, tasteless; its form and colour are changed, its size is increased. Does the same wax remain after these changes? It must be allowed that it does; no one doubts it, no one thinks otherwise. What was it then that we so distinctly knew to exist in this piece of wax? Nothing certainly that we observed by the senses, since all that the taste, the smell, the sight, the touch reported to us has disappeared, and still the same wax remains." This something which endures under every change of sensible qualities cannot be imagined; for the imagination must represent some of these qualities, and none of them are essential to the thing; it can only be conceived by the understanding.[b]

not quite correct.

103. It may seem almost surprising to us, after the writings of Locke and his followers on the one hand, and the chemist with his crucible on the other, have chased these abstract substances of material objects from their sanctuaries, that a man of such prodigious acuteness and intense reflection as Descartes should not have remarked that the identity of wax after its liquefaction is merely nominal, and depending on arbitrary language, which in many cases gives new appella-

[a] Vol. xi. p. 369.

[b] Méditation Seconde, t. 256.

tions to the same aggregation of particles after a change of their sensible qualities; and that all we call substances are but aggregates of resisting moveable corpuscles, which by the laws of nature are capable of affecting our senses differently, according to the combinations they may enter into, and the changes they may successively undergo. But if he had distinctly seen this, which I do not apprehend that he did, it is not likely that he would have divulged the discovery. He had already given alarm to the jealous spirit of orthodoxy by what now appears to many so self-evident, that they have treated the supposed paradox as a trifling with words, the doctrine that colour, heat, smell, and other secondary qualities, or accidents of bodies, do not exist in them, but in our own minds, and are the effects of their intrinsic or primary qualities. It was the tenet of the schools that these were sensible realities, inherent in bodies; and the church held as an article of faith that the substance of bread being withdrawn from the consecrated wafer, the accidents of that substance remained as before, but independent, and not inherent in any other. Arnauld raised this objection, which Descartes endeavoured to repel by a new theory of transubstantiation; but it always left a shade of suspicion, in the Catholic church of Rome, on the orthodoxy of Cartesianism.

His notions of intuitive truth.

104. "The paramount and indisputable authority which, in all our reasonings concerning the human mind, he ascribes to the evidence of consciousness," is reckoned by Stewart among the great merits of Descartes. It is certain that there are truths which we know, as it is called, intuitively, that is, by the mind's immediate inward glance. And reasoning would be interminable, if it did not find its ultimate limit in truths which it cannot prove. Gassendi imputed to Descartes, that, in his fundamental enthymem, Cogito, ergo sum, he supposed a knowledge of the major premise, Quod cogitat, est. But Descartes replied that it was a great error to believe that our knowledge of particular propositions must always be deduced from universals, according to the rules of logic; whereas, on the contrary, it is by means of our knowledge of particulars that we ascend to generals, though it is true that we descend again from them to infer other parti-

cular propositions.[c] It is probable that Gassendi did not make this objection very seriously.

105. Thus the logic of Descartes, using that word for principles that guide our reasoning, was an instrument of defence both against the captiousness of ordinary scepticism, that of the Pyrrhonic school, and against the disputatious dogmatism of those who professed to serve under the banner of Aristotle. He who reposes on his own consciousness, or who recurs to first principles of intuitive knowledge, though he cannot be said to silence his adversary, should have the good sense to be silent himself, which puts equally an end to debate. But so far as we are concerned with the investigation of truth, the Cartesian appeal to our own consciousness, of which Stewart was very fond, just as it is in principle, *may* end in an assumption of our own prejudices as the standard of belief. Nothing can be truly self-evident but that which a clear, an honest, and an experienced understanding in another man acknowledges to be so.

Treatise on art of logic.

106. Descartes has left a treatise highly valuable, but not very much known, on the art of logic, or rules for the conduct of the understanding.[d] Once only, in a letter, he has alluded to the name of

[c] Vol. ii. p. 305. See, too, the passage, quoted above, in his posthumous dialogue.

[Perhaps the best answer might have been, that Cogito, ergo sum, though thrown into the form of an enthymem, was not meant so much for a logical inference, as an assertion of consciousness. It has been observed, that Cogito is equivalent to Sum cogitans, and involves the conclusion. It is impossible to employ rules of logic upon operations of the mind which are anterior to all reasoning. —1847.]

[d] M. Cousin has translated and republished two works of Descartes, which had only appeared in Opera Posthuma Cartesii, Amsterdam, 1701. Their authenticity, from external and intrinsic proofs, is out of question. One of these is that mentioned in the text, entitled "Rules for the Direction of the Understanding;" which, though logical in its subject, takes most of its illustrations from mathematics. The other is a dialogue left imperfect, in which he sustains the metaphysical principles of his philosophy. Of these two little tracts their editor has said, "that they equal in vigour and perhaps surpass in arrangement the Meditations and Discourse on Method. We see in these more unequivocally the main object of Descartes, and the spirit of the revolution which has created modern philosophy, and placed in the understanding itself the principle of all certainty, the point of departure for all legitimate inquiry. They might seem written but yesterday, and for the present age." Vol. xi., preface, p. i. I may add to this, that I consider the Rules for the Direction of the Understanding as one of the best works on logic (in the enlarged sense) which I have ever read; more practically useful, perhaps, to young students, than the Novum Organum; and though, as I have said, his illustrations are chiefly mathematical, most of his rules are applicable to the general discipline of the reasoning powers. It occupies little more than one hundred pages, and I

Bacon.[e] There are, perhaps, a few passages in this short tract that remind us of the Novum Organum. But I do not know that the coincidence is such as to warrant a suspicion that he was indebted to it; we may reckon it rather a parallel, than a derivative logic; written in the same spirit of cautious, inductive procedure, less brilliant and original in its inventions, but of more general application than the Novum Organum, which is with some difficulty extended beyond the province of natural philosophy. Descartes is as averse as Bacon to syllogistic forms. "Truth," he says, "often escapes from these fetters, in which those who employ them remain entangled. This is less frequently the case with those who make no use of logic, experience showing that the most subtle of sophisms cheat none but sophists themselves, not those who trust to their natural reason. And to convince ourselves how little this syllogistic art serves towards the discovery of truth, we may remark that the logicians can form no syllogism with a true conclusion, unless they are already acquainted with the truth that the syllogism develops. Hence it follows that the vulgar logic is wholly useless to him who would discover truth for himself, though it may assist in explaining to others the truth he already knows, and that it would be better to transfer it as a science from philosophy to rhetoric."[f]

Merits of his writings.

107. It would occupy too much space to point out the many profound and striking thoughts which this treatise on the conduct of the understanding, and indeed most of the writings of Descartes, contain. "The greater part of the questions on which the learned dispute are but questions of words. These occur so frequently that, if philosophers would agree on the signification of their words, scarce any of their controversies would remain." This has been continually said since; but it is a proof of some progress in wisdom, when the original thought of one age becomes the truism of the next. No one had been so much on his

think that I am doing a service in recommending it. Many of the rules will, of course, be found in later books; some, possibly, in earlier. This tract, as well as the dialogue which follows it, is incomplete, a portion being probably lost.

[e] Si quelqu'un de cette humeur vouloit entreprendre d'écrire l'histoire des apparences célestes selon la méthode de Verulamius. Vol. vi. p. 210.

[f] Vol. xi. p. 255.

guard against the equivocation of words, or knew so well their relation to the operations of the mind. And it may be said generally, though not without exception, of the metaphysical writings of Descartes, that we find in them a perspicuity which springs from his unremitting attention to the logical process of inquiry, admitting no doubtful or ambiguous position, and never requiring from his reader a deference to any authority but that of demonstration. It is a great advantage in reading such writers that we are able to discern when they are manifestly in the wrong. The sophisms of Plato, of Aristotle, of the schoolmen, and of a great many recent metaphysicians, are disguised by their obscurity; and while they creep insidiously into the mind of the reader, are always denied and explained away by partial disciples.

His notions of free-will.

108. Stewart has praised Descartes for having recourse to the evidence of consciousness in order to prove the liberty of the will. But he omits to tell us that the notions entertained by this philosopher were not such as have been generally thought compatible with free agency in the only sense that admits of controversy. It was an essential part of the theory of Descartes that God is the cause of all human actions. "Before God sent us into the world," he says in a letter, "he knew exactly what all the inclinations of our will would be; it is he that has implanted them in us; it is he also that has disposed all other things, so that such or such objects should present themselves to us at such or such times, by means of which he has known that our free-will would determine us to such or such actions, and he has willed that it should be so; but he has not willed to compel us thereto."[g] "We could not demonstrate," he says at another time, "that God exists, except by considering him as a being absolutely perfect; and he could not be absolutely perfect, if there could happen any thing in the world which did not spring entirely from him. . . . Mere philosophy is enough to make us know that there cannot enter the least thought into the mind of man, but God must will and have willed from all eternity that it should enter there."[h] This is in a letter to his highly

[g] Vol. iv. p. 374.

[h] Id., p. 246.

intelligent friend, the Princess Palatine Elizabeth, grand-daughter of James I.; and he proceeds to declare himself strongly in favour of predestination, denying wholly any particular providence, to which she had alluded, as changing the decrees of God, and all efficacy of prayer, except as one link in the chain of his determinations. Descartes, therefore, whatever some of his disciples may have become, was far enough from an Arminian theology. "As to free-will," he says elsewhere, "I own that thinking only of ourselves we cannot but reckon it independent, but when we think of the infinite power of God we cannot but believe that all things depend on him, and that consequently our free-will must do so too. . . . But since our knowledge of the existence of God should not hinder us from being assured of our free-will, because we feel and are conscious of it in ourselves, so that of our free-will should not make us doubt of the existence of God. For the independence which we experience and feel in ourselves, and which is sufficient to make our actions praiseworthy or blameable, is not incompatible with a dependence of another nature, according to which all things are subject to God."[1]

Fame of his system, and attacks upon it.

109. A system so novel, so attractive to the imagination by its bold and brilliant paradoxes as that of Descartes, could not but excite the attention of an age already roused to the desire of a new philosophy, and to the scorn of ancient authority. His first treatises appeared in French; and, though he afterwards employed Latin, his works were very soon translated by his disciples, and under his own care. He wrote in Latin with great perspicuity; in French with liveliness and elegance. His mathematical and optical writings gave him a reputation which envy could not take away, and secured his philosophy from that general ridicule which sometimes overwhelms an obscure author. His very enemies, numerous and vehement as they were, served to enhance the celebrity of the Cartesian system, which he seems to have anticipated by

[1] Vol. ix. p. 368. This had originally been stated in the Principia with less confidence, the free-will of man and predetermination of God being both asserted as true, but their co-existence incomprehensible. Vol. iii. p. 86.

publishing their objections to his Meditations with his own replies. In the universities, bigoted for the most part to Aristotelian authority, he had no chance of public reception; but the influence of the universities was much diminished in France, and a new theory had perhaps better chances in its favour on account of their opposition. But the Jesuits, a more powerful body, were in general adverse to the Cartesian system, and especially some time afterwards, when it was supposed to have the countenance of several leading Jansenists. The Epicurean school, led by Gassendi and Hobbes, presented a formidable phalanx; since it in fact comprehended the wits of the world, the men of indolence and sensuality, quick to discern the many weaknesses of Cartesianism, with no capacity for its excellences. It is unnecessary to say how predominant this class was in the seventeenth and eighteenth centuries, both in France and England.

Controversy with Voet.

110. Descartes was evidently in considerable alarm lest the church should bear with its weight upon his philosophy.[k] He had the censure on Galileo before his eyes, and certainly used some chicane of words as to the earth's movement upon this account. It was, however, in the Protestant country which he had chosen as his harbour of refuge that he was doomed to encounter the roughest storm. Gisbert Voet, an eminent theologian in the university of Utrecht, and the head of the party in the church of Holland, which had been victorious in the synod of Dort, attacked Descartes with all the virulence and bigotry characteristic of his school of divinity. The famous demonstration of the being of God he asserted to be a cover for atheism, and thus excited a flame of controversy, Descartes being not without supporters in the university, especially Regius, professor of medicine. The philosopher was induced by these assaults to change his residence from a town in the province of Utrecht to Leyden. Voet did not cease to pursue him with outrageous calumny, and succeeded in

[k] On a tellement assujetti la théologie à Aristote, qu'il est impossible d'expliquer une autre philosophie qu'il ne semble d'abord qu'elle soit contre la foi. Et àpropos de ceci, je vous prie de me mander s'il n'y a rien de déterminé en la foi touchant l'étendue du monde: savoir s'il est fini ou plutôt infini, et si tout ce qu'on appelle espaces imaginaires soient des corps créés et véritables. Vol. vi. p. 73.

obtaining decrees of the senate and university of Utrecht, which interdicted Regius from teaching that "new and unproved (præsumpta) philosophy" to his pupils. The war of libels on the Voetian side did not cease for some years, and Descartes replied with no small acrimony against Voet himself. The latter had recourse to the civil power, and instituted a prosecution against Descartes, which was quashed by the interference of the Prince of Orange. But many in the university of Leyden, under the influence of a notable theologian of that age, named Triglandius, one of the stoutest champions of Dutch orthodoxy, raised a cry against the Cartesian philosophy as being favourable to Pelagianism and popery, the worst names that could be given in Holland; and it was again through the protection of the Prince of Orange that he escaped a public censure. Regius, the most zealous of his original advocates, began to swerve from the fidelity of a sworn disciple, and published a book containing some theories of his own, which Descartes thought himself obliged to disavow. Ultimately he found, like many benefactors of mankind, that he had purchased reputation at the cost of peace; and, after some visits to France, where, probably from the same cause, he never designed to settle, found an honourable asylum and a premature death at the court of Christina. He died in 1651, having worked a more important change in speculative philosophy than any who had preceded him since the revival of learning; for there could be no comparison in that age between the celebrity and effect of his writings and those of Lord Bacon.[m]

111. The prejudice against Descartes, especially in his own country, was aggravated by his indiscreet and not very warrantable assumption of perfect originality.[n] No one, I think, can fairly refuse

Charges of plagiarism.

[m] The life of Descartes was written, very fully and with the warmth of a disciple, by Baillet, in two volumes quarto, 1691, of which he afterwards published an abridgment. In this we find at length the attacks made on him by the Voetian theologians. Brucker has given a long and valuable account of the Cartesian philosophy, but not favourable, and perhaps not quite fair. Vol. v. p. 200—334. Buhle is, as usual, much inferior to Brucker. But those who omit the mathematical portion will not find the original works of Descartes very long, and they are well worthy of being read.

[n] I confess, he says in his logic, that I was born with such a temper, that the chief pleasure I find in study is not from learning the arguments of others, but by inventing my own. This disposition alone impelled me in youth to the study of science; hence, whenever a new book

to own, that the Cartesian metaphysics, taken in their consecutive arrangement, form truly an original system; and it would be equally unjust to deny the splendid discoveries he developed in algebra and optics. But upon every one subject which Descartes treated, he has not escaped the charge of plagiarism; professing always to be ignorant of what had been done by others, he falls perpetually into their track; more, as his adversaries maintained, than the chances of coincidence could fairly explain. Leibnitz has summed up the claims of earlier writers to the pretended discoveries of Descartes; and certainly it is a pretty long bill to be presented to any author. I shall insert this passage in a note, though much of it has no reference to this portion of the Cartesian philosophy.[o] It may perhaps be thought by

promised by its title some new discovery, before sitting down to read it, I used to try whether my own natural sagacity could lead me to any thing of the kind, and I took care not to lose this innocent pleasure by too hasty a perusal. This answered so often that I at length perceived that I arrived at truth, not as other men do, after blind and precarious guesses, by good luck rather than skill, but that long experience had taught me certain fixed rules, which were of surprising utility, and of which I afterwards made use to discover more truths. Vol. xi. p. 252.

[o] Dogmata ejus metaphysica, velut circa ideas a sensibus remotas, et animæ distinctionem a corpore, et fluxam per se rerum materialium fidem, prorsus Platonica sunt. Argumentum pro existentia Dei, ex eo, quod ens perfectissimum, vel quo majus intelligi non potest, existentiam includit, fuit Anselmi, et in libro "Contra insipientem" inscripto extat inter ejus opera, passimque a scholasticis examinatur. In doctrina de continuo, pleno et loco Aristotelem noster secutus est, Stoicosque in re morali penitus expressit, floriferis ut apes in saltibus omnia libant. In explicatione rerum mechanica Leucippum et Democritum præeuntes habuit qui et vortices ipsos jam docuerant. Jordanus Brunus easdem fere de magnitudine universi ideas habuisse dicitur, quemadmodum et notavit V. CC. Stephanus Spleissius, ut de Gilberto nil dicam, cujus magneticæ considerationes tum per se, tum ad systema universi applicatæ, Cartesio plurimum profuerunt. Explicationem gravitatis per materiæ solidioris rejectionem in tangente, quod in physica Cartesiana prope pulcherrimum est, didicit ex Keplero, qui similitudine palearum motu aquæ in vase gyrantis ad centrum contrusarum rem explicuit primus. Actionem lucis in distans, similitudine baculi pressi jam veteres adumbravere. Circa iridem a M. Antonio de Dominis non parum lucis accepit. Keplerum fuisse primum suum in dioptricis magistrum, et in eo argumento omnes ante se mortales longo intervallo antegressum, fatetur Cartesius in epistolis familiaribus; nam in scriptis, quæ ipse edidit, longè abest a tali confessione aut laude; tametsi illa ratio, quæ rationum directionem explicat, ex compositione nimirum duplicis conatûs perpendicularis ad superficiem et ad eandem paralleli, disertè apud Keplerum extet, qui eodem, ut Cartesius, modo æqualitatem angulorum incidentiæ et reflexionis hinc deducit. Idque gratam mentionem ideo merebatur, quod omnis prope Cartesii ratiocinatio huic innititur principio. Legem refractionis primum invenisse Willebrodum Snellium, Isaacus Vossius patefecit, quanquam non ideo negare ausim, Cartesium in eadem incidere potuisse de suo. Negavit in epistolis Vietam sibi lectum, sed Thomæ Harrioti Angli libros analyticos posthumos anno 1631 editos vidisse multi vix dubitant; usque adeo magnus est eorum consensus

candid minds, that we cannot apply the doctrine of chances to coincidence of reasoning in men of acute and inquisitive spirits, as fairly as we may to that of style or imagery; but, if we hold strictly that the old writer may claim the exclusive praise of a philosophical discovery, we must regret to see such a multitude of feathers plucked from the wing of an eagle.

Recent increase of his fame.

112. The name of Descartes as a great metaphysical writer has revived in some measure of late years; and this has been chiefly owing, among ourselves, to Dugald Stewart; in France, to the growing disposition of their philosophers to cast away their idols of the eighteenth century. "I am disposed," says our Scottish philosopher, "to date the origin of the true philosophy of mind from the Principia (why not the earlier works?) of Descartes, rather than from the Organum of Bacon, or the Essays of Locke; without, however, meaning to compare the French author with our two countrymen, either as a contributor to our stock of *facts* relating to the intellectual phænomena, or as the author of any important conclusion concerning the general laws to which they may be referred." The excellent edition by M. Cousin, in which alone the entire works of Descartes can be found, is a homage that France has recently offered to his memory, and an important contribution to the studious both of metaphysical and mathematical philosophy. I have made use of no other, though it might be desirable for the inquirer to have the Latin original

cum calculo geometriæ Cartesianæ. Sane jam Harriotus æquationem nihilo æqualem posuit, et hinc derivavit, quomodo oriatur æquatio ex multiplicatione radicum in se invicem, et quomodo radicum auctione, diminutione, multiplicatione aut divisione variari æquatio possit, et quomodo proinde natura, et constitutio æquationum et radicum cognosci possit ex terminorum habitudine. Itaque narrat celeberrimus Wallisius, Robervalium, qui miratus erat, unde Cartesio in mentem venisset palmarium illud, æquationem ponere æqualem nihilo ad instar unius quantitatis, ostenso sibi a Domino de Cavendish libro Harrioti exclamasse, Il l'a vu! il l'a vu! vidit, vidit. Reductionem quadrato-quadratæ æquationis ad cubicam superiori jam sæculo invenit Ludovicus Ferrarius, cujus vitam reliquit Cardanus ejus familiaris. Denique fuit Cartesius, ut a viris doctis dudum notatum est, et ex epistolis nimium apparet, immodicus contemptor aliorum, et famæ cupiditate ab artificiis non abstinens, quæ parum generosa videri possunt. Atque hæc profecto non dico animo obtrectandi viro, quem mirificè æstimo, sed eo consilio, ut cuique suum tribuatur, nec unus omnium laudes absorbeat; justissimum enim est, ut inventoribus suus honos constet, nec sublatis virtutum præmiis præclara faciendi studium refrigescat. Leibnitz, apud Brucker v. 255.

at his side, especially in those works which had not been seen in French by their author.

SECTION IV.

On the Metaphysical Philosophy of Hobbes.

113. THE metaphysical philosophy of Hobbes was promulgated in his treatise on Human Nature, which appeared in 1650. This, with his other works, De Cive and De Corpore Politico, were fused into that great and general system, which he published in 1651 with the title of Leviathan. The first part of the Leviathan, "Of Man," follows the several chapters of the treatise on Human Nature with much regularity; but so numerous are the enlargements or omissions, so many are the variations with which the author has expressed the same positions, that they should much rather be considered as two works, than as two editions of the same. They differ more than Lord Bacon's treatise, De Augmentis Scientiarum, does from his Advancement of Learning. I shall, however, blend the two in a single analysis, and this I shall generally give, as far as is possible, consistently with my own limits, in the very words of Hobbes. His language is so lucid and concise, that it would be almost as improper to put an algebraical process in different terms as some of his metaphysical paragraphs. But as a certain degree of abridgment cannot be dispensed with, the reader must not take it for granted, even where inverted commas denote a closer attention to the text, that nothing is omitted, although, in such cases, I never hold it permissible to make any change.

Metaphysical treatises of Hobbes

114. All single thoughts, it is the primary tenet of Hobbes, are representations or appearances of some quality of a body without us, which is commonly called an object. "There is no conception in a man's mind, which hath not at first totally, or by parts, been begotten upon the organs of sense. The rest are derived from that original."[p] In the treatise on Human Nature he dwells long on the immediate causes

His theory of sensation

[p] Leviathan, c. 1.

of sensation; and if no alteration had been made in his manuscript since he wrote his dedication to the Earl of Newcastle in 1640, he must be owned to have anticipated Descartes in one of his most celebrated doctrines. "Because the image in vision, consisting in colour and shape, is the knowledge we have of the qualities of the object of that sense, it is no hard matter for a man to fall into this opinion, that the same colour and shape are the very qualities themselves; and for the same cause, that sound and noise are the qualities of the bell, or of the air. And this opinion hath been so long received, that the contrary must needs appear a great paradox; and yet the introduction of species visible and intelligible (which is necessary for the maintenance of that opinion), passing to and fro from the object, is worse than any paradox, as being a plain impossibility. I shall, therefore, endeavour to make plain these points: 1. That the subject wherein colour and image are inherent is not the object or thing seen. 2. That there is nothing without us (really) which we call an image or colour. 3. That the said image or colour is but an apposition unto us of the motion, agitation or alteration, which the object worketh in the brain, or spirits, or some external substance of the head. 4. That, as in vision, so also in conceptions that arise from the other senses, the subject of their inherence is not the object, but the sentient."[q] And this he goes on to prove. Nothing of this will be found in the Discours sur la Méthode, the only work of Descartes then published; and, even if we believe Hobbes to have interpolated this chapter after he had read the Meditations, he has stated the principle so clearly and illustrated it so copiously, that, so far especially as Locke and the English metaphysicians took it up, we may almost reckon him another original source.

coincident with Descartes.

115. The second chapter of the Leviathan, "On Imagination," begins with one of those acute and original observations we often find in Hobbes: "That when a thing lies still, unless somewhat else stir it, it will lie still for ever, is a truth that no man doubts of. But that when a thing is in motion, it will eternally be in motion, unless somewhat stay it,

Imagination and memory.

[q] Hum. Nat., c. 2.

though the reason be the same, namely, that nothing can change itself, is not so easily assented to. For men measure, not only other men, but all other things, by themselves; and because they find themselves subject after motion to pain and lassitude, think everything else grows weary of motion and seeks repose of its own accord." The physical principle had lately been established, but the reason here given for the contrary prejudice, though not the sole one, is ingenious and even true. Imagination he defines to be "conception remaining, and by little and little decaying after the act of sense."[r] This he afterwards expressed less happily, "the gradual decline of the motion in which sense consists;" his phraseology becoming more and more tinctured with the materialism which he affected in all his philosophy. Neither definition seems at all applicable to the imagination which calls up long past perceptions. "This decaying sense, when we would express the thing itself (I mean fancy itself), we call imagination, but when we would express the decay, and signify that the sense is fading, old and past, it is called memory. So that imagination and memory are but one thing, which for divers considerations hath divers names.[s] It is however evident that imagination and memory are distinguished by something more than their names." The second fundamental error of Hobbes in his metaphysics, his extravagant nominalism, if so it should be called, appears in this sentence, as the first, his materialism, does in that previously quoted.

116. The phænomena of dreaming and the phantasms of waking men are considered in this chapter with the keen observation and cool reason of Hobbes.[t] I am not sure that he has gone more profoundly into psychological speculations in the Leviathan than in the earlier treatise; but it bears witness more frequently to what had probably been the growth of the intervening period, a proneness to political and religious allusion, to magnify civil and to depreciate ecclesiastical power. "If this superstitious fear of spirits were taken away, and with it prognostics from dreams, false prophecies and many other things depending thereon, by which crafty and ambitious persons abuse the simple people, men would

[r] Hum. Nat., c. 3. [s] Lev., c. 2. [t] Hum. Nat., c. 3.

be much more fitted than they are for civil obedience. And this ought to be the work of the schools; but they rather nourish such doctrine." [u]

117. The fourth chapter on Human Nature, and the corresponding third chapter of the Leviathan, entitled On Discourse, or the Consequence and Train of Imagination, are among the most remarkable in Hobbes, as they contain the elements of that theory of association, which was slightly touched afterwards by Locke, but developed and pushed to a far greater extent by Hartley. "The cause," he says, "of the coherence or consequence of one conception to another is their first coherence or consequence at that time when they are produced by sense: as for instance, from St. Andrew the mind runneth to St. Peter, because their names are read together; from St. Peter to a stone, from the same cause; from stone to foundation, because we see them together; and for the same cause from foundation to church, and from church to people, and from people to tumult; and according to this example the mind may run almost from any thing to any thing." [x] This he illustrates in the Leviathan by the well-known anecdote of a question suddenly put by one, in conversation about the death of Charles I., "What was the value of a Roman penny?" Of this *discourse*, as he calls it, in a larger sense of the word than is usual with the logicians, he mentions several kinds; and after observing that the remembrance of succession of one thing to another, that is, of what was antecedent and what consequent and what concomitant, is called an experiment, adds, that "to have had many experiments, is what we call experience, which is nothing else but remembrance of what antecedents have been followed by what consequents." [y]

Discourse or train of imagination.

118. "No man can have a conception of the future, for the future is not yet; but of our conceptions of the past we make a future, or rather call past future relatively." [z] And again: "The present only has a being in nature; things past have a being in the memory only, but things to come have no being at all; the future being but a fiction of the mind, applying the

Experience.

[u] Hum. Nat., c. 3.
[x] Id., c. 4, § 2.
[y] Id.
[z] Id., c. 4, § 7.

sequels of actions past to the actions that are present, which with most certainty is done by him that has most experience, but not with certainty enough. And though it be called prudence, when the event answereth our expectation, yet in its own nature it is but presumption."[a] "When we have observed antecedents and consequents frequently associated, we take one for a sign of the other, as clouds foretell rain, and rain is a sign there have been clouds. But signs are but conjectural, and their assurance is never full or evident. For though a man have always seen the day and night to follow one another hitherto, yet can he not thence conclude they shall do so, or that they have done so, eternally. Experience concludeth nothing universally. But those who have most experience conjecture best, because they have most signs to conjecture by; hence old men, cæteris paribus, and men of quick parts, conjecture better than the young or dull."[b] "But experience is not to be equalled by any advantage of natural and extemporary wit, though perhaps many young men think the contrary." There is a presumption of the past as well as the future founded on experience, as when, from having often seen ashes after fire, we infer from seeing them again that there has been fire. But this is as conjectural as our expectations of the future.[c]

Unconceivableness of infinity.

119. In the last paragraph of the chapter in the Leviathan he adds, what is a very leading principle in the philosophy of Hobbes, but seems to have no particular relation to what has preceded. "Whatsoever we imagine is finite; therefore there is no idea or conception of anything we call infinite. No man can have in his mind an image of infinite magnitude, nor conceive infinite swiftness, infinite time, or infinite force, or infinite power. When we say anything is infinite, we signify only that we are not able to conceive the ends and bounds of the things named, having no conception of the thing, but of our own inability. And therefore the name of God is used, not to make us conceive him, for he is incomprehensible and his greatness and power are inconceivable, but that we may honour him. Also because whatsoever, as I said before, we conceive, has been perceived first by

[a] Lev., c. 3. [b] Hum. Nat., c. 4. [c] Lev., c. 3.

sense, either all at once, or by parts; a man can have no thought, representing anything, not subject to sense. No man, therefore, can conceive anything, but he must conceive it in some place, and indeed with some determinate magnitude, and which may be divided into parts, nor that anything is all in this place and all in another place at the same time, nor that two or more things can be in one and the same place at once. For none of these things ever have, or can be incident to sense, but are absurd speeches, taken upon credit without any signification at all, from deceived philosophers, and deceived or deceiving schoolmen." This, we have seen in the last section, had been already discussed with Descartes. The paralogism of Hobbes consists in his imposing a limited sense on the word idea or conception, and assuming that what cannot be conceived according to that sense has no signification at all.

Origin of language.

120. The next chapter being the fifth in one treatise, and the fourth in the other, may be reckoned, perhaps, the most valuable as well as original in the writings of Hobbes. It relates to speech and language. "The invention of printing," he begins by observing, "though ingenious, compared with the invention of letters, is no great matter. . . . . But the most noble and profitable invention of all others was that of speech, consisting of names or appellations, and their connexion, whereby men register their thoughts, recall them when they are past, and also declare them one to another for mutual utility and conversation; without which there had been amongst men neither commonwealth, nor society, nor content, nor peace, no more than among lions, bears, and wolves. The first author of speech was God himself, that instructed Adam how to name such creatures as he presented to his sight; for the Scripture goeth no further in this matter. But this was sufficient to direct him to add more names, as the experience and use of the creatures should give him occasion, and to join them in such manner by degrees, as to make himself understood; and so by succession of time so much language might be gotten as he had found use for, though not so copious as an orator or philosopher has need of." [d]

[d] Leviathan, c. 4.

121. This account of the original of language appears in general as probable as it is succinct and clear. But the assumption that there could have been no society or mutual peace among mankind without language, the ordinary instrument of contract, is too much founded upon his own political speculations, nor is it proved by the comparison to lions, bears, and wolves, even if the analogy could be admitted; since the state of warfare which he here intimates to be natural to man, does not commonly subsist in these wild animals of the same species. *Sævis inter se convenit ursis*, is an old remark. But taking mankind with as much propensity to violence towards each other as Hobbes could suggest, is it speech, or reason and the sense of self-interest, which has restrained this within the boundaries imposed on it by civil society? The position appears to be that man, with every other faculty and attribute of his nature, except language, could never have lived in community with his fellows. It is manifest, that the mechanism of such a community would have been very imperfect. But possessing his rational powers, it is hard to see why he might not have devised signs to make known his special wants, or why he might not have attained the peculiar prerogative of his species and foundation of society, the exchange of what he liked less for what he liked better.

His political theory interferes.

122. This will appear more evident, and the exaggerated notions of the school of Hobbes as to the absolute necessity of language to the mutual relations of mankind will be checked, by considering what was not so well understood in his age as at present, the intellectual capacities of those who are born deaf, and the resources which they are able to employ. It can hardly be questioned, but that a number of families thrown together in this unfortunate situation, without other intercourse, could by the exercise of their natural reason, as well as the domestic and social affections, constitute themselves into a sort of commonwealth, at least as regular as that of ants and bees. But those whom we have known to want the use of speech have also wanted the sense of hearing, and have thus been shut out from many assistances to the reasoning faculties, which our hypothesis need not exclude. The

Necessity of speech exaggerated.

fair supposition is that of a number of persons merely dumb; and although they would not have laws or learning, it does not seem impossible that they might maintain at least a patriarchal, if not a political, society for many generations. Upon the lowest supposition, they could not be inferior to the Chimpanzees, who are said to live in communities in the forests of Angola.

Use of names.

123. The succession of conceptions in the mind depending wholly on that which they had one to another when produced by the senses, they cannot be recalled at our choice and the need we have of them, "but as it chanceth us to hear and see such things as shall bring them to our mind. Hence brutes are unable to call what they want to mind, and often, though they hide food, do not know where to find it. But man has the power to set up marks or sensible objects, and remember thereby somewhat past. The most eminent of these are names or articulate sounds, by which we recall some conception of things to which we give those names; as the appellation white bringeth to remembrance the quality of such objects as produce that colour or conception in us. It is by names that we are capable of science, as for instance that of number; for beasts cannot number for want of words, and do not miss one or two out of their young, nor could a man without repeating orally or mentally the words of number know how many pieces of money may be before him."[e] We have here another assumption, that the numbering faculty is not stronger in man than in brutes, and also that the former could not have found out how to divide a heap of coins into parcels without the use of words of number. The experiment might be tried with a deaf and dumb child.

Names universal not realities.

124. Of names some are proper, and some common to many or universal, there being nothing in the world universal but names, for the things named are every one of them individual and singular. "One universal name is imposed on many things for their similitude in some quality or other accidents; and whereas a proper name bringeth to mind one thing only, universals recall any one of those many."[f] "The universality of one name to many things hath been the cause that men think the things are themselves universal,

[e] Hum. Nat., c. 5. [f] Lev., c. 4.

and so seriously contend that besides Peter and John, and all the rest of the men that are, have been, or shall be in the world, there is yet something else that we call man, viz. man in general, deceiving themselves by taking the universal or general appellation for the thing it signifieth.[g] For if one should desire the painter to make him the picture of a man, which is as much as to say, of a man in general, he meaneth no more but that the painter should choose what man he pleaseth to draw, which must needs be some of them that are, or have been, or may be, none of which are universal. But when he would have him to draw the picture of the king, or any particular person, he limiteth the painter to that one person he chooseth. It is plain, therefore, that there is nothing universal but names, which are there'ore called indefinite."[h]

125. "By this imposition of names, some of larger, some of stricter signification, we turn the reckoning of the consequences of things imagined in the mind into a reckoning of the consequences of appellations."[i] Hence he thinks that though a man born deaf and dumb might by meditation know that the

How imposed.

[g] "An Universal," he says in his Logic, "is not a name of many things collectively, but of each taken separately (sigillatim sumptorum). Man is not the name of the human species in general, but of each single man, Peter, John, and the rest, separately. Therefore this universal name is not the name of any thing existing in nature, nor of any idea or phantasm formed in the mind, but always of some word or name. Thus when an animal, or a stone, or a ghost (spectrum), or any thing else is called universal, we are not to understand that any man or stone or any thing else was, or is, or can be, an universal, but only that these words animal, stone, and the like, are universal names, that is, names common to many things, and the conceptions corresponding to them in the mind are the images and phantasms of single animals or other things. And therefore we do not need, in order to understand what is meant by an universal, any other faculty than that of imagination, by which we remember that such words have excited the conception in our minds sometimes of one particular thing, sometimes of another." Cap. 2, s. 9. Imagination and memory are used by Hobbes almost as synonyms.

[h] Hum. Nat., c. 5.

[i] It may deserve to be remarked that Hobbes himself, nominalist as he was, did not limit reasoning to comparison of propositions, as some later writers have been inclined to do, and as in his objections to Descartes he might seem to do himself. This may be inferred from the sentence quoted in the text, and more expressly, though not quite perspicuously, from a passage in the Computatio, sive Logica, his Latin treatise published after the Leviathan. Quomodo autem animo *sine verbis tacita cogitatione ratiocinando addere et subtrahere solemus* uno aut altero exemplo ostendendum est. Si quis ergo e longinquo aliquid obscurè videat, etsi nulla sint imposita vocabula, habet tamen ejus rei ideam eandem propter quam impositis nunc vocabulis dicit eam rem esse corpus. Postquam autem propius accesserit, videritque eandem rem certo quodam modo nunc uno, nunc alio in loco esse, habebit ejusdem ideam novam, propter quam nunc talem rem *animatam* vocat, &c. p. 2.

angles of one triangle are equal to two right ones, he could not, on seeing another triangle of different shape, infer the same without a similar process. But by the help of words, after having observed the equality is not consequent on any thing peculiar to one triangle, but on the number of sides and angles which is common to all, he registers his discovery in a proposition. This is surely to confound the antecedent process of reasoning with what he calls the registry, which follows it. The instance, however, is not happily chosen, and Hobbes has conceded the whole point in question, by admitting that the truth of the proposition could be *observed*, which cannot require the use of words.[k] He expresses the next sentence with more felicity. "And thus the consequence found in one particular comes to be registered and remembered as an universal rule, and discharges our mental reckoning of time and place; and delivers us from all labour of the mind saving the first, and makes that which was found true here and now to be true in all times and places."[m]

The subject continued.

126. The equivocal use of names makes it often difficult to recover those conceptions for which they were designed "not only in the language of others, wherein we are to consider the drift and occasion and contexture of the speech, as well as the words themselves, but in our own discourse, which being derived from the custom and common use of speech, representeth unto us not our own conceptions. It is, therefore, a great ability in a man, out of the words, contexture, and other circumstances of language, to deliver himself from equivocation, and to find out the true mean-

[k] The demonstration of the thirty-second proposition of Euclid could leave no one in doubt whether this property were common to all triangles, after it had been proved in a single instance. It is said, however, to be recorded by an ancient writer, that this discovery was first made as to equilateral, afterwards as to isosceles, and lastly as to other triangles. Stewart's Philosophy of Human Mind, vol. ii. chap. iv. sect. 2. The mode of proof must have been different from that of Euclid. And this might possibly lead us to suspect the truth of the tradition. For if the equality of the angles of a triangle to two right angles admitted of any *elementary* demonstration, such as might occur in the infancy of geometry, without making use of the property of parallel lines, assumed in the twelfth axiom of Euclid, the difficulties consequent on that assumption would readily be evaded. See the Note on Euclid, i. 29, by Playfair, who has given a demonstration of his own, but one which involves the idea of motion rather more than was usual with the Greeks in their elementary propositions.

[m] Lev.

ing of what is said; and this is it we call understanding." [n] "If speech be peculiar to man, as for aught I know it is, then is understanding peculiar to him also; understanding being nothing else but conception caused by speech." [o] This definition is arbitrary, and not conformable to the usual sense. "True and false," he observes afterwards, "are attributes of speech, not of things; where speech is not, there is neither truth nor falsehood, though there may be error. Hence as truth consists in the right ordering of names in our affirmations, a man that seeks precise truth hath need to remember what every word he uses stands for, and place it accordingly. In geometry, the only science hitherto known, men begin by definitions. And every man who aspires to true knowledge should examine the definitions of former authors, and either correct them or make them anew. For the errors of definitions multiply themselves, according as the reckoning proceeds, and lead men into absurdities, which at last they see, but cannot avoid without reckoning anew from the beginning in which lies the foundation of their errors. . . . . In the right definition of names, lies the first use of speech, which is the acquisition of science. And in wrong or no definitions lies the first abuse from which proceed all false and senseless tenets, which make those men that take their instruction from the authority of books, and not from their own meditation, to be as much below the condition of ignorant men, as men endued with true science are above it. For between true science and erroneous doctrine, ignorance is in the middle. Words are wise men's counters—they do but reckon by them; but they are the money of fools." [p]

Names differently imposed.

127. "The names of such things as affect us, that is, which please and displease us, because all men be not alike affected with the same thing, nor the same man at all times, are in the common discourse of men of inconstant signification. For seeing all names are imposed to signify our conceptions, and all our affections are but conceptions, when we conceive the same thoughts differently, we can hardly avoid different naming of them. For though the nature of that we conceive be the same, yet the diversity of our recep-

[n] Hum. Nat. [o] Lev. [p] Lev.

tion of it, in respect of different constitutions of body and prejudices of opinion, gives every thing a tincture of our different passions. And therefore in reasoning, a man must take heed of words, which, besides the signification of what we imagine of their nature, have a signification also of the nature, disposition, and interest of the speaker; such as are the names of virtues and vices; for one man calleth wisdom what another calleth fear, and one cruelty what another justice; one prodigality what another magnanimity, and one gravity what another stupidity, &c. And therefore such names can never be true grounds of any ratiocination. No more can metaphors and tropes of speech, but these are less dangerous because they profess their inconstancy, which the other do not."[q] Thus ends this chapter of the Leviathan, which, with the corresponding one in the treatise on Human Nature, are, notwithstanding what appear to me some erroneous principles, as full, perhaps, of deep and original thoughts as any other pages of equal length on the art of reasoning and philosophy of language. Many have borrowed from Hobbes without naming him; and in fact he is the founder of the Nominalist school in England. He may probably have conversed with Bacon on these subjects; we see much of that master's style of illustration. But as Bacon was sometimes too excursive to sift particulars, so Hobbes has sometimes wanted a comprehensive view.

Knowledge.

128. "There are," to proceed with Hobbes, "two kinds of knowledge; the one, sense, or knowledge original, and remembrance of the same; the other, science, or knowledge of the truth of propositions, derived from understanding. Both are but experience, one of things from without, the other from the proper use of words in language, and experience being but remembrance, all knowledge is remembrance. Knowledge implies two things, truth and evidence; the latter is the concomitance of a man's conception with the words that signify such conception in the act of ratiocination." If a man does not annex a meaning to his words, his conclusions are not evident to him. "Evidence is to truth as the sap to the tree, which, so far as it creepeth along with the body and branches,

[q] Lev.

keepeth them alive; when it forsaketh them they die; for this evidence, which is meaning with our words, is the life of truth." "Science is evidence of truth, from some beginning or principle of sense. The first principle of knowledge is that we have such and such conceptions; the second, that we have thus and thus named the things whereof they are conceptions; the third is, that we have joined those names in such manner as to make true propositions; the fourth and last is, that we have joined these propositions in such manner as they be concluding, and the truth of the conclusion said to be known." [r]

129. Reasoning is the addition or subtraction of parcels. "In whatever matter there is room for addition and subtraction, there is room for reason; and where these have no place, then reason has nothing at all to do." [s] This is neither as perspicuously expressed, nor as satisfactorily illustrated, as is usual with Hobbes; but it is true that all syllogistic reasoning is dependent upon quantity alone, and consequently upon that which is capable of addition and subtraction. This seems not to have been clearly perceived by some writers of the old Aristotelian school, or perhaps by some others, who, as far as I can judge, have a notion that the relation of a genus to a species, or a predicate to its subject, considered merely as to syllogism or deductive reasoning, is something different from that of a whole to its parts; which would deprive that logic of its chief boast, its axiomatic evidence. But, as this would appear too dry to some readers, I shall pursue it farther in a note.[t]

Reasoning.

[r] Hum. Nat., c. 6. [s] Lev., c. 5.

[t] Dugald Stewart (Elements of Philosophy, &c., vol. ii. ch. ii. sect. 2) has treated this theory of Hobbes on reasoning, as well as that of Condillac, which seems much the same, with great scorn, as "too puerile to admit of (*i. e.* require) refutation." I do not myself think the language of Hobbes, either here, or as quoted by Stewart from his Latin treatise on Logic, so perspicuous as usual. But I cannot help being of opinion that he is substantially right. For surely when we assert that A is B, we assert that all things which fall under the class B, taken collectively, comprehend A; or that $B = A + X$; B being here put, it is to be observed, not for the *res prædicata* itself, but for the concrete *de quibus prædicandum est.* I mention this, because this elliptical use of the word predicate seems to have occasioned some confusion in writers on logic. The predicate, strictly taken, being an attribute or quality, cannot be said to include or contain the subject. But to return, when we say $B=A+X$, or $B-X=A$, since we do not compare, in such a proposition as is here supposed, A with X, we only mean that $A=A$,

130. A man may reckon without the use of words in particular things, as in conjecturing from the sight of anything what is likely to follow; and

False reasoning.

or, that a certain part of B is the same as itself. Again, in a particular affirmative, Some A is B, we assert that part of A, or A−Y, is contained in B, or that B may be expressed by $\overline{A-Y}+X$. So also when we say, Some A is not B, we equally divide the class or genus B into A − Y and X, or assert that $B=\overline{A-Y}+X$; but in this case, the subject is no longer A−Y, but the remainder, or other part of A, namely, Y; and this is not found in either term of the predicate. Finally, in the universal negative, No A (neither $\overline{A-Y}$ nor Y) is B, the $\overline{A-Y}$ of the predicate vanishes or has no value, and B becomes equal to X, which is incapable of measurement with A, and consequently with either A−Y or Y, which make up A. Now if we combine this with another proposition, in order to form a syllogism, and say that C is A, we find, as before, that A=C+Z; and substituting this value of A in the former proposition, it appears that B=C+Z+X. Then, in the conclusion, we have, C is B; that is, C is a part of C+Z+X. And the same in the three other cases or moods of the figure. This seems to be, in plainer terms, what Hobbes means by addition or subtraction of parcels, and what Condillac means by rather a lax expression, that equations and propositions are at bottom the same, or, as he phrases it better, "l'évidence de raison consiste uniquement dans l'identité." If we add to this, as he probably intended, non-identity, as the condition of all negative conclusions, it seems to be no more than is necessarily involved in the fundamental principle of syllogism, the *dictum de omni et nullo:* which may be thus reduced to its shortest terms: "Whatever can be divided into parts, includes all those parts, and nothing else." This is not limited to mathematical quantity, but includes every thing which admits of more and less. Hobbes has a good passage in his Logic on this: Non putandum est computationi, id est, ratiocinationi in numeris tantum locum esse, tanquam homo a cæteris animantibus, quod censuisse narratur Pythagoras, sola numerandi facultate distinctus esset; nam et magnitudo magnitudini, corpus corpori, motus motui, tempus tempori, gradus qualitatis gradui, actio actioni, conceptus conceptui, proportio proportioni, oratio orationi, nomen nomini, in quibus omne philosophiæ genus continetur, adjici adimique potest.

But it does not follow by any means that we should assent to the strange passages quoted by Stewart from Condillac and Diderot, which reduce all *knowledge* to identical propositions. Even in geometry, where the objects are strictly magnitudes, the countless variety in which their relations may be exhibited constitutes the riches of that inexhaustible science; and in moral or physical propositions, the relation of quantity between the subject and predicate, as concretes, which enables them to be compared, though it is the sole foundation of all *general deductive reasoning*, or syllogism, has nothing to do with the other properties or relations, of which we obtain a knowledge by means of that comparison. In mathematical reasoning we infer as to quantity through the medium of quantity; in other reasoning we use the same medium, but our inference is as to truths which do not lie within that category. Thus in the hackneyed instance, All men are mortal; that is, mortal creatures include men and something more, it is absurd to assert, that we only know that men are men. It is true that our knowledge of the truth of the proposition comes by the help of this comparison of men in the subject with men as implied in the predicate; but the very nature of the proposition discovers a constant relation between the individuals of the human species and that mortality which is predicated of them along with others; and it is in this, not in an identical equation, as Diderot seems to have thought, that our *knowledge* consists.

The remarks of Stewart's friend, M. Prevost of Geneva, on the principle of identity as the basis of mathematical science, and which the former has can-

if he reckons wrong, it is error. But in reasoning on general words, to fall on a false inference is not error,

didly subjoined to his own volume, appear to me very satisfactory. Stewart comes to admit that the dispute is nearly verbal; but we cannot say that he originally treated it as such; and the principle itself, both as applied to geometry and to logic, is, in my opinion, of some importance to the clearness of our conceptions as to those sciences. It may be added, that Stewart's objection to the principle of identity as the basis of geometrical reasoning is less forcible in its application to syllogism. He is willing to admit that magnitudes capable of coincidence by immediate superposition may be reckoned identical, but scruples to apply such a word to those which are dissimilar in figure, as the rectangles of the means and extremes of four proportional lines. Neither one nor the other are, in fact, identical as real quantities, the former being necessarily conceived to differ from each other by position in space, as much as the latter; so that the expression he quotes from Aristotle, ἐν τουτοῖς ἡ ἰσότης ἑνότης, or any similar one of modern mathematicians, can only refer to the abstract magnitude of their areas, which being divisible into the same number of equal parts, they are called the same. And there seems no real difference in this respect between two circles of equal radii and two such rectangles as are supposed above, the identity of their magnitudes being a distinct truth, independent of any consideration either of their figure or their position. But, however this may be, the identity of the subject with part of the predicate in an affirmative proposition is never fictitious, but real. It means that the persons or things in the one are strictly the same beings with the persons or things to which they are compared in the other, though, through some difference of relations, or other circumstance, they are expressed in different language. It is needless to give examples, as all those who can read this note at all will know how to find them.

I will here take the liberty to remark, though not closely connected with the present subject, that Archbishop Whately is not quite right in saying (Elements of Logic, p. 46), that in affirmative propositions the predicate is *never* distributed. Besides the numerous instances where this is, in point of fact, the case, all which he justly excludes, there are many in which it is involved in the very form of the proposition. Such are those which assert identity or equality, and such are all definitions. Of the first sort are all the theorems in geometry, asserting an equality of magnitudes or ratios, in which the subject and predicate may always change places. It is true that in the instance given in the work quoted, that equilateral triangles are equiangular, the converse requires a separate proof, and so in many similar cases. But in these the predicate is not distributed by the form of the proposition; they assert no equality of magnitude.

The position, that where such equality is affirmed, the predicate is not *logically* distributed, would lead to the consequence that it can only be *converted* into a particular affirmation. Thus after proving that the square of the hypothenuse, in all right-angled triangles, is equal to those of the sides, we could only infer that the squares of the sides are *sometimes* equal to that of the hypothenuse, which could not be maintained without rendering the rules of logic ridiculous. The most general mode of considering the question, is to say, as we have done above, that, in an universal affirmative, the predicate B (that is, the class of which B is predicated) is composed of A the subject, and X, an unknown remainder. But if, by the very nature of the proposition, we perceive that X is nothing, or has no value, it is plain that the subject measures the entire predicate, and, vice versâ, the predicate measures the subject; in other words, each is taken universally, or distributed.

[A critic upon the first edition has observed, that "nothing is clearer than that in these propositions the predicate is not necessarily distributed;" and even hints a doubt whether I understood the terms rightly. Edinburgh Review, vol. lxxxii. p. 219. This suspicion of my ignorance as to the meaning of the two commonest words in logic I need not probably repel; as to the peremptory assertion of this critic, without any proof beyond his own

though often so called, but absurdity.[u] "If a man should talk to me of a round quadrangle, or accidents of bread in cheese, or immaterial substances, or of a free subject, a free will or any free, but free from being hindered by opposition, I should not say he were in error, but that his words were without meaning, that is to say, absurd." Some of these propositions, it will occur, are intelligible in a reasonable sense, and not contradictory, except by means of an arbitrary definition which he who employs them does not admit. It may be observed here, as we have done before, that Hobbes does not confine reckoning, or reasoning, to universals, or even to words.

authority, that in propositions denoting equality of magnitude, the predicate is not *necessarily* distributed, if his own reflections do not convince him, I can only refer him to Aristotle's words: ἐν τουτοῖς ἡ ἰσότης ἑνότης; and I presume he does not doubt that in identical propositions of the form, A est A, the distribution of the predicate, or the convertibility of the proposition, which is the same thing, is manifest.—1842.]

[Reid observes, in his Brief Account of Aristotle's Logic, that "the doctrine of the conversion of propositions is not so complete as it appears. How, for instance, shall we convert this proposition, God is omniscient?" Sir W. Hamilton, who, as editor of Reid, undertakes the defence against him of every thing in the established logic, rather curiously answers, in his notes on this passage: "By saying, An, or The, omniscient is God." (Hamilton's edition of Reid, p. 697.) The rule requires, "An omniscient," a conversion into the particular; but, as this would be shocking, he substitutes, as an alternative, *the*, which is to take generally or distribute the predicate in the first proposition; and to this the nature of the proposition leads us, as it does in innumerable cases. However, as logical writers, especially the recent, commonly exclude all consideration of the subject-matter of propositions, it may be correct to say, with Archbishop Whately, that, as a rule of syllogism, the predicate is not distributed. Aristotle himself, though he lays this down as a formal rule, does not hesitate to say, that where the predicate is the *proprium* (ἴδιον) or characteristic of the subject, and of nothing else, it may be reciprocated (ἀντικατηγορεῖται) with the subject; as if it is the *proprium* of a man to be capable of learning grammar, all men are capable of being grammarians, and all who are such are men. Topica, i. 4. And in the well-known passage upon inductive syllogism, Analyt. Prior., l. ii. c. 23, he shows the minor premise to be convertible into an universal affirmative, by which alone such a syllogism differs from the logical form called Darapti. But as Aristotle notoriously considers syllogisms in their matter as well as form, the modern writers, who confine themselves to the latter, are not concluded by his authority. Their theory, which not only reduces all logic to syllogism, but all syllogism to a very few rules of form, so that we may learn every thing that can be learned in this art through the letters A, B, and C, without any examples at all, appears to render it more jejune and unprofitable than ever. The comparison which some have made of this literal logic with algebra is surely not to the purpose, for we cannot move a step in algebra without known as well as unknown quantities. As soon as we substitute real examples, we must perceive that the predicate *is* sometimes distributed in affirmative propositions by the sense of the propositions themselves, and without any extrinsic proof, which is all that I meant.—1847.]

[u] Lev., c. 5

131. Man has the exclusive privilege of forming general theorems. But this privilege is allayed by another, that is, by the privilege of absurdity, to which no living creature is subject, but man only. And of men those are of all most subject to it, that profess philosophy. . . . For there is not one that begins his ratiocination from the definitions or explications of the names they are to use, which is a method used only in geometry, whose conclusions have thereby been made indisputable. He then enumerates seven causes of absurd conclusions; the first of which is the want of definitions, the others are erroneous imposition of names. If we can avoid these errors, it is not easy to fall into absurdity (by which he of course only means any wrong conclusion) except perhaps by the length of a reasoning. "For all men," he says, "by nature reason alike, and well, when they have good principles. Hence it appears that reason is not as sense and memory born with us, nor gotten by experience only, as prudence is, but attained by industry, in apt imposing of names, and in getting a good and orderly method of proceeding from the elements to assertions, and so to syllogisms. Children are not endued with reason at all till they have attained the use of speech, but are called reasonable creatures, for the possibility of having the use of reason hereafter. And reasoning serves the generality of mankind very little, though with their natural prudence without science they are in better condition than those who reason ill themselves, or trust those who have done so."[x] It has been observed by Buhle, that Hobbes had more respect for the Aristotelian forms of logic than his master Bacon. He has in fact written a short treatise, in his Elementa Philosophiæ, on the subject; observing, however, therein, that a true logic will be sooner learned by attending to geometrical demonstrations than by drudging over the rules of syllogism, as children learn to walk not by precept but by habit.[y]

Its frequency.

[x] Lev., c. 5.

[y] Citius multo veram logicam discunt qui mathematicorum demonstrationibus, quam qui logicorum syllogizandi præceptis legendis tempus conterunt, haud aliter quam parvuli pueri gressum formare discunt non præceptis sed sæpe gradiendo. C. iv. p. 30. Atque hæc sufficiunt (he says afterwards) de syllogismo, qui est tanquam gressus philosophiæ; nam et quantum necesse est ad cognoscendum unde vim suam habeat omnis

132. "No discourse whatever," he says truly in the seventh chapter of the Leviathan, "can end in absolute knowledge of fact, past or to come. For as to the knowledge of fact, it is originally sense; and ever after memory. And for the knowledge of consequence, which I have said before is called science, it is not absolute but conditional. No man can know by discourse that this or that is, has been, or will be, which is to know absolutely; but only that if this is, that is; if this has been, that has been; if this shall be, that shall be; which is to know conditionally, and that not the consequence of one thing to another, but of one name of a thing to another name of the same thing. And therefore when the discourse is put into speech and begins with the definitions of words, and proceeds by connexion of the same into general affirmations, and of those again into syllogisms, the end or last sum is called the conclusion, and the thought of the mind by it signified is that conditional knowledge of the consequence of words which is commonly called science. But if the first ground of such discourse be not definitions; or if definitions be not rightly joined together in syllogisms, then the end or conclusion is again opinion, namely, of the truth of somewhat said, though sometimes in absurd and senseless words, without possibility of being understood." [z]

Knowledge of fact not derived from reasoning.

133. "Belief, which is the admitting of propositions upon trust, in many cases is no less free from doubt than perfect and manifest knowledge; for as there is nothing whereof there is not some cause, so when there is doubt, there must be some cause thereof conceived. Now there be many things which we receive from the report of others, of which it is impossible to imagine any cause of doubt; for what can be opposed against the consent of all men, in things they can know and have no cause to report otherwise than they are, such as is great part of our histories, unless a man would say that all the world had conspired to deceive him?" [a] Whatever we believe on the authority of the speaker,

Belief.

argumentatio legitima, tantum diximus; et omnia accumulare quæ dici possunt, æque superfluum esset ac si quis ut dixi puerulo ad gradiendum præcepta dare velit; acquiritur enim ratiocinandi ars non præceptis sed usu et lectione eorum librorum in quibus omnia severis demonstrationibus transiguntur. C. v. p. 35.

[z] Lev., c. 7.

[a] Hum. Nat. c. 6.

he is the object of our faith. Consequently when we believe that the Scriptures are the word of God, having no immediate revelation from God himself, our belief, faith, and trust is in the church, whose word we take and acquiesce therein. Hence all we believe on the authority of men, whether they be sent from God or not, is faith in men only.[b] We have no certain knowledge of the truth of Scripture, but trust the holy men of God's church succeeding one another from the time of those who saw the wondrous works of God Almighty in the flesh. And as we believe the Scriptures to be the word of God on the authority of the church, the interpretation of the Scripture in case of controversy ought to be trusted to the church rather than private opinion.[c]

134. The ninth chapter of the Leviathan contains a synoptical chart of human science or "knowledge of consequences," also called philosophy. He divides it into natural and civil, the former into consequences from accidents common to all bodies, quantity and motion, and those from qualities otherwise called physics. The first includes astronomy, mechanics, architecture, as well as mathematics. The second he distinguishes into consequences from qualities of bodies transient, or meteorology, and from those of bodies permanent, such as the stars, the atmosphere, or terrestrial bodies. The last are divided again into those without sense, and those with sense; and these into animals and men. In the consequences from the qualities of animals generally he reckons optics and music; in those from men we find ethics, poetry, rhetoric, and logic. These altogether constitute the first great head of natural philosophy. In the second, or civil philosophy, he includes nothing but the rights and duties of sovereigns and their subjects. This chart of human knowledge is one of the worst that has been propounded, and falls much below that of Bacon.[d]

Chart of science.

135. This is the substance of the philosophy of Hobbes, so far as it relates to the intellectual faculties, and especially to that of reasoning. In the seventh and two following chapters of the treatise on

Analysis of passions.

[b] Lev., c. 7. [c] Hum. Nat., c. 11. [d] Lev., c. 9.

Human Nature, in the ninth and tenth of the Leviathan, he proceeds to the analysis of the passions. The motion in some internal substance of the head, if it does not stop there, producing mere conceptions, proceeds to the heart, helping or hindering the vital motions, which he distinguishes from the voluntary, exciting in us pleasant or painful affections, called passions. We are solicited by these to draw near to that which pleases us, and the contrary. Hence pleasure, love, appetite, desire, are divers names for divers considerations of the same thing. As all conceptions we have immediately by the sense are delight or pain or appetite or fear, so are all the imaginations after sense. But as they are weaker imaginations, so are they also weaker pleasures or weaker pains.[e] All delight is appetite, and presupposes a further end. There is no utmost end in this world, for while we live we have desires, and desire presupposes a further end. We are not therefore to wonder that men desire more, the more they possess; for felicity, by which we mean continual delight, consists not in having prospered, but in prospering.[f] Each passion, being, as he fancies, a continuation of the motion which gives rise to a peculiar conception, is associated with it. They all, except such as are immediately connected with sense, consist in the conception of a power to produce some effect. To honour a man, is to conceive that he has an excess of power over some one with whom he is compared: hence qualities indicative of power, and actions significant of it, are honourable; riches are honoured as signs of power, and nobility is honourable as a sign of power in ancestors.[g]

Good and evil relative terms.

136. "The constitution of man's body is in perpetual mutation, and hence it is impossible that all the same things should always cause in him the same appetites and aversions; much less can all men consent in the desire of any one object. But whatsoever is the object of any man's appetite or desire, that is it which he for his part calls good, and the object of his hate and aversion, evil, or of his contempt, vile and inconsiderable. For these words of good, evil, and contemptible are ever used with relation to the person

[e] Hum. Nat., c. 7. [f] Hum. Nat., c. 7. Lev. c. 11. [g] Hum. Nat., c. 8.

using them; there being nothing simply and absolutely so; nor any common rule of good and evil, to be taken from the nature of the objects themselves, but from the person of the man, where there is no commonwealth, or in a commonwealth from the person that represents us, or from an arbitrator or judge, whom men disagreeing shall by consent set up, and make his sentence the rule thereof."[h]

His paradoxes.

137. In prosecuting this analysis all the passions are resolved into self-love, the pleasure that we take in our own power, the pain that we suffer in wanting it. Some of his explications are very forced. Thus weeping is said to be from a sense of our want of power. And here comes one of his strange paradoxes. "Men are apt to weep that prosecute revenge, when the revenge is suddenly stopped or frustrated by the repentance of their adversary; *and such are the tears of reconciliation.*"[k] So resolute was he to resort to any thing the most preposterous, rather than admit a moral feeling in human nature. His account of laughter is better known, and perhaps more probable, though not explaining the whole of the case. After justly observing that whatsoever it be that moves laughter, it must be new and unexpected, he defines it to be "a sudden glory arising from a sudden conception of some eminency in ourselves, by comparison with the infirmity of others, or with our own formerly, for men laugh at the follies of themselves past." It might be objected, that those are most prone to laughter who have least of this glorying in themselves, or undervaluing of their neighbours.

His notion of love.

138. "There is a great difference between the desire of a man when indefinite, and the same desire limited to one person, and this is that love which is the great theme of poets. But notwithstanding their praises, it must be defined by the word need; for it is a conception a man hath of his need of that one person desired."[m] There is yet another passion sometimes called love, but more properly good-will or charity. There can be no greater argument to a man of his own power than to find himself able not only to accomplish his own desires, but also to assist other men in theirs; and this is that conception wherein consists charity.

h Lev., c. 6.

k Hum. Nat., c. 9; Lev., c. 6 and 10.

m Hum. Nat., c. 9.

In which first is contained that natural affection of parents towards their children, which the Greeks call στοργή, as also that affection wherewith men seek to assist those that adhere unto them. But the affection wherewith men many times bestow their benefits on strangers is not to be called charity, but either contract, whereby they seek to purchase friendship, or fear, which makes them to purchase peace."[n] This is equally contrary to notorious truth, there being neither fear nor contract in generosity towards strangers. It is, however, not so extravagant as a subsequent position, that in beholding the danger of a ship in a tempest, though there is pity, which is grief, yet "the delight in our own security is so far predominant, that men usually are content in such a case to be spectators of the misery of their friends."[o]

Curiosity.

139. As knowledge begins from experience, new experience is the beginning of new knowledge. Whatever, therefore, happens new to a man gives him the hope of knowing somewhat he knew not before. This appetite of knowledge is curiosity. It is peculiar to man; for beasts never regard new things, except to discern how far they may be useful, while man looks for the cause and beginning of all he sees.[p] This attribute of curiosity seems rather hastily denied to beasts. And as men, he says, are always seeking new knowledge, so are they always deriving some new gratification. There is no such thing as perpetual tranquillity of mind while we live here, because life itself is but motion, and can never be without desire, nor without fear, no more than without sense. "What kind of felicity God hath ordained to them that devoutly honour him, a man shall no sooner know than enjoy, being joys that now are as incomprehensible, as the word of schoolmen, beatifical vision, is unintelligible."[q]

Difference of intellectual capacities.

140. From the consideration of the passions Hobbes advances to inquire what are the causes of the difference in the intellectual capacities and dispositions of men.[r] Their bodily senses are nearly alike, whence he precipitately infers

[n] Hum. Nat., c. 9.

[o] Id., ibid. This is an exaggeration of some well-known lines of Lucretius, which are themselves exaggerated.

[p] Hum. Nat., c. 9.

[q] Lev., c. 6 and c. 11.

[r] Hum. Nat., c. 10.

there can be no great difference in the brain. Yet men differ much in their bodily constitution, whence he derives the principal differences in their minds; some being addicted to sensual pleasures are less curious as to knowledge, or ambitious as to power. This is called dulness, and proceeds from the appetite of bodily delight. The contrary to this is a quick ranging of mind accompanied with curiosity in comparing things that come into it, either as to unexpected similitude, in which fancy consists, or dissimilitude in things appearing the same, which is properly called judgment; "for to judge is nothing else but to distinguish and discern. And both fancy and judgment are commonly comprehended under the name of wit, which seems to be a tenuity and agility of spirits, contrary to that restiness of the spirits supposed in those who are dull."[s]

141. We call it levity, when the mind is easily diverted, and the discourse is parenthetical; and this proceeds from curiosity with too much equality and indifference; for when all things make equal impression and delight, they equally throng to be expressed. A different fault is indocibility, or difficulty of being taught; which must arise from a false opinion that men know already the truth of what is called in question; for certainly they are not otherwise so unequal in capacity as not to discern the difference of what is proved and what is not, and therefore if the minds of men were all of white paper, they would all most equally be disposed to acknowledge whatever should be in right method, and by right ratiocination delivered to them. But when men have once acquiesced in untrue opinions, and registered them as authentical records in their minds, it is no less impossible to speak intelligibly to such men than to write legibly on a paper already scribbled over. The immediate cause, therefore, of indocibility is prejudice, and of prejudice false opinion of our own knowledge.[t]

142. Intellectual virtues are such abilities as go by the name of a good wit, which may be natural or acquired. "By natural wit," says Hobbes, "I mean not that which a man hath from his birth, for

Wit and fancy.

[s] Hum. Nat. [t] Id.

that is nothing else but sense; wherein men differ so little from one another, and from brute beasts, as it is not to be reckoned among virtues. But I mean that wit which is gotten by use only and experience, without method, culture, or instruction, and consists chiefly in celerity of imagining and steady direction. And the difference in this quickness is caused by that of men's passions that love and dislike some one thing, some another, and therefore some men's thoughts run one way, some another; and are held to, and observe differently the things that pass through their imagination." Fancy is not praised without judgment and discretion, which is properly a discerning of times, places, and persons; but judgment and discretion is commended for itself without fancy: without steadiness and direction to some end, a great fancy is one kind of madness, such as they have who lose themselves in long digressions and parentheses. If the defect of discretion be apparent, how extravagant soever the fancy be, the whole discourse will be taken for a want of wit.[u]

Differences in the passions.

143. The causes of the difference of wits are in the passions; and the difference of passions proceeds partly from the different constitution of the body and partly from different education. Those passions are chiefly the desire of power, riches, knowledge, or honour; all which may be reduced to the first, for riches, knowledge, and honour are but several sorts of power. He who has no great passion for any of these, though he may be so far a good man as to be free from giving offence, yet cannot possibly have either a great fancy or much judgment. To have weak passions is dulness, to have passions indifferently for every thing giddiness and distraction, to have stronger passions for any thing than others have is madness.

Madness.

Madness may be the excess of many passions; and the passions themselves, when they lead to evil, are degrees of it. He seems to have had some notion of what Butler is reported to have thrown out as to the madness of a whole people. "What argument for madness can there be greater, than to clamour, strike, and throw stones at our best friends? Yet this is

[u] Lev., c. 8.

somewhat less than such a multitude will do. For they will clamour, fight against, and destroy those by whom all their lifetime before they have been protected, and secured from injury. And if this be madness in the multitude, it is the same in every particular man."[x]

144. There is a fault in some men's habit of discoursing which may be reckoned a sort of madness, which is when they speak words with no signification at all. "And this is incident to none but those that converse in questions of matters incomprehensible as the schoolmen, or in questions of abstruse philosophy. The common sort of men seldom speak insignificantly, and are therefore by those other egregious persons counted idiots. But to be assured their words are without any thing correspondent to them in the mind, there would need some examples; which if any man require, let him take a schoolman into his hands, and see if he can translate any one chapter concerning any difficult point, as the Trinity, the Deity, the nature of Christ, transubstantiation, free-will, &c., into any of the modern tongues, so as to make the same intelligible, or into any tolerable Latin, such as they were acquainted with that lived when the Latin tongue was vulgar." And after quoting some words from Suarez, he adds, "When men write whole volumes of such stuff, are they not mad, or intend to make others so?"[y]

Unmeaning language.

145. The eleventh chapter of the Leviathan, on manners, by which he means those qualities of mankind which concern their living together in peace and unity, is full of Hobbes's caustic remarks on human nature. Often acute, but always severe, he ascribes overmuch to a deliberate and calculating selfishness. Thus the reverence of antiquity is referred to "the contention men have with the living, not with the dead, to these ascribing more than due that they may obscure the glory of the other." Thus, also, "to have received from one to whom we think ourselves equal, greater benefits than we can hope to requite, disposes to counterfeit love, but really to secret hatred, and puts a man into the estate of a desperate debtor, that in declining the sight of his creditor, tacitly wishes him

Manners.

[x] Lev., c. 8

[y] Lev.

where he might never see him more. For benefits oblige, and obligation is thraldom; and unrequitable obligation perpetual thraldom, which is to one's equal hateful." He owns, however, that to have received benefits from a superior, disposes us to love him; and so it does where we can hope to requite even an equal. If these maxims have a certain basis of truth, they have at least the fault of those of Rochefoucault; they are made too generally characteristic of mankind.

Ignorances and prejudice.

146. Ignorance of the signification of words disposes men to take on trust not only the truth they know not, but also errors and nonsense. For neither can be detected without a perfect understanding of words. "But ignorance of the causes and original constitution of right, equity, law, and justice, disposes a man to make custom and example the rule of his actions, in such manner as to think that unjust which it has been the custom to punish, and that just, of the impunity and approbation of which they can produce an example, or, as the lawyers which only use this false measure of justice barbarously call it, a precedent." "Men appeal from custom to reason, and from reason to custom, as it serves their turn, receding from custom when their interest requires it, and setting themselves against reason as oft as reason is against them; which is the cause that the doctrine of right and wrong is perpetually disputed both by the pen and the sword; whereas the doctrine of lines and figures is not so, because men care not in that subject what is truth, as it is a thing that crosses no man's ambition, profit, or lust. For I doubt not, but if it had been a thing contrary to any man's right of dominion, or to the interest of men that have dominion, that the three angles of a triangle should be equal to two angles of a square, that doctrine should have been, if not disputed, yet by the burning of all books of geometry, suppressed, as far as he whom it concerned was able."[1] This excellent piece of satire has been often quoted, and sometimes copied, and does not exaggerate the pertinacity of mankind in resisting the evidence of truth, when it thwarts the interests and passions of any particular sect or com-

[1] Lev., c. 11.

munity. In the earlier part of the paragraph it seems not so easy to reconcile what Hobbes has said with his general notions of right and justice; since if these resolve themselves, as is his theory, into mere force, there can be little appeal to reason, or to anything else than custom and precedent, which are commonly the exponents of power.

147. In the conclusion of this chapter of the Leviathan as well as in the next, he dwells more on the nature of religion than he had done in the former treatise, and so as to subject himself to the imputation of absolute atheism, or at least of a denial of most attributes which we assign to the Deity. "Curiosity about causes," he says, "led men to search out, one after the other, till they came to this necessary conclusion, that there is some eternal cause which men call God. But they have no more idea of his nature, than a blind man has of fire, though he knows that there is something that warms him. So by the visible things of this world and their admirable order, a man may conceive there is a cause of them, which men call God, and yet not have an idea or image of him in his mind. And they that make little inquiry into the natural causes of things are inclined to feign several kinds of powers invisible, and to stand in awe of their own imaginations. And this fear of things invisible is the natural seed of that which every one in himself calleth religion, and in them that worship or fear that power otherwise than they do, superstition."

His theory of religion.

148. "As God is incomprehensible, it follows that we can have no conception or image of the Deity; and consequently all his attributes signify our inability or defect of power to conceive any thing concerning his nature, and not any conception of the same, excepting only this, that there is a God. Men that by their own meditation arrive at the acknowledgment of one infinite, omnipotent, and eternal God, choose rather to confess this is incomprehensible and above their understanding, than to define his nature by spirit incorporeal, and then confess their definition to be unintelligible."[a] For concerning such spirits he holds that it is not possible by

[a] Lev., c. 12.

natural means only to come to the knowledge of so much as that there are such things.[b]

149. Religion he derives from three sources—the desire of men to search for causes, the reference of every thing that has a beginning to some cause, and the observation of the order and consequence of things. But the two former lead to anxiety, for the knowledge that there have been causes of the effects we see, leads us to anticipate that they will in time be the causes of effects to come; so that every man, especially such as are over-provident, is "like Prometheus, the prudent man, as his name implies, who was bound to the hill Caucasus, a place of large prospect, where an eagle feeding on his liver devoured as much by day as was repaired by night; and so he who looks too far before him, has his heart all day long gnawed by the fear of death, poverty, or other calamity, and has no repose nor pause but in sleep." This is an allusion made in the style of Lord Bacon. The ignorance of causes makes men fear some invisible agent, like the gods of the Gentiles; but the investigation of them leads us to a God eternal, infinite, and omnipotent. This ignorance, however, of second causes, conspiring with three other prejudices of mankind, the belief in ghosts, or spirits of subtile bodies, the devotion and reverence generally shown towards what we fear as having power to hurt us, and the taking of things casual for prognostics, are altogether the natural seed of religion, which by reason of the different fancies, judgments, and passions of several men hath grown up into ceremonies so different that those which are used by one man are for the most part ridiculous to another. He illustrates this by a variety of instances from ancient superstitions. But the forms of religion are changed when men suspect the wisdom, sincerity, or love of those who teach it, or its priests.[c] The remaining portion of the Leviathan, relating to moral and political philosophy, must be deferred to our next chapter.

Its supposed sources.

150. The Elementa Philosophiæ were published by Hobbes in 1655, and dedicated to his constant patron the Earl of Devonshire. These are divided into three

[b] Hum. Nat., c. 11.

[c] Lev., c. 12.

parts; entitled De Corpore, De Homine, and De Cive. And the first part has itself three divisions; Logic, the First Philosophy, and Physics. The second part, De Homine, is neither the treatise of Human Nature, nor the corresponding part of the Leviathan, though it contains many things substantially found there. A long disquisition on optics and the nature of vision, chiefly geometrical, is entirely new. The third part, De Cive, is the treatise by that name, reprinted, as far as I am aware, without alteration.

151. The first part of the first treatise, entitled Computatio sive Logica, is by no means the least valuable among the philosophical writings of Hobbes. In forty pages the subject is very well and clearly explained, nor do I know that the principles are better laid down, or the rules more sufficiently given, in more prolix treatises. Many of his observations, especially as to words, are such as we find in his English works, and perhaps his nominalism is more clearly expressed than it is in them. Of the syllogistic method, at least for the purpose of demonstration, or teaching others, he seems to have entertained a favourable opinion, or even to have held it necessary for real demonstration, as his definition shows. Hobbes appears to be aware of what I do not remember to have seen put by others, that in the natural process of reasoning, the minor premise commonly precedes the major.[d] It is for want of attend-

[d] In Whately's Logic, p. 90, it is observed, that "the *proper order* is to place the major premise first, and the minor second; but this does not constitute the major and minor premises," &c. It may be the proper order in one sense, as exhibiting better the foundation of syllogistic reasoning; but it is not that which we commonly follow, either in thinking, or in proving to others. In the rhetorical use of syllogism it can admit of no doubt that the opposite order is the most striking and persuasive; such as in Cato, "If there be a God, he must delight in virtue; And that which he delights in must be happy." In Euclid's demonstrations this will be found the form usually employed. And, though the rules of grammar are generally illustrated by examples, which is beginning with the major premise, yet the process of reasoning which a boy employs in construing a Latin sentence is the reverse. He observes a nominative case, a verb in the third person, and then applies his general rule, or major, to the particular instance, or minor, so as to infer their agreement. In criminal jurisprudence, the Scots begin with the major premise, or relevancy of the indictment, when there is room for doubt; the English with the minor, or evidence of the fact, reserving the other for what we call motion in arrest of judgment. Instances of both orders are common, but by far the most frequent are of that which the Archbishop of Dublin reckons the less proper of the two. Those logicians who fail to direct the student's attention to this, really do not justice to their own favourite science.

ing to this, that syllogisms, as usually stated, are apt to have so formal and unnatural a construction. The process of the mind in this kind of reasoning is explained, in general, with correctness, and, I believe, with originality, in the following passage, which I shall transcribe from the Latin, rather than give a version of my own; few probably being likely to read the present section, who are unacquainted with that language. The style of Hobbes, though perspicuous, is concise, and the original words will be more satisfactory than any translation.

152. Syllogismo directo cogitatio in animo respondens est hujusmodi. Primo concipitur phantasma rei nominatæ cum accidente sive affectu ejus propter quem appellatur eo nomine quod est in minore propositione subjectum; deinde animo occurrit phantasma ejusdem rei cum accidente sive affectu propter quem appellatur, quod est in eadem propositione prædicatum. Tertio redit cogitatio rursus ad rem nominatam cum affectu propter quem eo nomine appellatur, quod est in prædicato propositionis majoris. Postremo cum meminerit eos affectus esse omnes unius et ejusdem rei, concludit tria illa nomina ejusdem quoque rei esse nomina; hoc est, conclusionem esse veram. Exempli causa, quando fit syllogismus hic, Homo est Animal, Animal est Corpus, ergo Homo est Corpus, occurrit animo imago hominis loquentis vel differentis [sic, sed lege disserentis], meminitque id quod sic apparet vocari hominem. Deinde occurrit eadem imago ejusdem hominis sese moventis, meminitque id quod sic apparet vocari animal. Tertio recurrit eadem imago hominis locum aliquem sive spatium occupantis, meminitque id quod sic apparet vocari corpus.[e] Postremo cum meminerit rem illam quæ et

[e] This is the questionable part of Hobbes's theory of syllogism. According to the common and obvious understanding, the mind, in the major premise, Animal est Corpus, does not reflect on the subject of the minor, Homo, as occupying space, but on the subject of the major, Animal, which includes, indeed, the former, but is mentally substituted for it. It may sometimes happen that, where this predicate of the minor term is *manifestly* a collective word that comprehends the subject, the latter is not as it were absorbed in it, and may be contemplated by the mind distinctly in the major; as if we say, John is a man; a man feels; we may perhaps have no image in the mind of any man but John. But this is not the case where the predicated quality appertains to many things visibly different from the subject; as in Hobbes's instance, Animal est Corpus, we may surely consider other animals as being extended and occupying space be-

extendebatur secundum locum, et loco movebatur, et oratione utebatur, unam et eandem fuisse, concludit etiam nomina illa tria, Homo, Animal, Corpus, ejusdem rei esse nomina, et proinde, Homo est Corpus, esse propositionem veram. Manifestum hinc est conceptum sive cogitationem quæ respondens syllogismo ex propositionibus universalibus in animo existit, nullam esse in iis animalibus quibus deest usus nominum, cum inter syllogizandum oporteat non modo de re sed etiam alternis vicibus de diversis rei nominibus, quæ propter diversas de re cogitationes adhibitæ sunt, cogitare.

153. The metaphysical philosophy of Hobbes, always bold and original, often acute and profound, without producing an immediate school of disciples like that of Descartes, struck, perhaps, a deeper root in the minds of reflecting men, and has influenced more extensively the general tone of speculation. Locke, who had not read much, had certainly read Hobbes, though he does not borrow from him so much as has sometimes been imagined. The French metaphysicians of the next century found him nearer to their own theories than his more celebrated rival in English philosophy. But the writer who has built most upon Hobbes, and may be reckoned, in a certain sense, his commentator, if he who fully explains and develops a system may deserve that name, was Hartley. The theory of association is implied and intimated in many passages of the elder philosopher, though it was first expanded and applied with a diligent, ingenious, and comprehensive research, if sometimes in too forced a manner, by his disciple. I use this word without particular inquiry into the direct acquaintance of Hartley with the writings of Hobbes; the subject had been frequently touched in intermediate publications, and, in matters of reasoning, as I have intimated above, little or no presumption of borrowing can be founded on coincidence. Hartley also resembles Hobbes in the extreme to which he has pushed the nominalist theory, in the proneness to materialise all intellectual processes, and either to force all things

sides men. It does not seem that otherwise there could be any ascending scale from particulars to generals, as far as the reasoning faculties, independent of words, are concerned. And if we begin with the major premise of the syllogism, this will be still more apparent.

mysterious to our faculties into something imaginable, or to reject them as unmeaning, in the want, much connected with this, of a steady perception of the difference between the Ego and its objects, in an excessive love of simplifying and generalising, and in a readiness to adopt explanations neither conformable to reason nor experience, when they fall in with some single principle, the key that was to unlock every ward of the human soul.

154. In nothing does Hobbes deserve more credit than in having set an example of close observation in the philosophy of the human mind. If he errs, he errs like a man who goes a little out of the right track, not like one who has set out in a wrong one. The eulogy of Stewart on Descartes, that he was the father of this experimental psychology, cannot be strictly wrested from him by Hobbes, inasmuch as the publications of the former are of an earlier date; but we may fairly say that the latter began as soon, and prosecuted his inquiries farther. It seems natural to presume that Hobbes, who is said to have been employed by Bacon in translating some of his works into Latin, had at least been led by him to the inductive process which he has more than any other employed. But he has seldom mentioned his predecessor's name; and indeed his mind was of a different stamp; less excursive, less quick in discovering analogies, and less fond of reasoning from them, but more close, perhaps more patient, and more apt to follow up a predominant idea, which sometimes becomes one of the "idola specûs" that deceive him.

CHAPTER IV.

HISTORY OF MORAL AND POLITICAL PHILOSOPHY AND OF JURISPRUDENCE, FROM 1600 TO 1650.

SECT. I.—ON MORAL PHILOSOPHY.

Casuists of the Roman Church — Suarez on Moral Law — Selden — Charron — La Mothe le Vayer — Bacon's Essays — Feltham — Browne's Religio Medici — Other Writers.

1. IN traversing so wide a field as moral and political philosophy, we must still endeavour to distribute the subject according to some order of subdivision, so far at least as the contents of the books themselves which come before us will permit. And we give the first place to those which, relating to the moral law both of nature and revelation, connect the proper subject of the present chapter with that of the second and third.

2. We meet here a concourse of volumes occupying no small space in old libraries, the writings of the casuists, chiefly within the Romish church. None perhaps in the whole compass of literature are more neglected by those who do not read with what we may call a professional view; but to the ecclesiastics of that communion they have still a certain value, though far less than when they were first written. The most vital discipline of that church, the secret of the power of its priesthood, the source of most of the good and evil it can work, is found in the confessional. It is there that the keys are kept; it is there that the lamp burns, whose rays diverge to every portion of human life. No church that has relinquished this prerogative can ever establish a permanent dominion over mankind; none that retains it in effective use can lose the hope or the prospect of being their ruler.

Casuistical writers.

Importance of confession.

3. It is manifest that in the common course of this rite no particular difficulty will arise, nor is the confessor likely to weigh in golden scales the scruples or excuses of ordinary penitents. But peculiar circumstances might be brought before him, wherein there would be a necessity for possessing some rule, lest by sanctioning the guilt of the self-revealing party he should incur as much of his own. Treatises therefore of casuistry were written as guides to the confessor, and became the text-books in every course of ecclesiastical education. These were commonly digested in a systematic order, and, what is the unfailing consequence of system, or rather almost part of its definition, spread into minute ramifications, and aimed at comprehending every possible emergency. Casuistry is itself allied to jurisprudence, especially to that of the canon law; and it was natural to transfer the subtilty of distinction and copiousness of partition usual with the jurists, to a science which its professors were apt to treat upon very similar principles.

Necessity of rules for the confessor.

4. The older theologians seem, like the Greek and Roman moralists, when writing systematically, to have made general morality their subject, and casuistry but their illustration. Among the monuments of their ethical philosophy, the Secunda Secundæ of Aquinas is the most celebrated. Treatises, however, of casuistry, which is the expansion and application of ethics, may be found both before and during the sixteenth century; and while the confessional was actively converted to so powerful an engine, they could not conveniently be wanting. Casuistry, indeed, is not much required by the church in an ignorant age; but the sixteenth century was not an age of ignorance. Yet it is not till about the end of that period that we find casuistical literature burst out, so to speak, with a profusion of fruit. "Uninterruptedly afterwards," says Eichhorn, "through the whole seventeenth century, the moral and casuistical literature of the church of Rome was immensely rich; and it caused a lively and extensive movement in a province which had long been at peace. The first impulse came from the Jesuits, to whom the Jansenists opposed themselves. We must

Increase of casuistical literature.

distinguish from both the theological moralists, who remained faithful to their ancient teaching." [a]

Distinction of subjective and objective morality.

5. We may be blamed, perhaps, for obtruding a pedantic terminology, if we make the most essential distinction in morality, and one for want of which, more than any other, its debatable controversies have arisen, that between the subjective and objective rectitude of actions; in clearer language, between the provinces of conscience and of reason, between what is well meant and what is well done. The chief business of the priest is naturally with the former. The walls of the confessional are privy to the whispers of self-accusing guilt. No doubt can ever arise as to the subjective character of actions which the conscience has condemned, and for which the penitent seeks absolution. Were they even objectively lawful, they are sins in him, according to the unanimous determination of casuists. But though what the conscience reclaims against is necessarily wrong, relatively to the agent, it does not follow that what it may fail to disapprove is innocent. Choose whatever theory we may please as to the moral standard of actions, they must have an objective rectitude of their own, independently of their agent, without which there could be no distinction of right and wrong, nor any scope for the dictates of conscience. The science of ethics, as a science, can only be conversant with objective morality. Casuistry is the instrument of applying this science, which, like every other, is built on reasoning, to the moral nature and volition of man. It rests for its validity on the great principle, that it is our duty to know, as far as lies in us, what is right, as well as to do what we know to be such. But its application was beset with obstacles; the extenuations of ignorance and error were so various, the difficulty of representing the moral position of the penitent to the judgment of the confessor by any process of language so insuperable, that the most acute understanding might be foiled in the task of bringing home a conviction of guilt to the self-deceiving sinner. Again, he might aggravate needless scruples, or disturb the tranquil repose of innocence.

[a] Geschichte der Cultur, vol. vi. part i. p. 390.

6. But though past actions are the primary subject of auricular confession, it was a necessary consequence that the priest would be frequently called upon to advise as to the future, to bind or loose the will in incomplete or meditated lines of conduct. And as all without exception must come before his tribunal, the rich, the noble, the counsellors of princes, and princes themselves, were to reveal their designs, to expound their uncertainties, to call, in effect, for his sanction in all they might have to do, to secure themselves against transgression by shifting the responsibility on his head. That this tremendous authority of direction, distinct from the rite of penance, though immediately springing from it, should have produced a no more overwhelming influence of the priesthood than it has actually done, great as that has been, can only be ascribed to the reaction of human inclinations which will not be controlled, and of human reason which exerts a silent force against the authority it acknowledges.

Directory office of the confessor.

7. In the directory business of the confessional, far more than in the penitential, the priest must strive to bring about that union between subjective and objective rectitude in which the perfection of a moral act consists, without which in every instance, according to their tenets, some degree of sinfulness, some liability to punishment remains, and which must at least be demanded from those who have been made acquainted with their duty. But when he came from the broad lines of the moral law, from the decalogue and the Gospel, or even from the ethical systems of theology, to the indescribable variety of circumstance which his penitents had to recount, there arose a multitude of problems, and such as perhaps would most command his attention, when they involved the practice of the great, to which he might hesitate to apply an unbending rule. The questions of casuistry, like those of jurisprudence, were often found to turn on the great and ancient doubt of both sciences, whether we should abide by the letter of a general law, or let in an equitable interpretation of its spirit. The consulting party would be apt to plead for the one; the guide of conscience would more securely adhere to the other. But

Difficulties of casuistry.

he might also perceive the severity of those rules of obligation which conduce, in the particular instance, to no apparent end, or even defeat their own principle. Hence there arose two schools of casuistry, first in the practice of confession, and afterwards in the books intended to assist it; one strict and uncomplying, the other more indulgent and flexible to circumstances.

Strict and lax schemes of it.

8. The characteristics of these systems were displayed in almost the whole range of morals. They were, however, chiefly seen in the rules of veracity, and especially in promissory obligations. According to the fathers of the church, and to the rigid casuists in general, a lie was never to be uttered, a promise was never to be broken. The precepts especially of Revelation, notwithstanding their brevity and figurativeness, were held complete and literal. Hence promises obtained by mistake, fraud, or force, and, above all, gratuitous vows, where God was considered as the promisee, however lightly made, or become intolerably onerous by supervenient circumstances, were strictly to be fulfilled, unless the dispensing power of the church might sometimes be sufficient to release them. Besides the respect due to moral rules, and especially those of Scripture, there had been from early times in the Christian church a strong disposition to the ascetic scheme of religious morality; a prevalent notion of the intrinsic meritoriousness of voluntary self-denial, which discountenanced all regard in man to his own happiness, at least in this life, as a sort of flinching from the discipline of suffering. And this had doubtless its influence upon the severe casuists.

Convenience of the latter.

9. But there had not been wanting those who, whatever course they might pursue in the confessional, found the convenience of an accommodating morality in the secular affairs of the church. Oaths were broken, engagements entered into without faith, for the ends of the clergy, or of those whom they favoured in the struggles of the world. And some of the ingenious sophistry, by which these breaches of plain rules are usually defended, was not unknown before the Reformation. But casuistical writings at that time were comparatively few. The Jesuits have the credit of first rendering public a scheme of false morals, which has

been denominated from them, and enhanced the obloquy that overwhelmed their order. Their volumes of casuistry were exceedingly numerous; some of them belong to the last twenty years of the sixteenth, but a far greater part to the following century.

Favoured by the Jesuits.

10. The Jesuits were prone for several reasons to embrace the laxer theories of obligation. They were less tainted than the old monastic orders with that superstition which had flowed into the church from the East, the meritoriousness of self-inflicted suffering for its own sake. They embraced a life of toil and danger, but not of habitual privation and pain. Dauntless in death and torture, they shunned the mechanical asceticism of the convent. And, secondly, their eyes were bent on a great end, the good of the Catholic church, which they identified with that of their own order. It almost invariably happens that men who have the good of mankind at heart, and actively prosecute it, become embarrassed, at some time or other, by the conflict of particular duties with the best method of promoting their object. An unaccommodating veracity, an unswerving good faith, will often appear to stand, or stand really, in the way of their ends; and hence the little confidence we repose in enthusiasts, even when, in a popular mode of speaking, they are most sincere; that is, most convinced of the rectitude of their aim.

The causes of this.

11. The course prescribed by Loyola led his disciples not to solitude, but to the world. They became the associates and counsellors, as well as the confessors, of the great. They had to wield the powers of the earth for the service of heaven. Hence, in confession itself, they were often tempted to look beyond the penitent, and to guide his conscience rather with a view to his usefulness than his integrity. In questions of morality, to abstain from action is generally the means of innocence, but to act is indispensable for positive good. Thus their casuistry had a natural tendency to become more objective, and to entangle the responsibility of personal conscience in an inextricable maze of reasoning. They had also to retain their influence over men not wholly submissive to religious control, nor ready to abjure the pleasant paths in which they trod; men of the court and the city, who might serve the

church though they did not adorn it, and for whom it was necessary to make some compromise in furtherance of the main design.

Extravagance of the strict casuists.

12. It must also be fairly admitted, that the rigid casuists went to extravagant lengths. Their decisions were often not only harsh, but unsatisfactory; the reason demanded in vain a principle of their iron law; and the common sense of mankind imposed the limitations, which they were incapable of excluding by any thing better than a dogmatic assertion. Thus, in the cases of promissory obligation, they were compelled to make some exceptions, and these left it open to rational inquiry whether more might not be found. They diverged unnecessarily, as many thought, from the principles of jurisprudence; for the jurists built their determinations, or professed to do so, on what was just and equitable among men; and though a distinction, frequently very right, was taken between the *forum exterius* and *interius*, the provinces of jurisprudence and casuistry, yet the latter could not, in these questions of mutual obligation, rest upon wholly different ground from the former.

Opposite faults of Jesuits.

13. The Jesuits, however, fell rapidly into the opposite extreme. Their subtilty in logic, and great ingenuity in devising arguments, were employed in sophisms that undermined the foundations of moral integrity in the heart. They warred with these arms against the conscience which they were bound to protect. The offences of their casuistry, as charged by their adversaries, are very multifarious. One of the most celebrated is the doctrine of equivocation; the innocence of saying that which is true in a sense meant by the speaker, though he is aware that it will be otherwise understood. Another is that of what was called probability; according to which it is lawful, in doubtful problems of morality, to take the course which appears to ourselves least likely to be right, provided any one casuistical writer of good repute has approved it. The multiplicity of books, and want of uniformity in their decisions, made this a broad path for the conscience. In the latter instance, as in many others, the *subjective* nature of moral obligation was lost sight of; and to this the scientific treatment of casuistry inevitably contributed.

14. Productions so little regarded as those of the jesuitical casuists cannot be dwelt upon. Thomas Sanchez of Cordova is author of a large treatise on matrimony, published in 1592; the best, as far as the canon law is concerned, which has yet been published. But in the casuistical portion of this work the most extraordinary indecencies occur, such as have consigned it to general censure.[b] Some of these, it must be owned, belong to the rite of auricular confession itself, as managed in the church of Rome, though they give scandal by their publication and apparent excess beyond the necessity of the case. The Summa Casuum Conscientiæ of Toletus, a Spanish Jesuit and cardinal, which, though published in 1602, belongs to the sixteenth century, and the casuistical writings of Less, Busenbaum, and Escobar, may just be here mentioned. The Medulla Casuum Conscientiæ of the second (Munster, 1645) went through fifty-two editions, the Theologia Moralis of the last (Lyon, 1646) through forty.[c] Of the opposition excited by the laxity in moral rules ascribed to the Jesuits, though it began in some manner during this period, we shall have more to say in the next.

Suarez De Legibus.

15. Suarez of Granada, by far the greatest man in the department of moral philosophy whom the order of Loyola produced in this age, or perhaps in any other, may not improbably have treated of casuistry in some part of his numerous volumes. We shall, however, gladly leave this subject to bring before the reader a large treatise of Suarez, on the principles of natural law, as well as of all positive jurisprudence. This is entitled, Tractatus de legibus ac Deo legislatore in decem libros distributus, utriusque fori hominibus non minus utilis, quam necessarius. It might with no great impropriety, perhaps, be placed in any of the three sections of this chapter, relating not only to moral philosophy, but to politics in some degree, and to jurisprudence.

Titles of his ten books.

16. Suarez begins by laying down the position, that all legislative, as well as all paternal, power is derived from God, and that the authority of

[b] Bayle, art. Sanchez, expatiates on this, and condemns the Jesuit; Catilina Cethegum. The later editions of Sanchez De Matrimonio are *castigate*.

[c] Ranke, die Päpste, vol. iii.

every law resolves itself into his. For either the law proceeds immediately from God, or, if it be human, it proceeds from man as his vicar and minister. The titles of the ten books of this large treatise are as follows:— 1. On the nature of law in general, and on its causes and consequences; 2. On eternal, natural law, and that of nations; 3. On positive human law in itself, considered relatively to human nature, which is also called civil law; 4. On positive ecclesiastical law; 5. On the differences of human laws, and especially of those that are penal, or in the nature of penal; 6. On the interpretation, the alteration, and the abolition of human laws; 7. On unwritten law, which is called custom; 8. On those human laws which are called favourable, or privileges; 9. On the positive divine law of the old dispensations; 10. On the positive divine law of the new dispensation.

Heads of the second book.

17. This is a very comprehensive chart of general law, and entitles Suarez to be accounted such a precursor of Grotius and Puffendorf as occupied most of their ground, especially that of the latter, though he cultivated it in a different manner. His volume is a closely printed folio of 700 pages in double columns. The following heads of chapters in the second book will show the questions in which Suarez dealt, and in some degree his method of stating and conducting them: 1. Whether there be any eternal law, and what is its necessity; 2. On the subject of eternal law, and on the acts it commands; 3. In what act the eternal law exists (existit), and whether it be one or many; 4. Whether the eternal law be the cause of other laws, and obligatory through their means; 5. In what natural law consists; 6. Whether natural law be a preceptive divine law; 7. On the subject of natural law, and on its precepts; 8. Whether natural law be one; 9. Whether natural law bind the conscience; 10. Whether natural law obliges not only to the act (actus) but to the mode (modum) of virtue. This obscure question seems to refer to the subjective nature, or motive, of virtuous actions, as appears by the next; 11. Whether natural law obliges us to act from love or charity (ad modum operandi ex caritate); 12. Whether natural law not only prohibits certain actions, but invalidates them when done; 13. Whether

the precepts of the law of nature are intrinsically immutable; 14. Whether any human authority can alter or dispense with the natural law; 15. Whether God by his absolute power can dispense with the law of nature; 16. Whether an equitable interpretation can ever be admitted in the law of nature; 17. Whether the law of nature is distinguishable from that of nations; 18. Whether the law of nations enjoins or forbids any thing; 19. By what means we are to distinguish the law of nature from that of nations; 20. Certain corollaries; and that the law of nations is both just, and also mutable.

Character of such scholastic treatises.

18. These heads may give some slight notion to the reader of the character of the book, as the book itself may serve as a typical instance of that form of theology, of metaphysics, of ethics, of jurisprudence, which occupies the unread and unreadable folios of the sixteenth and seventeenth centuries, especially those issuing from the church of Rome, and may be styled generally the scholastic method. Two remarkable characteristics strike us in these books, which are sufficiently to be judged by reading their table of contents, and by taking occasional samples of different parts. The extremely systematic form they assume and the multiplicity of divisions render this practice more satisfactory than it can be in works of less regular arrangement. One of these characteristics is that spirit of system itself, and another is their sincere desire to exhaust the subject by presenting it to the mind in every light, and by tracing all its relations and consequences. The fertility of those men who, like Suarez, superior to most of the rest, were trained in the scholastic discipline, to which I refer the methods of the canonists and casuists, is sometimes surprising; their views are not one-sided; they may not solve objections to our satisfaction, but they seldom suppress them; they embrace a vast compass of thought and learning; they write less for the moment, and are less under the influence of local and temporary prejudices, than many who have lived in better ages of philosophy. But, again, they have great defects; their distinctions confuse instead of giving light; their systems being not founded on clear principles become embarrassed and incoherent; their method is not always sufficiently consecutive; the difficulties which

they encounter are too arduous for them; they labour under the multitude, and are entangled by the discordance, of their authorities.

Quotations of Suarez.

19. Suarez, who discusses all these important problems of his second book with acuteness, and, for his circumstances, with an independent mind, is weighed down by the extent and nature of his learning. If Grotius quotes philosophers and poets too frequently, what can we say of the perpetual reference to Aquinas, Cajetan, Soto, Turrecremata, Vasquius, Isidore, Vincent of Beauvais or Alensis, not to mention the canonists and fathers, which Suarez employs to prove or disprove every proposition? The syllogistic forms are unsparingly introduced. Such writers as Soto or Suarez held all kinds of ornament not less unfit for philosophical argument than they would be for geometry. Nor do they ever appeal to experience or history for the rules of determination. Their materials are nevertheless abundant, consisting of texts of Scripture, sayings of the fathers and schoolmen, established theorems in natural theology and metaphysics, from which they did not find it hard to select premises which, duly arranged, gave them conclusions.

His definition of eternal law.

20. Suarez, after a prolix discussion, comes to the conclusion, that "eternal law is the free determination of the will of God, ordaining a rule to be observed, either, first, generally by all parts of the universe as a means of a common good, whether immediately belonging to it in respect of the entire universe, or at least in respect of the singular parts thereof; or, secondly, to be specially observed by intellectual creatures in respect of their free operations."[d] This is not instantly perspicuous; but definitions of a complex nature cannot be rendered such. It is true, however, what the reader may think curious, that this crabbed piece of scholasticism is nothing else in substance, than the celebrated sentence on law, which concludes the first book of Hooker's Ecclesiastical Polity. Whoever takes

[d] Legem æternam esse decretum liberum voluntatis Dei statuentis ordinem servandum, aut generaliter ab omnibus partibus universi in ordine ad commune bonum, vel immediatè illi conveniens ratione totius universi, vel saltem ratione singularum specierum ejus, aut specialiter servandum a creaturis intellectualibus quoad liberas operationes earum. c. 3, § 6. Compare with Hooker: Of Law no less can be said than that her throne is the bosom of God, &c.

the pains to understand Suarez, will perceive that he asserts exactly that which is unrolled in the majestic eloquence of our countryman.

21. By this eternal law God is not necessarily bound. But this seems to be said rather for the sake of avoiding phrases which were conventionally rejected by the scholastic theologians, since, in effect, his theory requires the affirmative, as we shall soon perceive; and he here says that the law is God himself (Deus ipse), and is immutable. This eternal law is not immediately known to man in this life, but either "in other laws, or through them," which he thus explains. "Men, while pilgrims here (viatores homines), cannot learn the divine will in itself, but only as much as by certain signs or effects is proposed to them; and hence it is peculiar to the blessed in heaven that, contemplating the divine will, they are ruled by it as by a direct law. The former know the eternal law, because they partake of it by other laws, temporal and positive; for, as second causes display the first, and creatures the Creator, so temporal laws (by which he means laws respective of man on earth), being streams from that eternal law, manifest the fountain whence they spring. Yet all do not arrive even at this degree of knowledge, for all are not able to infer the cause from the effect. And thus, though all men necessarily perceive some participation of the eternal laws in themselves, since there is no one endowed with reason who does not in some manner acknowledge that what is morally good ought to be chosen, and what is evil rejected, so that in this sense men have all some notion of the eternal law, as St. Thomas, and Hales, and Augustin say; yet nevertheless they do not all know it formally, nor are aware of their participation of it, so that it may be said the eternal law is not universally known in a direct manner. But some attain that knowledge, either by natural reasoning, or, more properly, by revelation of faith; and hence we have said that it is known by some only in the inferior laws, but by others through the means of those laws." [e]

22. In every chapter Suarez propounds the arguments of doctors on either side of the problem, ending with his

[e] Lib. ii. c. 4, § 9.

own determination, which is frequently a middle course. On the question, Whether natural law is of itself preceptive, or merely indicative of what is intrinsically right or wrong, or, in other words, whether God, as to this law, is a legislator, he holds this middle line with Aquinas and most theologians (as he says); contending that natural law does not merely indicate right and wrong, but commands the one and prohibits the other on divine authority; though this will of God is not the whole ground of the moral good and evil which belongs to the observance or transgression of natural law, inasmuch as it presupposes a certain intrinsic right and wrong in the actions themselves, to which it superadds the special obligation of a divine law. God therefore may be truly called a legislator in respect of natural law."[f]

Whether God is a legislator?

23. He next comes to a profound but important inquiry, closely connected with the last, Whether God could have permitted by his own law actions against natural reason? Ockham and Gerson had resolved this in the affirmative, Aquinas the contrary way. Suarez assents to the latter, and thus determines that the law is strictly immutable. It must follow of course that the pope cannot alter or dispense with the law of nature, and he might have spared the fourteenth chapter, wherein he controverts the doctrine of Sanchez and some casuists who had maintained so extraordinary a prerogative.[g] This, however, is rather episodical. In the fifteenth chapter he treats more at length the question, Whether God can dispense with the law of nature? which is not, perhaps, decided in denying his power to repeal it. He begins by distinguishing three classes of moral laws. The first are the most general, such as that good is to be done rather than evil; and with these it is agreed that God cannot dispense. The second is of such as the precepts of the decalogue, where the chief difficulty

Whether God could permit or commend wrong actions?

[f] Hæc Dei voluntas, prohibitio aut præceptio non est tota ratio bonitatis et malitiæ quæ est in observatione vel transgressione legis naturalis, sed supponit in ipsis actubus necessariam quandam honestatem vel turpitudinem, et illis adjungit specialem legis divinæ obligationem. c. 6, § 11.

[g] Nulla potestas humana, etiamsi pontificia sit, potest proprium aliquod præceptum legis naturalis abrogare, nec illud proprie et in se minuere, neque in ipso dispensare. § 8.

had arisen. Ockham, Peter d'Ailly, Gerson, and others, incline to say that he can dispense with all these, inasmuch as they are only prohibitions which he has himself imposed. This tenet, Suarez observes, is rejected by all other theologians as false and absurd. He decidedly holds that there is an intrinsic goodness or malignity in actions independent of the command of God. Scotus had been of opinion that God might dispense with the commandments of the second table, but not those of the first. Durand seems to have thought the fifth commandment (our sixth) more dispensable than the rest, probably on account of the case of Abraham. But Aquinas, Cajetan, Soto, with many more, deny absolutely the dispensability of the decalogue in any part. The Gordian knot about the sacrifice of Isaac is cut by a distinction, that God did not act here as a legislator, but in another capacity, as lord of life and death, so that he only used Abraham as an instrument for that which he might have done himself. The third class of moral precepts is of those not contained in the decalogue, as to which he decides also, that God cannot dispense with them, though he may change the circumstances upon which their obligation rests, as when he releases a vow.

English casuists—Perkins, Hall.

24. The Protestant churches were not generally attentive to casuistical divinity, which smelt too much of the opposite system. Eichhorn observes that the first book of that class, published among the Lutherans, was by a certain Baldwin of Wittenberg, in 1628.[b] A few books of casuistry were published in England during this period, though nothing, as well as I remember, that can be reckoned a system, or even a treatise, of moral philosophy. Perkins, an eminent Calvinistic divine of the reign of Elizabeth, is the first of these in point of time. His Cases of Conscience appeared in 1606. Of this book I can say nothing from personal knowledge. In the works of Bishop Hall several particular questions of this kind are treated, but not with much ability. His distinctions are more than usually feeble. Thus usury is a deadly sin, but it is very difficult to commit it unless we love

[b] Vol. vi. part i. p. 346.

the sin for its own sake; for almost every possible case of lending money will be found by his limitations of the rule to justify the taking a profit for the loan.[i] His casuistry about selling goods is of the same description: a man must take no advantage of the scarcity of the commodity, unless there should be just reason to raise the price, which he admits to be often the case in a scarcity. He concludes by observing that, in this, as in other well-ordered nations, it would be a happy thing to have a regulation of prices. He decides, as all the old causists did, that a promise extorted by a robber is binding. Sanderson was the most celebrated of the English casuists. His treatise De Juramenti Obligatione appeared in 1647.

Selden, De Jure Naturali juxta Hebræos.

25. Though no proper treatise of moral philosophy came from any English writer in this period, we have one which must be placed in this class, strangely as the subject has been handled by its distinguished author. Selden published in 1640 his learned work, De Jure Naturali et Gentium juxta Disciplinam Ebræorum.[k] The object of the author was to trace the opinions of the Jews on the law of nature and nations, or of moral obligation, as distinct from the Mosaic law; the former being a law to which they held all mankind to be bound. This theme had been of course untouched by the Greek and Roman philosophers, nor was much to be found upon it in modern writers. His purpose is therefore rather historical than argumentative; but he seems so generally to adopt the Jewish theory of natural law that we may consider him the disciple of the rabbis as much as their historian.

Jewish theory of natural law.

26. The origin of natural law was not drawn by the Jews, as some of the jurists imagined it ought to be, from the habits and instincts of all animated beings, quod natura omnia animalia docuit, according to the definition of the Pandects. Nor did they deem, as many have done, the consent of mankind and common customs of nations to be a sufficient

[i] Hall's Works (edit. Pratt), vol. viii. p. 375.

[k] *Juxta* for *secundum*, we need hardly say, is bad Latin: it was, however, very common, and is even used by Joseph Scaliger, as Vossius mentions, in his treatise De Vitiis Sermonis.

basis for so permanent and invariable a standard. Upon the discrepancy of moral sentiments and practices among mankind Selden enlarges in the tone which Sextus Empiricus had taught scholars, and which the world had learned from Montaigne. Nor did unassisted reason seem equal to determine moral questions, both from its natural feebleness, and because reason alone does not create an obligation, which depends wholly on the command of a superior.[m] But God, as the ruler of the universe, has partly implanted in our minds, partly made known to us by exterior revelation, his own will, which is our law. These positions he illustrates with a superb display of erudition, especially Oriental, and certainly with more prolixity, and less regard to opposite reasonings, than we should desire.

Seven Precepts of the Sons of Noah.

27. The Jewish writers concur in maintaining that certain short precepts of moral duty were orally enjoined by God on the parent of mankind, and afterwards on the sons of Noah. Whether these were simply preserved by tradition, or whether, by an innate moral faculty, mankind had the power of constantly discerning them, seems to have been an unsettled point. The principal of these divine rules are called, for distinction, The Seven Precepts of the Sons of Noah. There is, however, some variance in the lists, as Selden has given them from the ancient writers. That most received consists of seven prohibitions; namely, of idolatry, blasphemy, murder, adultery, theft, rebellion, and cutting a limb from a living animal. The last of these, the sense of which however is controverted, as well as the third, but no other, are indicated in the ninth chapter of Genesis.

Character of Selden's work.

28. Selden pours forth his unparalleled stores of erudition on all these subjects, and upon those which are suggested in the course of his explanations. These digressions are by no means the least useful part of his long treatise. They elucidate some obscure passages of Scripture. But the whole work belongs far more to theological than to philosophical investigation; and I have placed it here chiefly out of

[m] Selden says, in his Table Talk, that he can understand no law of nature, but a law of God. He might mean this in the sense of Suarez, without denying an intrinsic distinction of right and wrong.

conformity to usage; for undoubtedly Selden, though a man of very strong reasoning faculties, had not greatly turned them to the principles of natural law. His reliance on the testimony of Jewish writers, many of them by no means ancient, for those primæval traditions as to the sons of Noah, was in the character of his times, but it will scarcely suit the more rigid criticism of our own. His book, however, is excellent for its proper purpose, that of representing Jewish opinion, and is among the greatest achievements in erudition that any English writer has performed.

Grotius and Hobbes.

29. The moral theories of Grotius and Hobbes are so much interwoven with other parts of their philosophy, in the treatise De Jure Belli and in the Leviathan, that it would be dissecting those works too much, were we to separate what is merely ethical from what falls within the provinces of politics and jurisprudence. The whole must therefore be reserved for the ensuing sections of this chapter. Nor is there much in the writings of Bacon or of Descartes which falls, in the sense we have hitherto been considering it, under the class of moral philosophy. We may, therefore, proceed to another description of books, relative to the passions and manners of mankind, rather than, in a strict sense, to their duties, though of course there will frequently be some intermixture of subjects so intimately allied.

Charron on Wisdom.

30. In the year 1601 Peter Charron, a French ecclesiastic, published his treatise on Wisdom. The reputation of this work has been considerable; his countrymen are apt to name him with Montaigne; and Pope has given him the epithet of "more wise" than his predecessor, on account, as Warburton expresses it, of his "moderating everywhere the extravagant Pyrrhonism of his friend." It is admitted that he has copied freely from the Essays of Montaigne; in fact, a very large portion of the treatise on Wisdom, not less, I should conjecture, than one fourth, is extracted from them with scarce any verbal alteration. It is not the case that he moderates the sceptical tone which he found there; on the contrary, the most remarkable passages of that kind have been transcribed; but we must do Charron the justice to say that he has retrenched the

indecencies, the egotism, and the superfluities. Charron does not dissemble his debts. "This," he says in his preface, "is the collection of a part of my studies; the form and method are my own. What I have taken from others I have put in their words, not being able to say it better than they have done." In the political part he has borrowed copiously from Lipsius and Bodin, and he is said to have obligations to Duvair.[n] The ancients also must have contributed their share. It becomes, therefore, difficult to estimate the place of Charron as a philosopher, because we feel a good deal of uncertainty whether any passage may be his own. He appears to have been a man formed in the school of Montaigne, not much less bold in pursuing the novel opinions of others, but less fertile in original thoughts, so that he often falls into the commonplaces of ethics; with more reading than his model, with more disciplined habits as well of arranging and distributing his subject as of observing the sequence of an argument; but, on the other hand, with far less of ingenuity in thinking, and of sprightliness of language.

La Mothe le Vayer. His Dialogues.

31. A writer of rather less extensive celebrity than Charron belongs full as much to the school of Montaigne, though he does not so much pillage his Essays. This was La Mothe le Vayer, a man distinguished by his literary character in the court of Louis XIII., and ultimately preceptor both to the duke of Orleans and the young king (Louis XIV.) himself. La Mothe was habitually and universally a sceptic. Among several smaller works we may chiefly instance his Dialogues, published many years after his death under the name of Horatius Tubero. They must have been written in the reign of Louis XIII., and belong, therefore, to the present period. In attacking every established doctrine, especially in religion, he goes much farther than Montaigne, and seems to have taken some of his metaphysical system immediately from Sextus Empiricus. He is profuse of quotation, especially in a dialogue entitled Le Banquet Sceptique, the aim of which is to show that there is no uniform taste of mankind as to their choice of food. His mode

[n] Biogr. Universelle.

of arguing against the moral sense is entirely that of Montaigne, or, if there be any difference, is more full of the two fallacies by which that lively writer deceives himself: namely, the accumulating examples of things arbitrary and fanciful, such as modes of dress and conventional usages, with respect to which no one pretends that any natural law can be found; and when he comes to subjects more truly moral, the turning our attention solely to the external action, and not to the motive or principle, which under different circumstances may prompt men to opposite courses.

32. These dialogues are not unpleasing to read, and exhibit a polite though rather pedantic style, not uncommon in the seventeenth century. They are, however, very diffuse, and the sceptical paradoxes become merely commonplace by repetition. One of them is more grossly indecent than any part of Montaigne. La Mothe le Vayer is not, on the whole, much to be admired as a philosopher; little appears to be his own, and still less is really good. He contributed, no question, as much as any one, to the irreligion and contempt for morality prevailing in that court where he was in high reputation. Some other works of this author may be classed under the same description.

Bacon's Essays.

33. We can hardly refer lord Bacon's Essays to the school of Montaigne, though their title may lead us to suspect that they were in some measure suggested by that most popular writer. The first edition, containing ten essays only, and those much shorter than as we now possess them, appeared, as has been already mentioned, in 1597. They were reprinted with very little variation in 1606. But the enlarged work was published in 1612, and dedicated to prince Henry. He calls them, in this dedication, "certain brief notes, set down rather significantly than curiously, which I have called Essays. The word is late, but the thing is ancient; for Seneca's Epistles to Lucilius, if you mark them well, are but Essays, that is, dispersed meditations, though conveyed in the form of epistles." The resemblance, at all events, to Montaigne, is not greater than might be expected in two men equally original in genius, and entirely opposite in their characters and circumstances. One, by an instinctive felicity,

catches some of the characteristics of human nature; the other, by profound reflection, scrutinises and dissects it. One is too negligent for the inquiring reader, the other too formal and sententious for one who seeks to be amused. We delight in one, we admire the other; but this admiration has also its own delight. In one we find more of the sweet temper and tranquil contemplation of Plutarch, in the other more of the practical wisdom and somewhat ambitious prospects of Seneca. It is characteristic of Bacon's philosophical writings, that they have in them a spirit of movement, a perpetual reference to what man is to do in order to an end, rather than to his mere speculation upon what is. In his Essays this is naturally still more prominent. They are, as quaintly described in the title-page of the first edition, "places (loci) of persuasion and dissuasion;" counsels for those who would be great as well as wise. They are such as sprang from a mind ardent in two kinds of ambition, and hesitating whether to found a new philosophy, or to direct the vessel of the state. We perceive, however, that the immediate reward attending greatness, as is almost always the case, gave it a preponderance in his mind; and hence his Essays are more often political than moral; they deal with mankind, not in their general faculties or habits, but in their mutual strife, their endeavours to rule others, or to avoid their rule. He is more cautious and more comprehensive, though not more acute, than Machiavel, who often becomes too dogmatic through the habit of referring everything to a particular aspect of political societies. Nothing in the Prince or the Discourses on Livy is superior to the Essays on Seditions, on Empire, on Innovations, or generally those which bear on the dexterous management of a people by their rulers. Both these writers have what to our more liberal age appears a counselling of governors for their own rather than their subjects' advantage; but as this is generally represented to be the best means, though not, as it truly is, the real end, their advice tends, on the whole, to promote the substantial benefits of government.

Their excellence.

34. The transcendent strength of Bacon's mind is visible in the whole tenor of these Essays, unequal as they must be from the very nature

of such compositions. They are deeper and more discriminating than any earlier, or almost any later, work in the English language, full of recondite observation, long matured and carefully sifted. It is true that we might wish for more vivacity and ease: Bacon, who had much wit, had little gaiety; his Essays are consequently stiff and grave, where the subject might have been touched with a lively hand; thus it is in those on Gardens and on Building. The sentences have sometimes too apophthegmatic a form, and want coherence; the historical instances, though far less frequent than with Montaigne, have a little the look of pedantry to our eyes. But it is from this condensation, from this gravity, that the work derives its peculiar impressiveness. Few books are more quoted, and, what is not always the case with such books, we may add that few are more generally read. In this respect they lead the van of our prose literature; for no gentleman is ashamed of owning that he has not read the Elizabethan writers; but it would be somewhat derogatory to a man of the slightest claim to polite letters, were he unacquainted with the Essays of Bacon. It is indeed little worth while to read this or any other book for reputation's sake; but very few in our language so well repay the pains, or afford more nourishment to the thoughts. They might be judiciously introduced, with a small number more, into a sound method of education, one that should make wisdom, rather than mere knowledge, its object, and might become a text-book of examination in our schools.

Feltham's Resolves.

35. It is rather difficult to fix upon the fittest place for bringing forward some books, which, though moral in their subject, belong to the general literature of the age, and we might strip the province of polite letters of what have been reckoned its chief ornaments. I shall therefore select here such only as are more worthy of consideration for their matter than for the style in which it is delivered. Several that might range, more or less, under the denomination of moral essays, were published both in English and in other languages. But few of them are now read, or even much known by name. One, which has made a better fortune than the rest, demands mention, the Resolves of Owen

Feltham. Of this book, the first part of which was published in 1627, the second not till after the middle of the century, it is not uncommon to meet with high praises in those modern writers who profess a faithful allegiance to our older literature. For myself, I can only say that Feltham appears not only a laboured and artificial, but a shallow writer. Among his many faults none strikes me more than a want of depth, which his pointed and sententious manner renders more ridiculous. There are certainly exceptions to this vacuity of original meaning in Feltham; it would be possible to fill a few pages with extracts not undeserving of being read, with thoughts just and judicious, though never deriving much lustre from his diction. He is one of our worst writers in point of style; with little vigour, he has less elegance; his English is impure to an excessive degree, and full of words unauthorized by any usage. Pedantry, and the novel phrases which Greek and Latin etymology was supposed to warrant, appear in most productions of this period; but Feltham attempted to bend the English idiom to his own affectations. The moral reflections of a serious and thoughtful mind are generally pleasing, and to this perhaps is partly owing the kind of popularity which the Resolves of Feltham have obtained; but they may be had more agreeably and profitably in other books.[o]

Browne's Religio Medici.

36. A superior genius to that of Feltham is exhibited in the Religio Medici of sir Thomas Browne. This little book made a remarkable impression; it was soon translated into several languages,

[o] This is a random sample of Feltham's style:—"Of all objects of sorrow, a distressed king is the most pitiful, because it presents us most the frailty of humanity, and cannot but most *midnight* the soul of him that is fallen. The sorrows of a deposed king are like the *distorquements* of a *darted* conscience, which none can know but he that hath lost a crown." Cent. i. 61. We find, not long after, the following precious phrase:—"The nature that is *arted* with the subtleties of time and practice." i. 63. In one page we have *obnubilate*, *nested*, *parallel* (as a verb), *fails* (failings), *uncurtain*, *depraving* (calumniating). i. 50. And we are to be disgusted with such vile English, or properly no English, for the sake of the sleepy saws of a trivial morality. Such defects are not compensated by the better and more striking thoughts we may occasionally light upon. In reading Feltham, nevertheless, I seemed to perceive some resemblance to the tone and way of thinking of the Turkish Spy, which is a great compliment to the former; for the Turkish Spy is neither disagreeable nor superficial. The resemblance must lie in a certain contemplative melancholy, rather serious than severe, in respect to the world and its ways; and as Feltham's Resolves seem to have a charm, by the editions they have gone through, and the good name they have gained, I can only look for it in this.

and is highly extolled by Conringius and others, who could only judge through these versions. Patin, though he rather slights it himself, tells us in one of his letters that it was very popular at Paris. The character which Johnson has given of the Religio Medici is well known; and, though perhaps rather too favourable, appears in general just.[p] The mind of Browne was fertile, and, according to the current use of the word, ingenious; his analogies are original, and sometimes brilliant; and as his learning is also in things out of the beaten path, this gives a peculiar and uncommon air to all his writings, and especially to the Religio Medici. He was, however, far removed from real philosophy, both by his turn of mind and by the nature of his erudition; he seldom reasons, his thoughts are desultory, sometimes he appears sceptical or paradoxical, but credulity and deference to authority prevail. He belonged to the class, numerous at that time in our church, who halted between Popery and Protestantism; and this gives him, on all such topics, an appearance of vacillation and irresoluteness which probably represents the real state of his mind. His paradoxes do not seem very original, nor does he arrive at them by any process of argument; they are more like traces of his reading casually suggesting themselves, and supported by his own ingenuity. His style is not flowing, but vigorous; his choice of words not elegant, and even approaching to barbarism as English phrase; yet there is an impressiveness, an air of reflection and sincerity in Browne's writings, which redeem many of their faults. His egotism is equal to that of Montaigne, but with this difference, that it is the egotism of a melancholy mind, which generally becomes unpleasing. This melancholy temperament is characteristic of Browne. "Let's talk of graves and worms and epitaphs" seems his motto. His best written work, the Hydriotaphia, is expressly an essay on sepulchral urns; but the same taste for the circumstances of mortality leavens also the Religio Medici.

37. The thoughts of sir Walter Raleigh on moral pru-

[p] "The Religio Medici was no sooner published than it excited the attention of the public by the novelty of paradoxes, the dignity of sentiment, the quick succession of images, the multitude of abstruse allusions, the subtlety of disquisition, and the strength of language." Life of Browne (in Johnson's Works, xii. 275).

dence are few, but precious. And some of the bright sallies of Selden recorded in his Table Talk are of the same description, though the book is too miscellaneous to fall under any single head of classification. The editor of this very short and small volume, which gives, perhaps, a more exalted notion of Selden's natural talents than any of his learned writings, requests the reader to distinguish times, and "in his fancy to carry along with him the when and the why many of these things were spoken." This intimation accounts for the different spirit in which he may seem to combat the follies of the prelates at one time, and of the presbyterians or fanatics at another. These sayings are not always, apparently, well reported; some seem to have been misunderstood, and in others the limiting clauses to have been forgotten. But on the whole they are full of vigour, raciness, and a kind of scorn of the half-learned, far less rude, but more cutting than that of Scaliger. It has been said that the Table Talk of Selden is worth all the Ana of the Continent. In this I should be disposed to concur; but they are not exactly works of the same class.

Selden's Table Talk.

38. We must now descend much lower, and could find little worth remembering. Osborn's Advice to his Son may be reckoned among the moral and political writings of this period. It is not very far above mediocrity, and contains a good deal that is commonplace, yet with a considerable sprinkling of sound sense and observation. The style is rather apophthegmatic, though by no means more so than was then usual.

Osborn's Advice to his Son.

39. A few books, English as well as foreign, are purposely deferred for the present; I am rather apprehensive that I shall be found to have overlooked some not unworthy of notice. One written in Latin by a German writer has struck me as displaying a spirit which may claim for it a place among the livelier and lighter class, though with serious intent, of moral essays. John Valentine Andreæ was a man above his age, and a singular contrast to the narrow and pedantic herd of German scholars and theologians. He regarded all things around him with a sarcastic but benevolent philosophy, keen in exposing the errors of mankind, yet only for the sake of amending them. It has

John Valentine Andreæ.

been supposed by many that he invented the existence of the famous Rosicrucian society, not so much probably for the sake of mystification, as to suggest an institution so praiseworthy and philanthropic as he delineated for the imitation of mankind. This, however, is still a debated problem in Germany.[q] But among his numerous writings, that alone of which I know anything is entitled, in the original Latin, Mythologiæ Christianæ, sive Virtutum et Vitiorum Vitæ Humanæ Imaginum Libri Tres. (Strasburg, 1618.) Herder has translated a part of this book in the fifth volume of his Zerstreute Blätter; and it is here that I have met with it. Andreæ wrote, I believe, solely in Latin, and his works appear to be scarce, at least in England. These short apologues, which Herder has called Parables, are written with uncommon terseness of language, a happy and original vein of invention, and a philosophy looking down on common life without ostentation and without passion. He came, too, before Bacon, but he had learned to scorn the disputes of the schools, and had sought for truth with an entire love, even at the hands of Cardan and Campanella. I will give a specimen, in a note, of the peculiar manner of Andreæ, but my translation does not perhaps justice to that of Herder. The idea, it may be observed, is now become more trite.[r]

[q] Brucker, iv. 735; Biogr. Univ., art. Andreæ, et alibi.

[r] "The Pen and the Sword strove with each other for superiority, and the voices of the judges were divided. The men of learning talked much and persuaded many; the men of arms were fierce, and compelled many to join their side. Thus nothing could be determined; it followed that both were left to fight it out, and settle their dispute in single combat.

"On one side books rustled in the libraries; on the other, arms rattled in the arsenals: men looked on in hope and fear, and waited the end.

"The Pen, consecrated to truth, was notorious for much falsehood; the Sword, a servant of God, was stained with innocent blood; both hoped for the aid of Heaven, both found its wrath.

"The State, which had need of both, and disliked the manners of both, would put on the appearance of caring for the weal and woe of neither. The Pen was weak, but quick, glib, well exercised, and very bold, when one provoked it. The Sword was stern, implacable, but less compact and subtle, so that on both sides the victory remained uncertain. At length, for the security of both, the common weal pronounced that both in turn should stand by her side and bear with each other. For that only is a happy country where the Pen and the Sword are faithful servants, not where either governs by its arbitrary will and passion."

If the touches in this little piece are not always clearly laid on, it may be ascribed as much, perhaps, to their having passed through two translations, as to the fault of the excellent writer. But in this early age we seldom find the entire neatness and felicity which later times attained.

SECT. II.—ON POLITICAL PHILOSOPHY.

Change in the Character of Political Writings — Bellenden and others — Patriarchal Theory refuted by Suarez — Althusius — Political Economy of Serra — Hobbes — and Analysis of his Political Treatises.

40. THE recluse philosopher who, like Descartes in his country-house near Utrecht, investigates the properties of quantity, or the operations of the human mind, while nations are striving for conquest and factions for ascendancy, hears that tumultuous uproar but as the dash of the ocean waves at a distance, and it may even serve, like music that falls upon the poet's ear, to wake in him some new train of high thought, or at the least to confirm his love of the absolute and the eternal, by comparison with the imperfection and error that beset the world. Such is the serene temple of philosophy, which the Roman poet has contrasted with the storm and the battle, with the passions of the great and the many, the perpetual struggle of man against his fellows. But if he who might dwell on this vantage-ground descends into the plain, and takes so near a view of the world's strife that he sees it as a whole very imperfectly, while the parts to which he approaches are magnified beyond their proportion; if especially he mingles with the combat, and shares its hopes and its perils, though in many respects he may know more than those who keep aloof, he will lose something of that faculty of equal and comprehensive vision in which the philosophical temper consists. Such has very frequently, or more or less perhaps in almost every instance, been the fate of the writer on general politics; if his pen has not been solely employed with a view to the questions that engage attention in his own age, it has generally been guided in a certain degree by regard to them.

Abandonment of anti-monarchical theories

41. In the sixteenth century we have seen that notions of popular rights, and of the admissibility of sovereign power for misconduct, were alternately broached by the two great religious parties of Europe, according to the necessity in which they stood for such weapons against their adver-

saries. Passive obedience was preached as a duty by the victorious, rebellion was claimed as a right by the vanquished. The history of France and England, and partly of other countries, was the clue to these politics. But in the following period a more tranquil state of public opinion, and a firmer hand upon the reins of power, put an end to such books as those of Languet, Buchanan, Rose, and Mariana. The last of these, by the vindication of tyrannicide, in his treatise De Rege, contributed to bring about a reaction in political literature. The Jesuits in France, whom Henry IV. was inclined to favour, publicly condemned the doctrine of Mariana in 1606. A book by Becanus, and another by Suarez, justifying regicide, were condemned by the parliament of Paris in 1612.[a] The assassination, indeed, of Henry IV., committed by one, not perhaps, metaphysically speaking, sane, but whose aberration of intellect had evidently been either brought on or nourished by the pernicious theories of that school, created such an abhorrence of the doctrine, that neither the Jesuits nor others ventured afterwards to teach it. Those also who magnified, as far as circumstances would permit, the alleged supremacy of the see of Rome over temporal princes, were little inclined to set up, like Mariana, a popular sovereignty, a right of the multitude not emanating from the Church, and to which the Church itself might one day be under the necessity of submitting. This became, therefore, a period favourable to the theories of absolute power; not so much shown by means of their positive assertion through the press as by the silence of the press, comparatively speaking, on all political theories whatever.

Political literature becomes historical.

42. The political writings of this part of the seventeenth century assumed in consequence more of an historical, or, as we might say, a statistical character. Learning was employed in systematical analyses of ancient or modern forms of government, in dissertations explanatory of institutions, in copious and exact statements of the true, rather than arguments upon the right or the expedient. Some of the very numerous works of Herman Conringius, a professor at Helmstadt, seem to fall within this description.

[a] Mezeray, Hist. de la Mère et du Fils.

But none are better known than a collection, made by the Elzevirs, at different times near the middle of this century, containing accounts, chiefly published before, of the political constitutions of European commonwealths. This collection, which is in volumes of the smallest size, may be called for distinction the Elzevir Republics. It is very useful in respect of the knowledge of facts it imparts, but rarely contains anything of a philosophical nature. Statistical descriptions of countries are much allied to these last; some indeed are included in the Elzevir series. They were as yet not frequent; but I might have mentioned, while upon the sixteenth century, one of the earliest, the Description of the Low Countries by Ludovico Guicciardini, brother of the historian.

Bellenden de Statu.

43. Those, however, were not entirely wanting who took a more philosophical view of the social relations of mankind. Among these a very respectable place should be assigned to a Scotsman, by name Bellenden, whose treatise De Statu, in three books, is dedicated to prince Charles in 1615. The first of these books is entitled De Statu prisci orbis in religione, re politica et literis; the second, Ciceronis Princeps, sive de statu principis et imperii; the third, Ciceronis Consul, Senator, Senatusque Romanus, sive de statu reipublicæ et urbis imperantis orbi. The first two books are, in a general sense, political; the last relates entirely to the Roman polity, but builds much political precept on this. Bellenden seems to have taken a more comprehensive view of history in his first book, and to have reflected more philosophically on it, than perhaps any one had done before; at least, I do not remember any work of so early an age which reminds me so much of Vico and the Grandeur et Décadence of Montesquieu. We can hardly make an exception for Bodin, because the Scot is so much more regularly historical, and so much more concise. The first book contains little more than forty pages. Bellenden's learning is considerable, and without that pedantry of quotation which makes most books of the age intolerable. The latter parts have less originality and reach of thought. This book was reprinted, as is well known, in 1787; but the celebrated preface of the editor has had the effect of eclipsing the

original author: Parr was constantly read and talked of, Bellenden never.

44. The Politics of Campanella are warped by a desire to please the court of Rome, which he recommends as fit to enjoy an universal monarchy, at least by supreme control; and observes, with some acuteness, that no prince had been able to obtain an universal ascendant over Christendom, because the presiding vigilance of the Holy See has regulated their mutual contentions, exalting one and depressing another, as seemed expedient for the good of religion.[1] This book is pregnant with deep reflection on history; it is enriched, perhaps, by the study of Bodin, but is much more concise. In one of the Dialogues of La Mothe le Vayer, we find the fallacy of some general maxims in politics drawn from a partial induction well exposed, by showing the instances where they have wholly failed. Though he pays high compliments to Louis XIII. and to Richelieu, he speaks freely enough, in his sceptical way, of the general advantages of monarchy.

Campanella's Politics.

La Mothe le Vayer.

45. Gabriel Naudé, a man of extensive learning, acute understanding, and many good qualities, but rather lax in religious and moral principle, excited some attention by a very small volume, entitled Considérations sur les Coups d'Etat, which he wrote while young, at Rome, in the service of the cardinal de Bagne. In this he maintains the bold contempt of justice and humanity in political emergencies which had brought disgrace on the 'Prince' of Machiavel, blaming those who, in his own country, had abandoned the defence of the St. Bartholomew massacre. The book is in general heavy and not well written, but, coming from a man of cool head, clear judgment, and considerable historical knowledge, it contains some remarks not unworthy of notice.

Naudé's Coups d'Etat.

46. The ancient philosophers, the civil lawyers, and by far the majority of later writers, had derived the origin of government from some agreement of the community. Bodin, explicitly rejecting this hypothesis, referred it to violent usurpation. But

Patriarchal theory of government.

[1] Nullus hactenus Christianus princeps monarchiam super cunctos Christianos populos sibi conservare potuit. Quoniam papa præest illis, et dissipat erigitque illorum conatus prout religioni expedit. C. 8.

in England, about the beginning of the reign of James, a different theory gained ground with the church; it was assumed, for it did not admit of proof, that a patriarchal authority had been transferred by primogeniture to the heir-general of the human race; so that kingdoms were but enlarged families, and an indefeasible right of monarchy was attached to their natural chief, which, in consequence of the impossibility of discovering him, devolved upon the representative of the first sovereign who could be historically proved to have reigned over any nation. This had not perhaps hitherto been maintained at length in any published book, but will be found to have been taken for granted in more than one. It was of course in favour with James I., who had a very strong hereditary title; and it might seem to be countenanced by the fact of Highland and Irish clanship, which does really affect to rest on a patriarchal basis.

Refuted by Suarez.

47. This theory as to the origin of political society, or one akin to it, appears to have been espoused by some on the Continent. Suarez, in the second book of his great work on law, observes, in a remarkable passage, that certain canonists hold civil magistracy to have been conferred by God on some prince, and to remain always in his heirs by succession; but "that such an opinion has neither authority nor foundation. For this power, by its very nature, belongs to no one man, but to a multitude of men. This is a certain conclusion, being common to all our authorities, as we find by St. Thomas, by the civil laws, and by the great canonists and casuists; all of whom agree that the prince has that power of law-giving which the people have given him. And the reason is evident, since all men are born equal, and consequently no one has a political jurisdiction over another, nor any dominion; nor can we give any reason from the nature of the thing why one man should govern another rather than the contrary. It is true that one might allege the primacy which Adam at his creation necessarily possessed, and hence deduce his government over all men, and suppose that to be derived by some one, either through primogenitary descent, or through the special appointment of Adam himself. Thus Chrysostom has said that the descent of all men from Adam

signifies their subordination to one sovereign. But in fact we could only infer from the creation and natural origin of mankind that Adam possessed a domestic or patriarchal (œconomicam), not a political, authority; for he had power over his wife, and afterwards a paternal power over his sons till they were emancipated; and he might even in course of time have servants and a complete family, and that power in respect of them which is called patriarchal. But after families began to be multiplied, and single men who were heads of families to be separated, they had each the same power with respect to their own families. Nor did political power begin to exist till many families began to be collected into one entire community. Hence, as that community did not begin by Adam's creation, nor by any will of his, but by that of all who formed it, we cannot properly say that Adam had naturally a political headship in such a society; for there are no principles of reason from which this could be inferred, since by the law of nature it is no right of the progenitor to be even king of his own posterity. And if this cannot be proved by the principles of natural law, we have no ground for asserting that God has given such a power by a special gift or providence, inasmuch as we have no revelation or Scripture testimony to the purpose."[u] So clear, brief, and dispassionate a refutation might have caused our English divines, who became very fond of this patriarchal theory, to blush before the Jesuit of Granada.

48. Suarez maintains it to be of the essence of a law that it be enacted for the public good. An unjust law is no law, and does not bind the conscience.[x] In this he breathes the spirit of Mariana. But he shuns some of his bolder assertions. He denies the right of rising in arms against a tyrant, unless he is an usurper; and though he is strongly for preserving the concession made by the kings of Spain to their people, that no taxes shall be levied without the consent of the Cortes, does not agree with those who lay it down as a general rule that no prince can impose taxes on his people by his own will.[y] Suarez asserts the direct power of the church over heretical princes, but denies

His opinion of law.

[u] Lib. ii. c. 2, § 3. [x] Lib. i. c. 7; and lib. iii. c. 22. [y] Lib. v. c. 17.

it as to infidels.[x] In this last point, as has been seen, he follows the most respectable authorities of his nation.

49. Bayle has taken notice of a systematic treatise on Politics by John Althusius, a native of Germany. Of this I have only seen an edition published at Groningen in 1615, and dedicated to the States of West Friesland. It seems, however, from the article in Bayle, that there was one printed at Herborn in 1603. Several German writers inveigh against this work as full of seditious principles, inimical to every government. It is a political system, taken chiefly from preceding authors, and very freely from Bodin; with great learning, but not very profitable to read. The ephori, as he calls them, by which he means the estates of a kingdom, have the right to resist a tyrant. But this right he denies to the private citizen. His chapter on this subject is written more in the tone of the sixteenth than of the seventeenth century, which indeed had scarcely commenced.[a] He answers in it Albericus Gentilis, Barclay, and others who had contended for passive obedience, not failing to draw support from the canonists and civilians whom he quotes. But the strongest passage is in his dedication to the States of Friesland. Here he declares his principle, that the supreme power or sovereignty (jus majestatis) does not reside in the chief magistrate, but in the people themselves, and that no other is proprietor or usufructuary of it, the magistrate being the administrator of this supreme power, but not its owner, nor entitled to use it for his benefit. And these rights of sovereignty are so much confined to the whole community, that they can no more alienate them to another, whether they will or not, than a man can transfer his own life.[b]

50. Few, even among the Calvinists, whose form of government was in some cases republican, would in the seventeenth century have approved this strong language of Althusius. But one of their noted theologians, Paræus, incurred the censure of the university of Oxford in 1623, for some passages in his Commentary on the

[x] Lib. iii. c. 10.

[a] Cap. 38. De tyrannide et ejus remediis.

[b] Administratorem, procuratorem, gubernatorem jurium majestatis, principem agnosco. Proprietarium vero et usufructuarium majestatis nullum alium quam populum universum in corpus unum symbioticum ex pluribus minoribus consociationibus consociatum, &c.

Epistle to the Romans which seemed to impugn their orthodox tenet of unlimited submission. He merely holds that subjects, when not private men, but inferior magistrates, may defend themselves, and the state, and the true religion, even by arms against the sovereign under certain conditions; because these superior magistrates are themselves responsible to the laws of God and of the state.[c] It was, in truth, impossible to deny the right of resistance in such cases without "branding the unsmirched brow" of Protestantism itself; for by what other means had the reformed religion been made to flourish in Holland and Geneva, or in Scotland? But in England, where it had been planted under a more auspicious star, there was little occasion to seek this vindication of the Protestant church, which had not, in the legal phrase, come in by disseisin of the state, but had united with the state to turn out of doors its predecessor. That some of the Anglican refugees under Mary were ripe enough for resistance, or even regicide, has been seen in another place by an extract from one of their most distinguished prelates.

Bacon.

51. Bacon ought to appear as a prominent name in political philosophy, if we had never met with it in any other. But we have anticipated much of his praise on this score; and it is sufficient to repeat generally that on such subjects he is among the most sagacious of mankind. It would be almost ridiculous to descend from Bacon, even when his giant shadow does but pass over our scene, to the feebler class of political moralists, such as Saavedra, author of Idea di un Principe politico, a wretched effort of Spain in her degeneracy; but an Italian writer must not be neglected, from the remarkable circumstance that he is esteemed one of the first who have treated the science of political œconomy. It must, however, be understood

Political œconomy.

[c] Subditi non privati, sed in magistratu inferiori constituti, adversus superiorem magistratum se et rempublicam et ecclesiam seu veram religionem etiam armis defendere jure possunt, his positis conditionibus: 1. Cum superior magistratus degenerat in tyrannum; 2. Aut ad manifestam idololatriam atque blasphemias ipsos vel subditos alios vult cogere; 3. Cum ipsis atrox infertur injuria; 4. Si aliter incolumes fortunis vita et conscientia esse non possint; 5. Ne prætextu religionis aut justitiæ sua quærant; 6. Servata semper ἐπιεικείᾳ et moderamine inculpatæ tutelæ juxta leges. Paræus in Epist. ad Roman., col. 1350.

that, besides what may be found on the subject in the ancients, many valuable observations which must be referred to political œconomy occur in Bodin, that the Italians had, in the sixteenth century, a few tracts on coinage, that Botero touches some points of the science, and that in England there were, during the same age, pamphlets on public wealth, especially one entitled, A Brief Conceit of English Policy.[d]

Serra on the means of obtaining money without mines.

52. The author to whom we allude is Antonio Serra, a native of Cosenza, whose short treatise on the causes which may render gold and silver abundant in countries that have no mines is dedicated to the Count de Lemos, "from the prison of Vicaria this tenth day of July, 1613." It has hence been inferred, but without a shadow of proof, that Serra had been engaged in the conspiracy of his fellow-citizen Campanella fourteen years before. The dedication is in a tone of great flattery, but has no allusion to the cause of his imprisonment, which might have been any other. He proposes, in his preface, not to discuss political government in general, of which he thinks that the ancients have treated sufficiently, if we well understood their works, and still less to speak of justice and injustice, the civil law being enough for this, but merely of what are the causes that render a country destitute of mines abundant in gold and silver, which no one has ever considered, though some have taken narrow views, and fancied that a low rate of exchange is the sole means of enriching a country.

His causes of wealth.

53. In the first part of this treatise Serra divides the causes of wealth, that is, of abundance of money, into general and particular accidents (accidenti communi e proprj), meaning by the former circumstances which may exist in any country, by the latter such as are peculiar to some. The common accidents are four—abundance of manufactures, character of the inhabitants, extent of commerce, and wisdom of government. The peculiar are chiefly, the fertility of

[d] This bears the initials of W. S., which some have idiotically taken for William Shakspeare. I have some reason to believe that there was an edition considerably earlier than that of 1584, but, from circumstances unnecessary to mention, cannot produce the manuscript authority on which this opinion is founded. It has been reprinted more than once, if I mistake not, in modern times.

the soil, and convenience of geographical position. Serra prefers manufactures to agriculture; one of his reasons is their indefinite capacity of multiplication; for no man whose land is fully cultivated by sowing a hundred bushels of wheat, can sow with profit a hundred and fifty; but in manufactures he may not only double the produce, but do this a hundred times over, and that with less proportion of expense. Though this is now evident, it is perhaps what had not been much remarked before.

His praise of Venice.

54. Venice, according to Serra, held the first place as a commercial city, not only in Italy, but in Europe; "for experience demonstrates that all the merchandises which come from Asia to Europe pass through Venice, and thence are distributed to other parts." But as this must evidently exclude all the traffic by the Cape of Good Hope, we can only understand Serra to mean the trade with the Levant. It is, however, worthy of observation, that we are apt to fall into a vulgar error in supposing that Venice was crushed, or even materially affected, as a commercial city, by the discoveries of the Portuguese.[e] She was in fact more opulent, as her buildings of themselves may prove, in the sixteenth century, than in any preceding age. The French trade from Marseilles to the Levant, which began later to flourish, was what impoverished Venice, rather than that of Portugal with the East Indies. This republic was the perpetual theme of admiration with the Italians. Serra compares Naples with Venice; one, he says, exports grain to a vast amount, the other imports its whole subsistence; money is valued higher at Naples, so that there is a profit in bringing it in, its export is forbidden; at Venice it is

[e] [Perhaps it is too much to say that Venice was not materially affected by the Portuguese commerce with India; when, though she became positively richer in the sixteenth century than before, her progress would have been more rapid had the monopoly of the spice trade remained in her hands. A remarkable proof of the apprehensions which the discovery of the passage by the Cape excited at Venice, appears by a letter of Luigi da Porto, author of the novel on Romeo and Juliet, written so early as 1509, just ten years after the voyage of Vasco di Gama. One of the senators recommended his colleagues to employ their money in inducing the sultan of Egypt to obstruct the voyages of the Portuguese to Calicut, so that the state might possess again the whole commerce in spices: il che è stato sin qua gran parte della ricchezza nostra, e 'l non poter più farlo, fra breve dovrà esser cagione della nostra povertà e della nostra rovina. Lettere di L. da Porto, 1832, vol. ii. p. 476.—1847.]

free; at Naples the public revenues are expended in the kingdom; at Venice they are principally hoarded. Yet Naples is poor, and Venice rich. Such is the effect of her commerce and of the wisdom of her government, which is always uniform, while in kingdoms, and far more in viceroyalties, the system changes with the persons. In Venice the method of choosing magistrates is in such perfection, that no one can come in by corruption or favour, nor can any one rise to high offices who has not been tried in the lower.

Low rate of exchange not essential to wealth.

55. All causes of wealth, except those he has enumerated, Serra holds to be subaltern or temporary; thus the low rate of exchange is subject to the common accidents of commerce. It seems, however, to have been a theory of superficial reasoners on public wealth, that it depended on the exchanges far more than is really the case; and in the second part of this treatise Serra opposes a particular writer, named De Santis, who had accounted in this way alone for abundance of money in a state. Serra thinks that to reduce the weight of coin may sometimes be an allowable expedient, and better than to raise its denomination. The difference seems not very important. The coin of Naples was exhausted by the revenues of absentee proprietors, which some had proposed to withhold; a measure to which Serra justly objects. This book has been reprinted at Milan in the collection of Italian œconomists, and, as it anticipates the principles of what has been called the mercantile theory, deserves some attention in following the progress of opinion. The once celebrated treatise of Mun, England's Treasure by Foreign Trade, was written before 1640; but not being published till after the Restoration, we may postpone it to the next period.

Hobbes. His political works.

56. Last in time among political philosophers before the middle of the century we find the greatest and most famous, Thomas Hobbes. His treatise De Cive was printed in 1642 for his private friends. It obtained, however, a considerable circulation, and excited some animadversion. In 1647 he published it at Amsterdam, with notes to vindicate and explain what had been censured. In 1650 an English treatise, with the Latin title, De Corpore Politico, appeared; and

in 1651 the complete system of his philosophy was given to the world in the Leviathan. These three works bear somewhat the same relation to one another that the Advancement of Learning does to the treatise De Augmentis Scientiarum; they are in effect the same; the same order of subjects, the same arguments, and in most places either the same words, or such variations as occurred to the second thoughts of the writer; but much is more copiously illustrated and more clearly put in the latter than in the former; while much also, from whatever cause, is withdrawn or considerably modified. Whether the Leviathan is to be reckoned so exclusively his last thoughts that we should presume him to have retracted the passages that do not appear in it, is what every one must determine for himself. I shall endeavour to present a comparative analysis of the three treatises, with some preference to the last.

Analysis of his three treatises.

57. Those, he begins by observing, who have hitherto written upon civil policy have assumed that man is an animal framed for society; as if nothing else were required for the institution of commonwealths than that men should agree upon some terms of compact which they call laws. But this is entirely false. That men do naturally seek each other's society, he admits by a note in the published edition of De Cive; but political societies are not mere meetings of men, but unions founded on the faith of covenants. Nor does the desire of men for society imply that they are fit for it. Many may desire it who will not readily submit to its necessary conditions.[f] This he left out in the two other treatises, thinking it, perhaps, too great a concession to admit any desire of society in man.

58. Nature has made little odds among men of mature age as to strength or knowledge. No reason, therefore, can be given why one should by any intrinsic superiority command others, or possess more than they. But there is a great difference in their passions; some through vainglory seeking pre-eminence over their fellows, some willing to allow equality, but not to lose

[f] Societates autem civiles non sunt meri congressus, sed fœdera, quibus faciendis fides et pacta necessaria sunt. . . . Alia res est appetere, alia esse capacem. Appetunt enim illi qui tamen conditiones æquas, sine quibus societas esse non potest, accipere per superbiam non dignantur.

what they know to be good for themselves. And this contest can only be decided by battle showing which is the stronger.

59. All men desire to obtain good and to avoid evil, especially death. Hence they have a natural right to preserve their own lives and limbs, and to use all means necessary for this end. Every man is judge for himself of the necessity of the means, and the greatness of the danger. And hence he has a right by nature to all things, to do what he wills to others, to possess and enjoy all he can. For he is the only judge whether they tend or not to his preservation. But every other man has the same right. Hence there can be no injury towards another in a state of nature. Not that in such a state a man may not sin against God, or transgress the laws of nature.[g] But injury, which is doing anything without right, implies human laws that limit right.

60. Thus the state of man in natural liberty is a state of war, a war of every man against every man, wherein the notions of right and wrong, justice and injustice, have no place. Irresistible might gives of itself right, which is nothing but the physical liberty of using our power as we will for our own preservation and what we deem conducive to it. But as, through the equality of natural powers, no man possesses this irresistible superiority, this state of universal war is contrary to his own good, which he necessarily must desire. Hence his reason dictates that he should seek peace as far as he can, and strengthen himself by all the helps of war against those with whom he cannot have peace. This then is the first fundamental law of nature. For a law of nature is nothing else than a rule or precept found out by reason for the avoiding what may be destructive to our life.

61. From this primary rule another follows, that a man should be willing, when others are so too, as far forth as for peace and defence of himself he shall think it necessary, to lay down his right to all things, and to

[g] Non quod in tali statu peccare in Deum, aut leges naturales violare impossibile sit. Nam injustitia erga homines supponit leges humanas, quales in statu naturali nullæ sunt. De Cive, c. 1. This he left out in the later treatises. He says afterward (sect. 28), omne damnum homini illatum legis naturalis violatio atque in Deum injuria est.

be contented with so much liberty against other men as he would allow to other men against himself. This may be done by renouncing his right to anything, which leaves it open to all, or by transferring it specially to another. Some rights, indeed, as those to his life and limbs, are inalienable, and no man lays down the right of resisting those who attack them. But, in general, he is bound not to hinder those to whom he has granted or abandoned his own right from availing themselves of it; and such hinderance is injustice or injury; that is, it is *sine jure*, his *jus* being already gone. Such injury may be compared to absurdity in argument, being in contradiction to what he has already done, as an absurd proposition is in contradiction to what the speaker has already allowed.

62. The next law of nature, according to Hobbes, is that men should fulfil their covenants. What contracts and covenants are he explains in the usual manner. None can covenant with God, unless by special revelation; therefore vows are not binding, nor do oaths add anything to the swearer's obligation. But covenants entered into by fear he holds to be binding in a state of nature, though they may be annulled by the law. That the observance of justice, that is, of our covenants, is never against reason, Hobbes labours to prove; for if ever its violation may have turned out successful, this, being contrary to probable expectation, ought not to influence us. "That which gives to human actions the relish of justice is a certain nobleness or gallantness of courage rarely found; by which a man scorns to be beholden for the contentment of his life to fraud or breach of promise." [h] A short gleam of something above the creeping selfishness of his ordinary morality!

63. He then enumerates many other laws of nature, such as gratitude, complaisance, equity, all subordinate to the main one of preserving peace by the limitation of the natural right, as he supposes, to usurp all. These laws are immutable and eternal; the science of them is the only true science of moral philosophy. For that is nothing but the science of what is good and evil in the conversation and society of mankind. In a state of

h Leviathan, c. 15.

nature private appetite is the measure of good and evil. But all men agree that peace is good, and therefore the means of peace, which are the moral virtues or laws of nature, are good also, and their contraries evil. These laws of nature are not properly called such, but conclusions of reason as to what should be done or abstained from; they are but theorems concerning what conduces to conservation and defence; whereas law is strictly the word of him that by right has command over others. But so far as these are enacted by God in Scripture, they are truly laws.

64. These laws of nature, being contrary to our natural passions, are but words of no strength to secure any one without a controlling power. For till such a power is erected, every man will rely on his own force and skill. Nor will the conjunction of a few men or families be sufficient for security, nor that of a great multitude guided by their own particular judgments and appetites. "For if we could suppose a great multitude of men to consent in the observation of justice and other laws of nature without a common power to keep them all in awe, we might as well suppose all mankind to do the same, and then there neither would be, nor need to be, any civil government or commonwealth at all, because there would be peace without subjection.[1] Hence it becomes necessary to confer all their power on one man, or assembly of men, to bear their person or represent them; so that every one shall own himself author of what shall be done by such representative. It is a covenant of each with each, that he will be governed in such a manner, if the other will agree to the same. This is the generation of the great Leviathan, or mortal God, to whom, under the immortal God, we owe our peace and defence. In him consists the essence of the commonwealth, which is one person, of whose acts a great multitude by mutual covenant have made themselves the authors.

65. This person (including, of course, an assembly as well as an individual) is the sovereign, and possesses sovereign power. And such power may spring from agreement or from force. A commonwealth by agree-

[1] Leviathan, c. 17.

ment or institution is when a multitude do agree and covenant one with another that whatever the major part shall agree to represent them shall be the representative of them all. After this has been done, the subjects cannot change their government without its consent, being bound by mutual covenant to own its actions. If any one man should dissent, the rest would break their covenant with him. But there is no covenant with the sovereign. He cannot have covenanted with the whole multitude as one party, because it has no collective existence till the commonwealth is formed; nor with each man separately, because the acts of the sovereign are no longer his sole acts, but those of the society, including him who would complain of the breach. Nor can the sovereign act unjustly towards a subject; for he who acts by another's authority cannot be guilty of injustice towards him; he may, it is true, commit iniquity, that is violate the laws of God and nature, but not injury.

66. The sovereign is necessarily judge of all proper means of defence, of what doctrines shall be taught, of all disputes and complaints, of rewards and punishments, of war and peace with neighbouring commonwealths, and even of what shall be held by each subject in property. Property, he admits in one place, existed in families before the institution of civil society; but between different families there was no *meum* and *tuum*. These are by the law and command of the sovereign; and hence, though every subject may have a right of property against his fellow, he can have none against the sovereign. These rights are incommunicable, and inseparable from the sovereign power; there are others of minor importance, which he may alienate; but if any one of the former is taken away from him, he ceases to be truly sovereign.

67. The sovereign power cannot be limited nor divided. Hence there can be but three simple forms of commonwealth—monarchy, aristocracy, and democracy. The first he greatly prefers. The king has no private interest apart from the people, whose wealth, honour, security from enemies, internal tranquillity, are evidently for his own good. But in the other forms each man may have a private advantage to seek. In popular assemblies

there is always an aristocracy of orators, interrupted sometimes by the temporary monarchy of one orator. And though a king may deprive a man of all he possesses to enrich a flatterer or favourite, so may also a democratic assembly, where there may be as many Neros as orators, each with the whole power of the people he governs. And these orators are usually more powerful to hurt others than to save them. A king may receive counsel of whom he will, an assembly from those only who have a right to belong to it, nor can their counsel be secret. They are also more inconstant both from passion and from their numbers; the absence of a few often undoing all that had been done before. A king cannot disagree with himself, but an assembly may do so, even to producing civil war.

68. An elective or limited king is not the sovereign, but the sovereign's minister; nor can there be a perfect form of government, where the present ruler has not power to dispose of the succession. His power, therefore, is wholly without bounds, and correlative must be the people's obligation to obey. Unquestionably there are risks of mischiefs and inconveniences attending a monarchy; but these are less than in the other forms; and the worst of them is not comparable to those of civil war, or the anarchy of a state of nature, to which the dissolution of the commonwealth would reduce us.

69. In the exercise of government the sovereign is to be guided by one maxim, which contains all his duty: Salus populi suprema lex. And in this is to be reckoned not only the conservation of life, but all that renders it happy. For this is the end for which men entered into civil society, that they might enjoy as much happiness as human nature can attain. It would be therefore a violation of the law of nature, and of the trust reposed in them, if sovereigns did not study, as far as by their power it may be, that their subjects should be furnished with everything necessary, not for life alone, but for the delights of life. And even those who have acquired empire by conquest must desire to have men fit to serve them, and should, in consistency with their own aims, endeavour to provide what will increase their strength and courage. Taxes, in the opinion of Hobbes, should be laid equally, and rather on expenditure than on re-

venue; the prince should promote agriculture, fisheries, and commerce, and in general whatever makes men happy and prosperous. Many just reflections on the art of government are uttered by Hobbes, especially as to the inexpediency of interfering too much with personal liberty. No man, he observes in another place, is so far free as to be exempted from the sovereign power; but if liberty consists in the paucity of restraining laws, he sees not why this may not be had in monarchy as well as in a popular government. The dream of so many political writers, a wise and just despotism, is pictured by Hobbes as the perfection of political society.

70. But most of all is the sovereign to be free from any limitation by the power of the priesthood. This is chiefly to be dreaded, that he should command anything under the penalty of death, and the clergy forbid it under the penalty of damnation. The pretensions of the see of Rome, of some bishops at home, and those of even the lowest citizens, to judge for themselves and determine upon public religion, are dangerous to the state and the frequent cause of wars. The sovereign therefore is alone to judge whether religions are safely to be admitted or not. And it may be urged that princes are bound to cause such doctrine as they think conducive to their subjects' salvation to be taught, forbidding every other, and that they cannot do otherwise in conscience. This, however, he does not absolutely determine. But he is clearly of opinion that, though it is not the case where the prince is infidel,[k] the head of the state, in a Christian commonwealth, is head also of the church; that he rather than any ecclesiastics is the judge of doctrines; that a church is the same as a commonwealth under the same sovereign, the component members of each being precisely the same. This is not very far removed from the doctrine of Hooker, and still less from the practice of Henry VIII.

71. The second class of commonwealths, those by forcible acquisition, differ more in origin than in their subsequent character from such as he has been discuss-

[k] Imperantibus autem non Christianis in temporalibus quidem omnibus eandem deberi obedientiam etiam a cive Christiano extra controversiam est: in spiritualibus vero, hoc est, in iis quæ pertinent ad modum colendi Dei sequenda est ecclesia aliqua Christianorum. De Cive, c. 18, § 3.

ing. The rights of sovereignty are the same in both. Dominion is acquired by generation or by conquest; the one parental, the other despotical. Parental power, however, he derives not so much from having given birth to, as from having preserved, the child; and, with originality and acuteness, thinks it belongs by nature to the mother rather than to the father, except where there is some contract between the parties to the contrary. The act of maintenance and nourishment conveys, as he supposes, an unlimited power over the child, extending to life and death, and there can be no state of nature between parent and child. In his notion of patriarchal authority he seems to go as far as Filmer; but, more acute than Filmer, perceives that it affords no firm basis for political society. By conquest and sparing the lives of the vanquished they become slaves; and so long as they are held in bodily confinement, there is no covenant between them and their master; but in obtaining corporal liberty they expressly or tacitly covenant to obey him as their lord and sovereign.

72. The political philosophy of Hobbes had much to fix the attention of the world and to create a sect of admiring partisans. The circumstances of the time, and the character of the passing generation, no doubt powerfully conspired with its intrinsic qualities; but a system so original, so intrepid, so disdainful of any appeal but to the common reason and common interests of mankind, so unaffectedly and perspicuously proposed, could at no time have failed of success. From the two rival theories —on the one hand, that of original compact between the prince and people, derived from antiquity, and sanctioned by the authority of fathers and schoolmen; on the other, that of an absolute patriarchal transmuted into an absolute regal power, which had become prevalent among part of the English clergy—Hobbes took as much as might conciliate a hearing from both, an original covenant of the multitude, and an unlimited authority of the sovereign. But he had a substantial advantage over both these parties, and especially the latter, in establishing the happiness of the community as the sole final cause of government, both in its institution and its continuance; the great fundamental theorem upon which

all political science depends, but sometimes obscured or lost in the pedantry of theoretical writers.[m]

73. In the positive system of Hobbes we find less cause for praise. We fall in at the very outset with a strange and indefensible paradox; the natural equality of human capacities, which he seems to have adopted rather in opposition to Aristotle's notion of a natural right in some men to govern, founded on their superior qualities, than because it was at all requisite for his own theory. By extending this alleged equality, or slightness of difference, among men to physical strength, he has more evidently shown its incompatibility with experience. If superiority in mere strength has not often been the source of political power, it is for two reasons: first, because, though there is a vast interval between the strongest man and the weakest, there is generally not much between the former and him who comes next in vigour; and, secondly, because physical strength is multiplied by the aggregation of individuals, so that the stronger few may be overpowered by the weaker many; while in mental capacity, comprehending acquired skill and habit as well as natural genius and disposition, both the degrees of excellence are removed by a wider distance, and what is still more important, the aggregation of the powers of individuals does not regularly and certainly augment the value of the whole. That the real

[m] [It was imputed to Hobbes by some of the royalists, that he had endeavoured to conciliate Cromwell, and make his own residence in England secure, by the unlimited doctrine of submission to power that he lays down. This is said by Clarendon: but I had been accustomed to look on it as an unfounded conjecture. In the curious poem, however, which Hobbes wrote at the age of eighty-four, on his own life, we have some confirmation of it:—

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

He owns that he was accused to the king of favouring Cromwell.

Nam regi accusor falso, quasi facta probarem
Impia Cromwelli, jus sceleri que darem.
Creditur; adversis in partibus esse videbar;
Perpetuo jubeor regis abesse domo.
* * * *
In patriam rideo tutelæ non bene certus,
Sed nullo potui tutior esse loco.
* * * *
Londinum veniens, ne clam venisse viderer,
Concilio statûs [sic] conciliandus eram.
* * * *
Omnia miles erat, committier omnia et uni
Poscebat; tacitè Cromwell is unus erat
Regia conanti calamo defendere jura,
Quis vitio vertat regia jura petens?

The last two lines were an admission of the charge. This poem is worth reading, and is of course an extraordinary performance at eighty-four. Hobbes (Sir W. Molesworth's edition), vol. i. p. xcii —1853.]

or acknowledged superiority of one man to his fellows has been the ordinary source of power is sufficiently evident from what we daily see among children, and must, it should seem, be admitted by all who derive civil authority from choice or even from conquest, and therefore is to be inferred from the very system of Hobbes.

74. That a state of nature is a state of war, that men, or at least a very large proportion of men, employ force of every kind in seizing to themselves what is in the possession of others, is a proposition for which Hobbes incurred as much obloquy as for any one in his writings; yet it is one not easy to controvert. But soon after the publication of the Leviathan, a dislike of the Calvinistic scheme of universal depravity, as well as of his own, led many considerable men into the opposite extreme of elevating too much the dignity of human nature; if by that term they meant, and in no other sense could it be applicable to this question, the real practical character of the majority of the species. Certainly the sociableness of man is as much a part of his nature as his selfishness; but whether this propensity to society would necessarily or naturally have led to the institution of political communities, may not be very clear; while we have proof enough in historical traditions, and in what we observe of savage nations, that mutual defence by mutual concession, the common agreement not to attack the possessions of each other, or to permit strangers to do so, has been the true basis, the final aim, of those institutions, be they more or less complex, to which we give the appellation of commonwealths.

75. In developing, therefore, the origin of civil society, Hobbes, though not essentially differing from his predecessors, has placed the truth in a fuller light. It does not seem equally clear that his own theory of a mutual covenant between the members of an unanimous multitude to become one people and to be represented, in all time to come, by such a sovereign government as the majority should determine, affords a satisfactory groundwork for the rights of political society. It is, in the first place, too hypothetical as a fact. That such an agreement may have been sometimes made by independent families, in the first coming together of communities, it would be presumptuous to deny—it carries upon the face

of it no improbability, except as to the design of binding posterity, which seems too refined for such a state of mankind as we must suppose; but it is surely possible to account for the general fact of civil government in a simpler way; and what is most simple, though not always true, is on the first appearance most probable. If we merely suppose an agreement, unanimous of course in those who concur in it, to be governed by one man, or by one council, promising that they shall wield the force of the whole against any one who shall contravene their commands issued for the public good, the foundation is as well laid, and the commonwealth as firmly established, as by the double process of a mutual covenant to constitute a people, and a popular determination to constitute a government. It is true that Hobbes distinguishes a commonwealth by institution, which he supposes to be founded on this unanimous consent, from one by acquisition, for which force alone is required. But as the force of one man goes but a little way towards compelling the obedience of others, so as to gain the name of sovereign power, unless it is aided by the force of many who voluntarily conspire to its ends, this sort of commonwealth by conquest will be found to involve the previous institution of the more peaceable kind.

76. This theory of a mutual covenant is defective also in a most essential point. It furnishes no adequate basis for any commonwealth beyond the lives of those who established it. The right, indeed, of men to bind their children, and through them a late posterity, is sometimes asserted by Hobbes, but in a very transient manner, and as if he was aware of the weakness of his ground. It might be inquired whether the force on which alone he rests the obligation of children to obey, can give any right beyond its own continuance; whether the absurdity he imputes to those who do not stand by their own engagements is imputable to such as disregard the covenants of their forefathers; whether, in short, any law of nature requires our obedience to a government we deem hurtful, because, in a distant age, a multitude whom we cannot trace bestowed unlimited power on some unknown persons from whom that government pretends to derive its succession.

77. A better ground for the subsisting rights of his Leviathan is sometimes suggested, though faintly, by Hobbes himself. "If one refuse to stand to what the major part shall ordain, or make protestation against any of their decrees, he does contrary to his covenant, and therefore unjustly: and whether he be of the congregation or not, whether his consent be asked or not, he must either submit to their decrees, or be left in the condition of war he was in before, wherein he might without injustice be destroyed by any man whatsoever."[n] This renewal of the state of war which is the state of nature, this denial of the possibility of doing an injury to any one who does not obey the laws of the commonwealth, is enough to silence the question why we are obliged still to obey. The established government and those who maintain it, being strong enough to wage war against gainsayers, give them the option of incurring the consequences of such warfare or of complying with the laws. But it seems to be a corollary from this, that the stronger part of a commonwealth, which may not always be the majority, have not only a right to despise the wishes but the interests of dissentients. Thus the more we scrutinise the theories of Hobbes, the more there appears a deficiency of that which only a higher tone of moral sentiment can give, a security for ourselves against the appetites of others, and for them against our own. But it may be remarked that his supposition of a state of war, not as a permanent state of nature, but as just self-defence, is perhaps the best footing on which we can place the right to inflict severe, and especially capital, punishment upon offenders against the law.

78. The positions so dogmatically laid down as to the impossibility of mixing different sorts of government were, even in the days of Hobbes, contradicted by experience. Several republics had lasted for ages under a mixed aristocracy and democracy; and there had surely been sufficient evidence that a limited monarchy might exist, though, in the revolution of ages, it might, one way or other, pass into some new type of polity. And these prejudices in favour of absolute power are rendered more dangerous by paradoxes unusual for an English-

[n] Lev., c. 18.

man, even in those days of high prerogative when Hobbes began to write, that the subject has no property relatively to the sovereign, and, what is the fundamental error of his whole system, that nothing done by the prince can be injurious to any one else. This is accompanied by the other portents of Hobbism, scattered through these treatises, especially the Leviathan, that the distinctions of right and wrong, moral good and evil, are made by the laws, that no man can do amiss who obeys the sovereign authority, that though private belief is of necessity beyond the prince's control, it is according to his will, and in no other way, that we must worship God.

79. The political system of Hobbes, like his moral system, of which, in fact, it is only a portion, sears up the heart. It takes away the sense of wrong, that has consoled the wise and good in their dangers, the proud appeal of innocence under oppression, like that of Prometheus to the elements, uttered to the witnessing world, to coming ages, to the just ear of Heaven. It confounds the principles of moral approbation, the notions of good and ill desert, in a servile idolatry of the monstrous Leviathan it creates, and after sacrificing all right at the altar of power, denies to the Omnipotent the prerogative of dictating the laws of his own worship.

Section III.

Roman Jurisprudence — Grotius on the Laws of War and Peace — Analysis of this Work — Defence of it against some Strictures.

80. In the Roman jurisprudence we do not find such a cluster of eminent men during this period as in the sixteenth century; and it would of course be out of our province to search for names little now remembered, perhaps, even in forensic practice. Many of the writings of Fabre of Savoy, who has been mentioned in the present volume, belong to the first years of this century. Farinacci, or Farinaceus, a lawyer of Rome, obtained a celebrity, which, after a long duration, has given way in the progress of legal

Civil jurists of this period.

studies, less directed than formerly towards a superfluous erudition.[o] But the work of Menochius de præsumptionibus, or, as we should express it, on the rules of evidence, is said to have lost none of its usefulness, even since the decline of the civil law in France.[p] No book, perhaps, belonging to this period is so generally known as the commentaries of Vinnius on the Institutes, which, as far as I know, has not been superseded by any of later date. Conringius of Helmstadt may be reckoned in some measure among the writers on jurisprudence, though chiefly in the line of historical illustration. The Elementa Juris Civilis, by Zouch, is a mere epitome, but neatly executed, of the principal heads of the Roman law, and nearly in its own words. Arthur Duck, another Englishman, has been praised, even by foreigners, for a succinct and learned, though elementary and popular, treatise on the use and authority of the civil law in different countries of Europe. This little book is not disagreeably written; but it is not, of course, from England that much could be contributed towards Roman jurisprudence.

Suarez on laws.

81. The larger principles of jurisprudence, which link that science with general morals, and especially such as relate to the intercourse of nations, were not left untouched in the great work of Suarez on laws. I have not however made myself particularly acquainted with this portion of his large volume. Spain appears to have been the country in which these questions were originally discussed upon principles broader than precedent, as well as upon precedents themselves; and Suarez, from the general comprehensiveness of his views in legislation and ethics, is likely to have said well whatever he may have said on the subject of international law. But it does not appear that he is much quoted by later writers.

Grotius De Jure Belli et Pacis.

82. The name of Suarez is obscure in comparison of one who soon came forward in the great field of natural jurisprudence. This was Hugo Grotius, whose famous work, De Jure Belli et Pacis, was published at Paris in 1625. It may be reckoned a proof of the extraordinary diligence as well

[o] Biogr. Univ

[p] Id.

as quickness of parts which distinguished this writer, that it had occupied a very short part of his life. He first mentions, in a letter to the younger Thuanus in August, 1623, that he was employed in examining the principal questions which belong to the law of nations.[q] In the same year he recommends the study of that law to another of his correspondents in such terms as bespeak his own attention to it.[r] According to one of his letters to Gassendi, quoted by Stewart, the scheme was suggested to him by Peiresc.

Success of this work.

83. It is acknowledged by every one that the publication of this treatise made an epoch in the philosophical, and almost we might say in the political history of Europe. Those who sought a guide to their own conscience or that of others, those who dispensed justice, those who appealed to the public sense of right in the intercourse of nations, had recourse to its copious pages for what might direct or justify their actions. Within thirty or forty years from its publication, we find the work of Grotius generally received as authority by professors of the continental universities, and deemed necessary for the student of civil law, at least in the Protestant countries of Europe. In England, from the difference of laws and from some other causes which might be assigned, the influence of Grotius was far slower, and even ultimately much less general. He was, however, treated with great respect as the founder of the modern law of nations, which is distin-

[q] Versor in examinandis controversiis præcipuis quæ ad jus gentium pertinent. Epist. 75. This is not from the folio collection of his epistles, so often quoted in a preceding chapter of this work (Part III., Chap. II.), but from one antecedently published in 1648, and entitled Grotii Epistolæ ad Gallos.

[r] Hoc spatio exacto, nihil restat quod tibi æque commendem atque studium juris, non illius privati, ex quo leguleii et rabulæ victitant, sed gentium ac publici; quam præstabilem scientiam Cicero vocans consistere ait in fœderibus, pactionibus, conditionibus populorum, regum, nationum, in omni denique jure belli et pacis. Hujus juris principia quomodo ex morali philosophia petenda sunt, monstrare poterunt Platonis ac Ciceronis de legibus liber. Sed Platonis summas aliquas legisse suffecerit. Neque pœniteat ex scholasticis Thomam Aquinatem, si non perlegere, saltem inspicere secunda parte secundæ partis libri, quem Summam Theologiæ inscripsit; præsertim ubi de justitia agit ac de legibus. Usum propius monstrabunt Pandectæ, libro primo atque ultimo; et codex Justinianeus, libro primo et tribus postremis. Nostri temporis juris consulti pauci juris gentium ac publici controversias attigere, eoque magis eminent, qui id fecere Vasquius, Hottomannus, Gentilis. Epist. xvi. This passage is useful in showing the views Grotius himself entertained as to the subject and groundwork of his treatise.

guished from what formerly bore that name by its more continual reference to that of nature. But when a book is little read it is easily misrepresented; and as a new school of philosophers rose up, averse to much of the principles of their predecessors, but, above all things, to their tediousness, it became the fashion not so much to dispute the tenets of Grotius as to set aside his whole work, among the barbarous and obsolete schemes of ignorant ages. For this purpose various charges have been alleged against it by men of deserved eminence, not, in my opinion, very candidly, or with much real knowledge of its contents. They have had, however, the natural effect of creating a prejudice, which, from the sort of oblivion fallen upon the book, is not likely to die away. I shall, therefore, not think myself performing an useless task in giving an analysis of the treatise De Jure Belli et Pacis; so that the reader, having seen for himself what it is, may not stand in need of any arguments or testimony to refute those who have represented it as it is not.

Its originality.

84. The book may be considered as nearly original, in its general platform, as any work of man in an advanced stage of civilization and learning can be. It is more so, perhaps, than those of Montesquieu and Smith. No one had before gone to the foundations of international law so as to raise a complete and consistent superstructure; few had handled even separate parts, or laid down any satisfactory rules concerning it. Grotius enumerates a few preceding writers, especially Ayala and Albericus Gentilis, but does not mention Soto in this place. Gentilis, he says, is wont, in determining controverted questions, to follow either a few precedents not always of the best description, or even the authority of modern lawyers, in their answers to cases, many of which are written with more regard to what the consulting parties desire, than to what real justice and equity demand.

Its motive and object.

85. The motive assigned for this undertaking is the noblest. "I saw," he says, "in the whole Christian world a licence of fighting, at which even barbarians might blush, wars begun on trifling pretexts or none at all, and carried on without reverence for any divine or human law, as if that one declaration

of war let loose every crime." The sight of such a monstrous state of things had induced some, like Erasmus, to deny the lawfulness of any war to a Christian. But this extreme, as he justly observes, is rather pernicious than otherwise; for when a tenet so paradoxical and impracticable is maintained, it begets a prejudice against the more temperate course which he prepares to indicate. "Let, therefore," he says afterwards, "the laws be silent in the midst of arms; but those laws only which belong to peace, the laws of civil life and public tribunals, not such as are eternal, and fitted for all seasons, unwritten laws of nature, which subsist in what the ancient form of the Romans denominated 'a pure and holy war.'"*

86. "I have employed in confirmation of this natural and national law the testimonies of philosophers, of historians, of poets, lastly, even of orators; not that we should indiscriminately rely upon them; for they are apt to say what may serve their party, their subject, or their cause; but because when many at different times and places affirm the same thing for certain, we may refer this unanimity to some general cause, which in such questions as these can be no other than either a right deduction from some natural principle or some common agreement. The former of these denotes the law of nature, the latter that of nations; the difference whereof must be understood, not by the language of these testimonies, for writers are very prone to confound the two words, but from the nature of the subject. For whatever cannot be clearly deduced from true premises, and yet appears to have been generally admitted, must have had its origin in free consent. . . . The sentences of poets and orators have less weight than those of history; and we often make use of them not so much to corroborate what we say, as to throw a kind of ornament over it." "I have abstained," he adds afterwards, "from all that belongs to a different subject, as what is expedient to be done; since this has its own science, that of politics, which Aristotle has rightly treated by not intermingling any thing extraneous to it, while Bodin has confounded that science with this which

His authorities.

* Eas res puro pioque duello repetundas censeo. It was a case prodigiously frequent in the opinion of the Romans.

we are about to treat. If we sometimes allude to utility, it is but in passing, and distinguishing it from the question of justice."[t]

Foundation of natural law.

87. Grotius derives the origin of natural law from the sociable character of mankind. "Among things common to mankind is the desire of society, that is, not of every kind of society, but of one that is peaceable and ordered according to the capacities of his nature with others of his species. Even in children, before all instruction, a propensity to do good to others displays itself, just as pity in that age is a spontaneous affection." We perceive by this remark that Grotius looked beyond the merely rational basis of natural law to the moral constitution of human nature. The conservation of such a sociable life is the source of that law which is strictly called natural; which comprehends, in the first place, the abstaining from all that belongs to others, and the restitution of it if by any means in our possession, the fulfilment of promises, the reparation of injury, and the right of human punishment. In a secondary sense, natural law extends to prudence, temperance, and fortitude, as being suitable to man's nature. And in a similar lax sense we have that kind of justice itself called distributive (διανεμητική), which prefers a better man to a worse, a relation to a stranger, a poorer man to a richer, according to the circumstances of the party and the case.[u] And this natural law is properly defined, "the dictate of right reason, pointing out a moral guilt or rectitude to be inherent in any action, on account of its agreement or disagreement with our rational and social nature; and consequently that such an action is either forbidden or enjoined by God the author of nature."[x] It is so immutable, that God himself cannot alter it; a position which he afterwards limits by a restriction we have seen in Suarez, that if God command any one to be killed, or his goods to be taken, this would not render murder or theft lawful, but, being commanded by the lord of life and all

[t] Prolegomena in librum de Jure Belli.

[u] Id. § 6-10.

[x] Jus naturale est dictatum rectæ rationis, indicans actui alicui, ex ejus convenientia aut disconvenientia cum ipsa natura rationali ac sociali, inesse moralem turpitudinem aut necessitatem moralem, ac consequenter ab auctore naturæ Deo talem actum aut vetari aut præcipi. L. i. c. i. § 10.

things, it would cease to be murder or theft. This seems little better than a sophism unworthy of Grotius; but he meant to distinguish between an abrogation of the law of nature, and a dispensation with it in a particular instance. The original position, in fact, is not stated with sufficient precision or on a right principle.

88. Voluntary or positive law is either human or revealed. The former is either that of civil communities, which are assemblages of freemen, living in society for the sake of laws and common utility, or that of nations, which derives its obligation from the consent of all or many nations; a law which is to be proved, like all unwritten law, by continual usage and the testimony of the learned. The revealed law he divides in the usual manner, but holds that no part of the Mosaic, so far as it is strictly a law, is at present binding upon us. But much of it is confirmed by the Christian Scriptures, and much is also obligatory by the law of nature. This last law is to be applied, *à priori*, by the conformity of the act in question to the natural and social nature of man; *à posteriori*, by the consent of mankind; the latter argument, however, not being conclusive, but highly probable, when the agreement is found in all, or in all the more civilised nations.[y]

Positive law.

89. Perfect rights, after the manner of the jurists, he distinguishes from imperfect. The former are called *sua*, our own, properly speaking, the objects of what they styled commutative justice —the latter are denominated fitnesses (aptitudines), such as equity, gratitude, and domestic affection prescribe, but which are only the objects of distributive or equitable justice. This distinction is of the highest importance in the immediate subject of the work of Grotius; since it is agreed on all hands that no law gives a remedy for the denial of these, nor can we justly, in a state of nature, have recourse to arms in order to enforce them.[z]

Perfect and imperfect rights.

90. War, however, as he now proceeds to show, is not absolutely unlawful either by the law of nature or that of nations, or of revelation. The proof is, as usual with Grotius, very diffuse;

Lawful cases of war.

[y] Lib. i. c. 1. [z] Id., ibid.

his work being in fact a magazine of arguments and examples with rather a supererogatory profusion.[a] But the Anabaptist and Quaker superstition has prevailed enough to render some of his refutation not unnecessary. After dividing war into public and private, and showing that the establishment of civil justice does not universally put an end to the right of private war, since cases may arise when the magistrate cannot be waited for, and others where his interference cannot be obtained, he shows that the public war may be either solemn and regular according to the law of nations, or less regular on a sudden emergency of self-defence; classing also under the latter any war which magistrates not sovereign may in peculiar circumstances levy.[b] And this leads him to inquire what constitutes sovereignty; defining, after setting aside other descriptions, that power to be sovereign whose acts cannot be invalidated at the pleasure of any other human authority, except one, which, as in the case of a successor, has exactly the same sovereignty as itself.[c]

Resistance by subjects unlawful.

91. Grotius rejects the opinion of those who hold the people to be everywhere sovereign, so that they may restrain and punish kings for misgovernment; quoting many authorities for the irresponsibility of kings. Here he lays down the principles of non-resistance, which he more fully inculcates in the next chapter. But this is done with many distinctions as to the nature of the principality, which may be held by very different conditions. He speaks of patrimonial kingdoms, which, as he supposes, may be alienated like an inheritance. But where the government can be traced to popular consent, he owns that this power of alienation should not be presumed to be comprised in the grant. Those, he says, are much deceived who think that in kingdoms where the consent of a senate or other body is required for new laws, the sovereignty itself is divided; for these restrictions must be understood to have been imposed by the prince on his own will, lest he should be entrapped into something contrary to his deliberate intention.[d] Among other

[a] C. 2.

[b] C. 3.

[c] Summa potestas illa dicitur, cujus actus alterius juri non subjacet, ita ut alterius voluntatis humanæ arbitrio irriti possint reddi. § 7.

[d] § 18.

things in this chapter, he determines that neither an unequal alliance, that is, where one party retains great advantages, nor a feudal homage takes away the character of sovereignty from the inferior, so far at least as authority over his own subjects is concerned.

92. In the next chapter, Grotius dwells more at length on the alleged right of subjects to resist their governors, and altogether repels it, with the exception of strict self-defence, or the improbable case of a hostile spirit, on the prince's part, extending to the destruction of his people. Barclay, the opponent of Buchanan and the Jesuits, had admitted the right of resistance against enormous cruelty. If the king has abdicated the government, or manifestly relinquished it, he may, after a time, be considered merely a private person. But mere negligence in government is by no means to be reckoned a relinquishment.[e] And he also observes that, if the sovereignty be divided between a king and part of his subjects, or the whole, he may be resisted by force in usurping their share, because he is no longer sovereign as to that; which he holds to be the case, even if the right of war be in him, since that must be understood of a foreign war, and it could not be maintained that those who partake the sovereignty have not the right to defend it; in which predicament a king may lose even his own share by the right of war. He proceeds to the case of usurpation; not such as is warranted by long prescription, but while the circumstances that led to the unjust possession subsist. Against such an usurper he thinks it lawful to rebel, so long as there is no treaty or voluntary act of allegiance, at least if the government de jure sanctions the insurrection. But where there may be a doubt whether the lawful ruler has not acquiesced in the usurpation, a private person ought rather to stand by possession, than to take the decision upon himself.[f]

93. The right of war, which we must here understand in the largest sense, the employment of force to resist force, though by private men, resides in all mankind.

[e] Si rex aut alius quis imperium abdicavit, aut manifeste habet pro derelicto, in eum post id tempus omnia licent, quæ in privatum. Sed minimè pro derelicto habere rem censendus est qui eam tractat negligentius. C. 4, § 9.

[f] § 20.

Solon, he says, taught us that those commonwealths would be happy wherein each man thought the injuries of others were like his own.[g] The mere sociability of human nature ought to suggest this to us. And, though Grotius does not proceed with this subject, he would not have doubted that we are even bound by the law of nature, not merely that we have a right, to protect the lives and goods of others against lawless violence, without the least reference to positive law or the command of a magistrate.[h] If this has been preposterously doubted, or affected to be doubted, in England of late years, it has been less owing to the pedantry which demands an express written law upon the most pressing emergency, than to lukewarmness, at the best, in the public cause of order and justice. The expediency of vindicating these by the slaughter of the aggressors must depend on the peculiar circumstances; but the right is paramount to any positive laws, even if, which with us is not the case, it were difficult to be proved from them.

All men naturally have right of war.

94. We now arrive at the first and fundamental inquiry, what is the right of self-defence, including the defence of what is our own. There can, says Grotius, be no just cause of war (that is, of using force, for he is now on the most general ground) but injury. For this reason he will not admit of wars to preserve the balance of power. An imminent injury to ourselves or our property renders repulsion of the aggressor by force legitimate. But here he argues rather weakly and inconsistently through excess of charity, and acknowledging the strict right of killing one who would otherwise kill us, thinks it more praiseworthy to accept the alternative.[i] The right of killing one who inflicts a smaller personal injury he wholly denies; and with respect to a robber, while he admits he may be slain by natural law, is of opinion that the Gospel has greatly limited the privilege of defending our property by such means. Almost all jurists and theologians of

Right of self-defence.

[g] Εν ᾗ των αδικουμενων ουχ ἡττον οἱ μη αδικουμενοι προβαλλονται και κολαζουσι τους αδικουντας. Ut cætera desint vincula, sufficit humanæ naturæ communio.

[h] He lays this down expressly afterwards. L. ii. c. 20.

[i] Lib. ii. c. 1, § 8. Gronovius observes pithily and truly on this: melius occidi quam occidere injuria; non melius occidi injuria quam occidere jure.

his day, he says, carry it farther than he does.[k] To public warfare he gives a greater latitude than to private self-defence, but without assigning any satisfactory reason; the true reason being that so rigid a scheme of ethics would have rendered his book an Utopian theory, instead of a practicable code of law.

95. Injury to our rights, therefore, is a just cause of war. But what are our rights? What is property? whence does it come? what may be its subjects? in whom does it reside? Till these questions are determined, we can have but crude and indefinite notions of injury, and consequently of the rights we have to redress it. The disquisition is necessary, but it must be long; unless, indeed, we acquiesce in what we find already written, and seek for no stable principles upon which this grand and primary question in civil society, the rights of property and dominion, may rest. Here then begins what has seemed to many the abandonment by Grotius of his general subject, and what certainly suspends for a considerable time the inquiry into international law, but still not, as it seems to me, an episodical digression, at least for the greater part, but a natural and legitimate investigation, springing immediately from the principal theme of the work, connected with it more closely at several intervals, and ultimately reverting into it. But of this the reader will judge as we proceed with the analysis.

Its origin and limitations.

96. Grotius begins with rather too romantic a picture of the early state of the world, when men lived on the spontaneous fruits of the earth, with no property except in what each had taken from the common mother's lap. But this happy condition did not, of course, last very long, and mankind came to separate and exclusive possession, each for himself and against the world. Original occupancy by persons, and division of lands by the community, he rightly holds to be the two sources of territorial propriety. Occupation is of two sorts, one by the community (per universitatem), the other (per fundos) by several possession. What is not thus occupied is still the domain of the state. Grotius conceives that mankind have reserved a right of

[k] Hodie omnes ferme tam jurisconsulti quam theologi docent recte homines a nobis interfici rerum defendendarum causa. § 13.

taking what belongs to others in extreme necessity. It is a still more remarkable limitation of the right of property, that it carries very far his notions of that of transit, maintaining that not only rivers, but the territory itself of a state may be peaceably entered, and that permission cannot be refused, consistently with natural law, even in the case of armies; nor is the apprehension of incurring the hostility of the power who is thus attacked by the army passing through our territory a sufficient excuse.[m] This of course must now be exploded. Nor can, he thinks, the transit of merchandise be forbidden or impeded by levying any further tolls than are required for the incident expenses. Strangers ought to be allowed to settle, on condition of obeying the laws, and even to occupy any waste tracts in the territory;[n] a position equally untenable. It is less unreasonably that he maintains the general right of mankind to buy what they want, if the other party can spare it; but he extends too far his principle, that no nation can be excluded by another from privileges which it concedes to the rest of the world. In all these positions, however, we perceive the enlarged and philanthropic spirit of the system of Grotius, and his disregard of the usages of mankind, when they clashed with his Christian principles of justice. But as the very contrary supposition has been established in the belief of the present generation, it may be doubtful whether his own testimony will be thought sufficient.

Right of occupancy.

97. The original acquisition of property was, in the infancy of human societies, by division or by occupancy; it is now by occupancy alone. Paullus has reckoned as a mode of original acquisition, if we have caused anything to exist, si quid ipsi, ut in rerum natura esset, fecimus. This, though not well expressed, must mean the produce of labour. Grotius observes, that this resolves itself into a continuance of a prior right, or a new one by occupancy, and therefore no peculiar mode of acquisition. In those things which naturally belong to no one, there may be two sorts of occupation, dominion or sovereignty, and property. And in the former sense at least, rivers and bays of the

[m] Sic etiam metus ab eo in quem bellum justum movet is qui transit, ad negandum transitum non valet. Lib. ii. c. 2, § 13.

[n] § 16, 17.

sea are capable of occupation. In what manner this may be done he explains at length.[o] But those who occupy a portion of the sea have no right to obstruct others in fishing. This had been the subject of a controversy of Grotius with Selden; the one in his Mare Liberum denying, the other in his Mare Clausum sustaining, the right of England to exclude the fishermen of Holland from the seas which she asserted to be her own.

98. The right of occupancy exists as to things derelict or abandoned by their owners. But it is of more importance to consider the presumptions of such relinquishment by sovereign states, as distinguished from mere prescription. The non-claim of the owner during a long period seems the only means of giving a right where none originally existed. It must be the silent acquiescence of one who knows his rights and has his free will. But when this abandonment has once taken place, it bars unborn claimants; for he who is not born, Grotius says, has no rights; ejus qui nondum est natus nullum est jus.[p]

Relinquishment of it.

99. A right over persons may be acquired in three ways, by generation, by their consent, by their crime. In children we are to consider three periods; that of imperfect judgment, or infancy, that of adult age in the father's family, and that of emancipation or foris-familiation, when they have ceased to form a part of it. In the first of these, a child is capable of property in possession, but not in enjoyment. In the second, he is subject to the parent only in actions which affect the family. In the third, he is wholly his own master. All beyond this is positive law. The paternal power was almost peculiar to the Romans, though the Persians are said to have had something of the same. Grotius, we perceive, was no ally of those who elevated the patriarchal power, in order to found upon it a despotic polity; nor does he raise it by any means so high as Bodin. The customs of Eastern nations would, perhaps, have warranted somewhat more than he concedes.[q]

Right over persons. By generation.

100. Consent is the second mode of acquiring domi-

[o] C. 3. [p] C. 4. [q] Id. 5.

nion. The consociation of male and female is the first species of it, which is principally in marriage, for which the promise of the woman to be faithful is required. But he thinks that there is no mutual obligation by the law of nature; which seems designed to save the polygamy of the patriarchs. He then discusses the chief questions as to divorce, polygamy, clandestine marriages, and incest; holding, that no unions are forbidden by natural law except in the direct line. Concubines, in the sense of the Roman jurisprudence, are true Christian wives.[r]

By consent in marriage.

101. In all other consociations except marriage, it is a rule that the majority can bind the minority. Of these the principal is a commonwealth. And here he maintains the right of every citizen to leave his country, and that the state retains no right over those whom it has banished. Subjection, which may arise from one kind of consent, is either private or public; the former is of several species, among which adoption, in the Roman sense, is the noblest, and servitude the meanest. In the latter case, the master has not the right of life and death over his servants, though some laws give him impunity. He is perplexed about the right over persons born in slavery, since his theory of its origin will not support it. But in the case of public subjection, where one state becomes voluntarily subject to another, he finds no difficulty about the unborn, because the people is the same, notwithstanding the succession of individuals; which seems paying too much deference to a legal fiction.[s]

In commonwealths.

102. The right of alienating altogether the territory he grants to patrimonial sovereigns. But he denies that a part can be separated from the rest without its consent, either by the community, or by the sovereign, however large his authority may be. This he extends to subjection of the kingdom to vassalage. The right of alienating private property by testament is founded, he thinks, in natural law;[t] a position wherein I can by no means concur. In conformity with this, he derives the right of succession by intestacy from the presumed in-

Right of alienating subjects.

Alienation by testament.

[r] C. 5. [s] Id. [t] C. 6, § 14.

tention of the deceased, and proceeds to dilate on the different rules of succession established by civil laws. Yet the rule that paternal and maternal heirs shall take respectively what descended from the ancestors on each side, he conceives to be founded in the law of nature, though subject to the right of bequest.[u]

Rights of property by positive law.

103. In treating of the acquisition of property by the law of nations, he means only the arbitrary constitutions of the Roman and other codes. Some of these he deems founded in no solid reason, though the lawgivers of every country have a right to determine such matters as they think fit. Thus the Roman law recognises no property in animals *feræ naturæ*, which that of modern nations gives, he says, to the owner of the soil where they are found, not unreasonably any more than the opposite maxim is unreasonable. So of a treasure found in the earth, and many other cases, wherein it is hard to say that the law of nature and reason prescribes one rule more than another.[x]

Extinction of rights.

104. The rights of sovereignty and property may terminate by extinction of the ruling or possessing family without provision of successors. Slaves then become free, and subjects their own masters. For there can be no new right by occupancy in such. But a people or community may cease to exist, though the identity of persons or even of race is not necessary for its continuance. It may expire by voluntary dispersion, or by subjugation to another state. But mere change of place by simultaneous emigration will not destroy a political society, much less a change of internal government. Hence, a republic becoming a monarchy, it stands in the same relation to other communities as before, and, in particular, is subject to all its former debts.[y]

[u] C. 7. In this chapter Grotius decides that parents are not bound by strict justice to maintain their children. The case is stronger the other way, in return for early protection. Barbeyrac thinks that aliment is due to children by strict right during infancy.

[x] § 8.

[y] § 2. At the end of this chapter Grotius unfortunately raises a question, his solution of which laid him open to censure. He inquires to whom the countries formerly subject to the Roman empire belong? And here he comes to the inconceivable paradox that that empire and the rights of the citizens of Rome still subsist. Gronovius bitterly remarks, in a note on this passage: Mi-

Some casuistical questions.

105. In a chapter on the obligations which the right of property imposes on others than the proprietor, we find some of the more delicate questions in the casuistry of natural law, such as relate to the bonâ fide possessor of another's property. Grotius, always siding with the stricter moralists, asserts that he is bound not only to restore the substance but the intermediate profits, without any claim for the valuable consideration which he may have paid. His commentator, Barbeyrac, of a later and laxer school of casuistry, denies much of this doctrine.[z]

Promises.

106. That great branch of ethics which relates to the obligation of promises has been so diffusively handled by the casuists, as well as philosophers, that Grotius deserves much credit for the brevity with which he has laid down the simple principles, and discussed some of the more difficult problems. That mere promises, or *nuda pacta*, where there is neither mutual benefit, nor what the jurists call synallagmatic contract, are binding on the conscience, whatever they may be, or ought to be, in law, is maintained against a distinguished civilian, Francis Connan; nor does Barbeyrac seem to dispute this general tenet of moral philosophers. Puffendorf however says that there is a tacit condition in promises of this kind that they can be performed without great loss to the promiser, and Cicero holds them to be released if their performance would be more detrimental to one party than serviceable to the other. This gives a good deal of latitude; but perhaps they are in such cases open to compensation without actual fulfilment. A promise given without deliberation, according to Grotius himself, is not binding. Those founded on deceit or error admit of many distinctions; but he deter-

rum est hoc loco summum virum, cum in præcipua questione non male sentiret, in tot salebras se conjecisse, totque monetstra chimæras confinxisse, ut aliquid novum diceret, et Germanis potius ludibrium deberet, quam Gallis et Papæ parum placeret. This, however, is very uncandid, as Barbeyrac truly points out; since neither of these could take much interest in a theory which reserved a supremacy over the world to the Roman people. It is probably the weakest passage in all the writings of Grotius, though there are too many which do not enhance his fame.

[z] C. 10. Our own Jurisprudence goes upon the principles of Grotius, and even denies the possessor by a bad title, though bonâ fide, any indemnification for what he may have laid out to the benefit of the property, which seems hardly consonant to the strictest rules of natural law.

mines, in the celebrated question of extorted promises, that they are valid by the natural, though their obligation may be annulled by the civil law. But the promisee is bound to release a promise thus unduly obtained.[a] These instances are sufficient to show the spirit in which Grotius always approaches the decision of moral questions; serious and learned, rather than profound in seeking a principle, or acute in establishing a distinction. In the latter quality he falls much below his annotator Barbeyrac, who had, indeed, the advantage of coming nearly a century after him.

Contracts.

107. In no part of his work has Grotius dwelt so much on the rules and distinctions of the Roman law as in his chapter on contracts, nor was it very easy or desirable to avoid it.[b] The wisdom of those great men, from the fragments of whose determinations the existing jurisprudence of Europe, in subjects of this kind, has been chiefly derived, could not be set aside without presumption, nor appropriated without ingratitude. Less fettered, at least in the best age of Roman jurisprudence, by legislative interference than our modern lawyers have commonly been, they resorted to no other principles than those of natural justice. That the Roman law, in all its parts, coincides with the best possible platform of natural jurisprudence it would be foolish to assert; but that in this great province, or rather demesne land, of justice, the regulation of contracts between man and man, it does not considerably deviate from the right line of reason, has never been disputed by any one in the least conversant with the Pandects.

108. It will be manifest, however, to the attentive

[a] C. 11, § 7. It is not very probable that the promisee will fulfil this obligation in such a case; and the decision of Grotius, though conformable to that of the theological casuists in general, is justly rejected by Puffendorf and Barbeyrac, as well as by many writers of the last century. The principle seems to be, that right and obligation in matters of agreement are correlative, and where the first does not arise the second cannot exist. Adam Smith and Paley incline to think the promise ought, under certain circumstances, to be kept; but the reasons they give are not founded on the *justitia expletrix*, which the proper obligation of promises, as such, requires. It is also a proof how little the moral sense of mankind goes along with the rigid casuists in this respect, that no one is blamed for defending himself against a bond given through duress or illegal violence, if the plea be a true one.

In a subsequent passage, l. iii. c. 19, § 4, Grotius seems to carry this theory of the duty of releasing an unjust promise so far as to deny the obligation of the latter, and thus circuitously to agree with the opposite class of casuists.

[b] C. 12.

ject of contracts as a part of ethics rather than of jurisprudence; and it is only by the frequent confusion of the two sciences that the contrary could be supposed. Thus he maintains that, equality being the principle of the contract by sale, either party is bound to restore the difference arising from a misapprehension of the other, even without his own fault; and this whatever may be the amount, though the civil law gives a remedy only where the difference exceeds one half of the price.[1] And in several other places he diverges equally from that law. Not that he ever contemplated what Smith seems to have meant by "natural jurisprudence," a theory of the principles which ought to run through and to be the foundation of the laws of all nations. But he knew that the judge in the tribunal and the inward judge in the breast, even where their subjects of determination appear essentially the same, must have different boundaries to their jurisdiction; and that, as the general maxims and inferible forms of external law, in attempts to accommodate themselves to the subtilties of casuistry, would become uncertain and arbitrary, so the finer emotions of the conscience would lose all their moral efficacy by restraining the duties of justice to that which can be enforced by the law. In the course of this twelfth chapter we come to a question much debated in the time of Grotius, the lawfulness of usury. After admitting, against the common opinion, that it is not repugnant to the law of nature, he yet maintains the prohibition in the Mosaic code to be binding on all mankind.[1] An extraordinary position, it would seem, in one who had denied any part of that system to be truly an universal law. This was, however, the usual determination of casuists; but he followed it up, as was also usual, with so many exceptions as materially relax and invalidate the application of the rule.

108. The next chapter, on promissory oaths, is a corollary to the last two. It was the opinion of Grotius, as it had been of all theologians and casuists, in truth, of all mankind, that a promise or contract

Promissory oaths.

¹ § 12.

the intention of the parties. But as the evidence of this intention must usually depend on words, we should adapt our general rules to their natural meaning. Common usage is to determine the interpretation of agreements, except where terms of a technical sense have been employed. But if the expressions will bear different senses, or if there is some apparent inconsistency in different clauses, it becomes necessary to collect the meaning conjecturally, from the nature of the subject, from the consequences of the proposed interpretation, and from its bearing on other parts of the agreement. This serves to exclude unreasonable and ... constructions from the equivocal language of ..., such as was usual in former times to a degree ... the greater prudence of contracting parties, if not ...tter faith, has rendered impossible in modern ... Among other rules of interpretation, whether ... or public engagements, he lays down one, ... the jurists, but concerning the validity of ...e have doubted, that things favourable, as ...hem, or conferring a benefit, are to be con...ly; things odious, or onerous to one party, ... stretched beyond the letter. Our own law, ...own, adopts this distinction between reme...l statutes; and it seems (wherever that ...urable in one sense is not odious in an... equitable principle in public conventions. ...question, the cause, or, as Polybius more ... pretext of the second Punic war, whe... of a treaty binding each party not to ... of the other shall comprehend those ... subsequently into alliance, seems, but ... grounds, to be decided in the nega...her cases from history are agreeably ... chapter.[1]

Their interpretation.

... he observes, important to ascertain ... personal or real, that is, whether it ...racting sovereign or the state. The ... are always real or permanent, even ...nment should become monarchical; ...not true as to those of kings, which

¹ C. 16.

positive law.[h] Whether the successors of a sovereign are bound by his engagements, must depend, he observes, on the political constitution, and on the nature of the engagement. Those of an usurper he determines not to be binding, which should probably be limited to domestic contracts, though his language seems large enough to comprise engagements towards foreign states.[i]

Public treaties.

111. We now return from what, in strict language, may pass for a long digression, though not a needless one, to the main stream of international law. The title of the fifteenth chapter is on Public Treaties. After several divisions, which it would at present be thought unnecessary to specify so much at length, Grotius enters on a question not then settled by theologians, whether alliances with infidel powers were in any circumstances lawful. Francis I. had given great scandal in Europe by his league with the Turk. And though Grotius admits the general lawfulness of such alliances, it is under limitations which would hardly have borne out the court of France in promoting the aggrandisement of the common enemy of Christendom. Another, and more extensive head in the casuistry of nations relates to treaties that have been concluded without the authority of the sovereign. That he is not bound by these engagements is evident as a leading rule; but the course which, according to natural law, ought to be taken in such circumstances is often doubtful. The famous capitulation of the Roman army at the Caudine Forks is in point. Grotius, a rigid casuist, determines that the senate were not bound to replace their army in the condition from which the treaty had delivered them. And this seems to be a rational decision, though the Romans have sometimes incurred the censure of ill faith for their conduct. But if the sovereign has not only by silence acquiesced in the engagement of his ambassador or general, which of itself, according to Grotius, will not amount to an implied ratification, but recognised it by some overt act of his own, he cannot afterwards plead the defect of sanction.[k]

112. Promises consist externally in words, really in

h § 6.

i Contractibus vero eorum qui sine jure imperium invaserunt, non tenebuntur populi aut veri reges, nam hi jus obligandi populum non habuerunt. § 14.

k C. 15.

the intention of the parties. But as the evidence of this intention must usually depend on words, we should adapt our general rules to their natural meaning. Common usage is to determine the interpretation of agreements, except where terms of a technical sense have been employed. But if the expressions will bear different senses, or if there is some apparent inconsistency in different clauses, it becomes necessary to collect the meaning conjecturally, from the nature of the subject, from the consequences of the proposed interpretation, and from its bearing on other parts of the agreement. This serves to exclude unreasonable and unfair constructions from the equivocal language of treaties, such as was usual in former times to a degree which the greater prudence of contracting parties, if not their better faith, has rendered impossible in modern Europe. Among other rules of interpretation, whether in private or public engagements, he lays down one, familiar to the jurists, but concerning the validity of which some have doubted, that things favourable, as they style them, or conferring a benefit, are to be construed largely; things odious, or onerous to one party, are not to be stretched beyond the letter. Our own law, as is well known, adopts this distinction between remedial and penal statutes; and it seems (wherever that which is favourable in one sense is not odious in another) the most equitable principle in public conventions. The celebrated question, the cause, or, as Polybius more truly calls it, the pretext of the second Punic war, whether the terms of a treaty binding each party not to attack the allies of the other shall comprehend those who have entered subsequently into alliance, seems, but rather on doubtful grounds, to be decided in the negative. Several other cases from history are agreeably introduced in this chapter.[1]

Their interpretation.

113. It is often, he observes, important to ascertain whether a treaty be personal or real, that is, whether it affect only the contracting sovereign or the state. The treaties of republics are always real or permanent, even if the form of government should become monarchical; but the converse is not true as to those of kings, which

1 C. 16.

are to be interpreted according to the probable meaning where there are no words of restraint or extension. A treaty subsists with a king though he may be expelled by his subjects; nor is it any breach of faith to take up arms against an usurper with the lawful sovereign's consent. This is not a doctrine which would now be endured.[m]

114. Besides those rules of interpretation which depend on explaining the words of an engagement, there are others which must sometimes be employed to extend or limit the meaning beyond any natural construction. Thus in the old law case, a bequest, in the event of the testator's posthumous son dying, was held valid where none was born, and instances of this kind are continual in the books of jurisprudence. It is equally reasonable sometimes to restrain the terms of a promise, where they clearly appear to go beyond the design of the promiser, or where supervenient circumstances indicate an exception which he would infallibly have made. A few sections in this place seem, perhaps, more fit to have been inserted in the eleventh chapter.

Obligation to repair injury.

115. There is a natural obligation to make amends for injury to the natural rights of another, which is extended by means of the establishment of property and of civil society to all which the laws have accorded him.[n] Hence a correlative right arises, but a right which is to be distinguished from fitness or merit. The jurists were accustomed to treat expletive justice, which consists in giving to every one what is strictly his own, separately from attributive justice, the equitable and right dispensation of all things according to desert. With the latter Grotius has nothing to do; nor is he to be charged with introducing the distinction of perfect and imperfect rights, if indeed those phrases are as objectionable as some have accounted them. In the far greater part of this chapter he considers the principles of this important province of natural law, the obligation to compensate damage, rather as it affects private persons than sovereign states. As, in most instances, this falls within the jurisdiction of civil tribunals, the rules laid down by Grotius may to a hasty

[m] § 17. [n] C. 17.

reader seem rather intended as directory to the judge than to the conscience of the offending party. This, however, is not by any means the case; he is here, as almost everywhere else, a master in morality and not in law. That he is not obsequiously following the Roman law will appear by his determining against the natural responsibility of the owner for injuries committed, without his fault, by a slave or a beast.[o] But sovereigns, he holds, are answerable for the piracies and robberies of their subjects when they are able to prevent them. This is the only case of national law which he discusses. But it is one of high importance, being in fact one of the ordinary causes of public hostility. This liability, however, does not exist where subjects, having obtained a lawful commission by letters of marque, become common pirates, and do not return home.

Rights by law of nations.

116. Thus far, the author begins in the eighteenth chapter, we have treated of rights founded on natural law, with some little mixture of the arbitrary law of nations. We come now to those which depend wholly on the latter. Such are the rights of ambassadors. We have now, therefore, to have recourse more to the usage of civilised people than to theoretical principles. The practice of mankind has, in fact, been so much more uniform as to the privileges of ambassadors than other matters of national intercourse, that they early acquired the authority and denomination of public law. The obligation to receive ambassadors from other sovereign states, the respect due to them, their impunity in offences committed by their principals or by themselves, are not indeed wholly founded on custom, to the exclusion of the reason of the case; nor have the customs of mankind, even here, been so unlike themselves as to furnish no contradictory precedents; but they afford perhaps the best instance of a tacit agreement, distinguishable both from moral right and from positive convention, which is specifically denominated the law of nations. It may be mentioned that Grotius determines in favour of the absolute impunity of ambassadors, that is, their

Those of ambassadors.

[o] This is against what we read in the 8th title of the 4th book of the Institutes: Si quadrupes pauperiem fecerit. Pauperies, in the legal sense, which has also some classical authority, means damnum sine injuria.

irresponsibility to the tribunals of the country where they reside, in the case of personal crimes, and even of conspiracy against the government. This, however, he founds altogether upon what he conceives to have been the prevailing usage of civilised states.[p]

117. The next chapter, on the right of sepulture, appears more excursive than any other in the whole treatise. The right of sepulture can hardly become a public question, except in time of war, and as such it might have been shortly noticed in the third book. It supplies Grotius, however, with a brilliant prodigality of classical learning.[q] But the next is far more important. It is entitled, On Punishments. The injuries done to us by others give rise to our right of compensation and to our right of punishment. We have to examine the latter with the more care, that many have fallen into mistakes from not duly apprehending the foundation and nature of punishment. Punishment is, as Grotius rather quaintly defines it, Malum passionis, quod infligitur ob malum actionis, evil inflicted on another for the evil which he has committed. It is not a part of attributive and hardly of expletive justice, nor is it, in its primary design, proportioned to the guilt of the criminal, but to the magnitude of the crime. All men have naturally a right to punish crimes, except those who are themselves equally guilty; but though the criminal would have no ground to complain, the mere pleasure of revenge is not a sufficient motive to warrant us; there must be an useful end to render punishment legitimate. This end may be the advantage of the criminal himself, or of the injured party, or of mankind in general. The interest of the injured party here considered is not that of reparation, which, though it may be provided for in punishment, is no proper part of it, but security against similar offences of the guilty party or of others. All men may naturally seek this security by punishing the offender; and though it is expedient in civil society that this right should be transferred to the judge, it is not taken away, where recourse cannot be had to the law. Every man may even, by the law of nature, punish crimes by which he

Right of sepulture.

Punishments.

[p] C. 18. [q] C. 19.

has sustained no injury; the public good of society requiring security against offenders, and rendering them common enemies.[r]

118. Grotius next proceeds to consider whether these rights of punishment are restrained by revelation, and concludes that a private Christian is not at liberty to punish any criminal, especially with death, for his own security or that of the public, but that the magistrate is expressly empowered by Scripture to employ the sword against malefactors. It is rather an excess of scrupulousness, that he holds it unbecoming to seek offices which give a jurisdiction in capital cases.[s]

119. Many things essentially evil are not properly punishable by human laws. Such are thoughts and intentions, errors of frailty, or actions from which, though morally wrong, human society suffers no mischief; or the absence of such voluntary virtues as compassion and gratitude. Nor is it always necessary to inflict lawful punishment, many circumstances warranting its remission. The ground of punishment is the guilt of the offender, its motive is the advantage expected from it. No punishment should exceed what is deserved, but it may be diminished according to the prospect of utility, or according to palliating circumstances. But though punishments should bear proportion to offences, it does not follow that the criminal should suffer no more evil than he has occasioned, which would give him too easy a measure of retribution. The general tendency of all that Grotius has said in this chapter is remarkably indulgent and humane, beyond the practice or even the philosophy of his age.[t]

120. War is commonly grounded upon the right of punishing injuries, so that the general principles upon which this right depends upon mankind ought well to be understood before we can judge of so great a matter of national law. States, Grotius thinks, have a right, analogous to that of individuals out of society, to punish heinous offences against the law of nature or of nations, though not affecting themselves, or even any other independent community. But this is to be done very cautiously, and does not extend to violations of the

[r] C. 20. [s] Id. [t] Id.