given no hint to Bacon, who would there and then have renounced him had he known of them. Not knowing them, Bacon in actual fact pleaded on his behalf with the Queen while he was in disgrace over his misdoings in Ireland and his forbidden return thence, and advised him for his good up to the first explosion.

Dr. Abbott, in short, weights the scales on one side as Dixon weights them on the other. He commonly, howbeit decorously, plays the devil's advocate, nearly always seeking the worst construction for Bacon's acts. After reproducing Gardiner's narrative of the proceedings against the goldsmiths and silk mercers in 1619, in the interests of the court monopoly of gold and silver thread, he carefully omits the historian's remark that "such, at least, is the story in the only form in which it has come down to us. It rests upon Yelverton's evidence, which Bacon never had an opportunity of correcting." Even Professor Gardiner goes too far when he assumes that the Proclamation of 1619 on the subject of the monopoly in question "may fairly be taken as Bacon's defence of himself." We know (1) that in 1620 Bacon concurred with Montagu, Coke, and other legal authorities, in advising the abolition of all monopolies;2 and (2) that he spoke in the House of Lords to the effect that in regard to the gold and silver thread monopoly "Sir Henry Yelverton [had] advised the same to be resumed into his Majesty's own hands, and by indentures to authorise divers to govern the same"; that the Council had consented; and "that the authority granted by the king was much abused in the execution

History of England, 1603-1642, iv, 19.

Spedding, Letters and Life, vii, 197-208.

thereof, to the intolerable grievance of the subject."1 This utterance, overlooked by the historian, quashes his inference. But Dr. Abbott's animus exceeds a stretch of inference: it so colours his whole narrative as to exclude it from the high category to which Spedding's belongs; and his industrious injustice at times leaves even a worse impression than does the

Old Bailey manner of Macaulay.

One who so eagerly presses every possible inference to Bacon's disadvantage cannot be leniently judged when he gainsays himself. Early in his inquiry2 Dr. Abbott affirms that Bacon showed "an invariable pliancy in the presence of great persons," and "had no political backbone, no power of adhering to his convictions and pressing them on unwilling ears." In support of this he can but cite some of Bacon's subtleties of negotiation with Elizabeth and with Buckingham; tactics which Bacon, like most men of his day, learned to regard as indispensable at court, but which were so far from being natural to him that in his youth, by the critic's own admission, he "took no trouble to disguise his sense of superiority" to his acquaintances,3 though in middle life he saw reason to resist his acquired propensity to compliment.4 And the critic has cited (1) Burghley's opinion of his nephew's "pride" at twenty-five; and (2) Essex's account, ten years later, of Bacon's "freedom and plainness which he hath used with me, and, in my knowledge, with some other of his best friends." Further, Dr. Abbott has commented (3) on "the lofty tone adopted by a young barrister of three-and-twenty in addressing his Sovereign."5 Finally, after asserting

Id., citing the Lords' Journals.

² Francis Bacon, pp. 21, 22. 4 Id. p. 33. 5 Id. p. 20. 3 Id. p. 32.

that Bacon's pliancy "disqualified him for the task of giving wise and effectual counsel," Dr. Abbott forgetfully confesses, in regard to Bacon's counselling of James, that "do what he might, he could not have completely succeeded; for he could not have persuaded James to change his nature." It is bad enough that the abundant sagacity of Bacon's counsels in parliamentary strategy should be ignored; but that he should be belittled for his very anxiety so to accommodate himself to the time as to guide the two capricious and headstrong monarchs to whom he had to sacrifice himself, is not justly to be borne. Tried by Dr. Abbott's standards, Machiavelli would stand disqualified for counsel, and Burghley and Colbert be classed as failures. From these verdicts of D.D.-dom one returns with a new zest to the wise page of Spedding, where candour yields moral inspiration, and good-will doubles intelligence. There we learn to know Bacon for what he was, neither a paragon of nobility nor a prodigy of baseness, but a man with high purposes and many high instincts, yet flawed by foibles like his best brethren, and at some points morally blind even as they were, yet not otherwise than they.

V.

Mr. Sidney Lee, who, as we have seen, unfortunately takes Dr. Abbott for his guide through the problem of Bacon's character, builds up an indictment against him in terms of his own precepts of worldly prudence as set forth in his books. Here we have one more application of the critical method by which Machiavelli was made out a virtuoso in murder.

"Bacon," says Mr. Lee, echoing Dr. Abbott and Macaulay, "sacrificed all ordinary considerations of honour in his treatment of Essex. But his principles of active life deprived friendship of meaning for him. The material benefit to be derived by one man from association with another alone entered into his scheme of self-advancement; and self-advancement was the only principle which he understood to govern 'the active stage of affairs." And again: "At all hazards he must advance himself, he must build up a material fortune. If the intellectual work to which he was called were to be done at all, no opportunity of securing the material wherewithal was he justified in rejecting. That is the principle which inspired Bacon's attitude to politics as well as to law; that is the principle which inspired every action of his life outside the walls of his study."2 "He was not prepared to sacrifice any chance of material advancement to his principles. If his own political views proved unacceptable to those who could help him on, he must substitute others with which the men of influence were in fuller sympathy."

For this systematic ill-construction of the whole of Bacon's public life, what is the justification? Apparently some of his own counsels to other men similarly placed. "He drew up a series of maxims, a series of precepts for getting on, for bettering one's position—for the architecture, as he called it, of one's fortune. Of these precepts, which form a cynical comment on Bacon's character and on his conception of social intercourse, this much may be said in their favour—that they get behind the screen of conventional hypocrisies." Let us try to do what Bacon is

said to have done; and ask what his cynical precepts

really amount to.

Going in his scrupulous way over the field of "learning," Bacon handles, with a minuteness which, to a modern reader, suggests naïveté quite as often as craft, all the aspects of conduct on which he thinks treatises ought to have been written; and in his survey of the possibilities of "Culture of the Mind" he comes to what he calls "Civil Knowledge," "a subject which of all others is most immersed in matter, and hardliest reduced to axiom." This he divides into "three parts, according to the three summary actions of society, which are Conversation, Negotiation, and Government." Under the first head he deprecates any great anxiety about reserve and selfsuppression. "If behaviour and outward carriage be intended too much, first it may pass into affection [i.e., affectation], and then quid deformius quam scenam in vitam transferre—what more unseemly than to be always playing a part—to act a man's life? But although it proceed not to that extreme, yet it consumeth time, and employeth the mind too much. And therefore, as we use to advise young students from company keeping by saying amici fures temporis-friends are thieves of time-so certainly the intending of the discretion of behaviour is a great thief of meditation."

Thus far, and yet further, the talk is as that of a garrulous old man of affairs, prattling sagely to his grandson; and the only criticism to be passed is an avowal of mild wonder, despite the excellence of the writing, as to why Bacon thought it all worth the writing out—why he could not be content to leave such matter in the inkbottle. But still he goes endlessly on, gravely fluent, quoting and commenting a

series of the proverbs of Solomon, and another series from the ancients, all by way of teaching ingenuous youth how to suck eggs. It is just such worldly-wise talk as wise men and wiseacres had made current before Solomon's time and since. "We will begin therefore with this precept, according to the ancient opinion, that the sinews of wisdom are slowness of belief and distrust; that more trust be given to countenance and deeds than to words; and in words, rather to sudden and surprised words than to set and purposed deeds." Harm there is none in the discourse, unless it be that it tends with supererogatory zeal to rob life of spontaneity, and to realise Voltaire's comment on "the insane project of being perfectly wise."

But when we come in our perusal to that grim saying ascribed to Bias, but doubtless older than Hammurabi-a saying adopted by Philo Judaeus and embodied in a Spanish proverb: "Love your friend as one who may one day be your enemy: hate your enemy as one who may one day be your friend "-we have tapped that vein of sombre prudence which crops up somewhere in the life of all of us; and if anyone thinks fit to cry out "Cynicism," we can but say, Would that it were. This seems to be the gist of Bacon's offence, as adjudged by Mr. Lee. We may appreciate a generous impatience with such withered wisdom; but is the open parade of it a proof of heartless craft, an incapacity for honest friendship, or a mastering bias to duplicity? Rather we recur to the characterisation of naïveté. Men think so in our own day, but do not think of taking the world into their confidence. The man who elaborates such rules of wisdom is doing a work of bon foi. Thus did Montaigne, with a difference. Even as Machiavelli

reduced to comparative decency of statement the principles on which worse men thought they had to work as rulers in Renaissance Italy, so Bacon raised to stately gravity of diction the rules of behaviour by which the best statesmen of his day in England were wont to steer their course. To suppose that he was introducing any novelty of dissimulation into English court life is to harbour an illusion which must stand in the way of all comprehension of our problem. Be it noted, too, that Bacon expressly qualifies all he has to say in this connection with the caveat: "Neither doth learning admire or esteem of this architecture of fortune otherwise than as of an inferior work: for no man's fortune can be an end worthy of his being, and many times the worthiest men do abandon their fortune willingly for better respects." Under this qualification the whole discussion should be read.

It is presumably by misadventure that Mr. Lee, in pressing his case, presents in quotation marks (p. 220), as a single extract from Bacon, the following:—

Have openness in fame and repute, secrecy in habit; dissimulation in seasonable use, and a power to feign if there be no remedy; mixture of falsehood is like alloy in coin of gold and silver which may make the metal work better."

Of this sentence, the first half (with "repute" for "opinion") is taken from the end of Bacon's essay Of Simulation and Dissimulation; while the second half comes from the essay Of Truth; where, however, it is followed by the words, "but it embaseth it." Needless to say, these words are used not in praise but in dispraise of falsehood. Mr. Lee must have mixed his notes. As for the clause italicised, it is simply such a counsel as every prominent politician in our own

¹ Ed. cited, p. 155. Cp. De Aug., B. viii, ch. i. Id. pp. 594-5.

time puts in practice every day. "Dissimulation in seasonable use" is but a way of saying, archaically, "Give not thyself away"; and the "power to feign if there be no remedy" is an accomplishment as common in private drawing-rooms as in those of palaces. If the whole of the essay be read, it will be found that this closing passage is the putting of a middle course after plainly stating the disadvantages as against the advantages of simulation. Once more, the explanation of such writing is not excess of craft, but defect of it. Talleyrand and Metternich would never have dreamt of publishing such maxims, precisely because they constantly acted on them. Bacon, doubtless, learned to comport himself warily as a man of affairs. He had need do so if he would remain one. But in seeking to save other young men the long delay which had beset his own career by reason of his youthful directness of speech, he was revealing at once the adventitious character of his own diplomatic discipline and the disinterested simplicity, the single-minded devotion to "learning," which inspired so much of his literary diligence. The old charge of disloyalty to Essex cannot be thus re-established. Untenable on its merits, it cannot be saved by citing Bacon against himself.

We can now judge aright of the estimate which Mr. Lee, still following Dr. Abbott, puts upon Bacon's career as a politician under James.

Had Bacon been a high-minded, disinterested politician, withdrawal from the King's service would have been the only course open to him; but he had an instinctive respect for authority, his private expenses were mounting high, and he was at length reaping pecuniary rewards in the legal and political spheres. Bacon deliberately chose the worser way. He abandoned in practice the last shreds of his political principles......He made up his mind to remain a servant of

the Crown, with the single and unpraiseworthy end of benefiting his own pocket.¹

Many of us, I doubt not, will sympathise with the spirit of Mr. Lee's pronouncement, while unable to acquiesce in it. Insofar, of course, as it puts everything upon Bacon's mere craving for income, it must be rejected as palpably unfair. The real issue is as to whether Bacon chose ill in staying at his post, whatever were the state of his finances. As to this, the student of Elizabethan and Jacobean history must surely feel that Mr. Lee is judging of Bacon's problem as he might do of that of a politician of our own time. The situations differ immensely. Mr. Lee, in his Life of Queen Victoria, courageously asserts of that sovereign lady that she dressed plainly, and with not much taste. In Queen Elizabeth's age, not only could he not have said as much, even were it true: he would not have dreamt of saying it. And the political possibilities differed proportionally. A statesman who in these days feels that by remaining in office at a given juncture he will be led into sacrificing principles by which he lays store, will certainly do well to resign. Whatever he may apprehend as to the course of affairs, he need not fear a national cataclysm. There is room for a constitutional Opposition as well as for a Ministry: the play of the two forces is the accepted condition of parliamentary life. Politicians, even "statesmen," abound; and nobody is indispensable. But in past times, when parliamentary capacity was "yet in the go-cart," when constitutional Opposition was either undeveloped or inefficacious, statesmen must many times have felt bound to hold to office at the cost of a heavy strain on their notions of good policy. Lord North seems to

Work cited, p. 229.

have felt thus constrained when he carried out the policy of George the Third in regard to the American colonies. Perhaps he was wrong, even from the political standpoint of his own age. But Walpole, before him, could justly enough feel that he must stay in power, despite forced departures from his principles, if the State were to be well managed; and we have the circumstantial assurance of the third Earl of Shaftesbury that when his grandfather, the first Earl, pronounced the odious maxim, *Delenda est Carthago*, in regard to the existence of Holland, he was obeying the King and Cabinet, and disobeying his own better judgment.¹

Be this true or not, if any statesman were ever justified in staying at the elbow of an unwise King, for fear of mishap to the State in case of his retirement, Bacon was entitled so to defend his service under James. Let any reader who doubts it follow the whole story as it is told by Spedding, keeping in mind what actually did happen in the next generation of English politics, and he will hesitate to take sides with Mr. Lee. Such a withdrawal on Bacon's part as Mr. Lee would prescribe would have been an act of sheer stoicism, not to say pessimism—a turning away from an evil world, to leave it to go to perdition as it would. Such stoicism or pessimism, no doubt, would be dignified enough, on the part either of Bacon in his perplexity, or of Machiavelli in his. But when we find such men incapable of taking comfort in a withdrawal into privacy while the State reels towards ruin, we are really not entitled to brand them with unworthiness because they bow to necessity

Rand's Life, Unpublished Letters, and Philosophical Regimen of Lord Shaftesbury, 1900, pp. 332-3; from Notes and Queries, 1851, p. 97.

and seek to make the best of a marred destiny. If we insist on such a verdict, we are but flying in the face of life. There is hardly a leading statesman in the modern world who has not at times felt that he must adapt himself to perverse conditions, and do what he may when he cannot do what he would. We may fairly infer that the sensitive spirit should shrink from statesmanship altogether; but we may not pass judgment as does Mr. Lee on men who have entered the arena knowing what it is, and who decide to remain men of action under the actual circumstances.

The criticism of Mr. Lee, finally, is reduced to something like absurdity by Dean Church, when he says of Bacon: "He chose to please man, and not to follow what his soul must have told him was the better way. He wanted, in his dealings with men, that sincerity on which he insisted so strongly in his dealings with nature and knowledge. And the ruin of a great life was the consequence." When it is thus solemnly alleged that lack of sincerity tends to ruin the lives of public men, detraction becomes derisory. The common sense of mankind testifies to the contrary. If lack of sincerity in dealings with men were ruinous in Dr. Church's own profession, ecclesiastical biography would be truly tragical reading. What ruined Bacon was not the wearing of such a mask as forms part of the stock-in-trade of as many modern theologians as modern politicians; nor the vulgar insincerity which stamps the characters of half the public men of Bacon's day, and of Elizabeth to boot. Of these he was guiltless. He fell, as men have fallen before and since, because of a folly that was beneath his character as it was

Bacon, in "Men of Letters" series, p. 4.

beneath his precepts; and because of the mischance of being found out. When we are judging a disrobed judge, let us be just.

VI.

Returning to Bacon's real deflection from right conduct, let us look in that direction for the clue it is likely to give to his psychology. Exorbitant expenses come of a sanguine way of speculation, a habit of dreaming great things and over-estimating one's command of the actual, coupled with a taste for multiplicity in some kinds of possession. Such a conjunction of tendencies might have been surmised in Bacon when, about the age of thirty-seven, though engaged in the queen's service, he contrived to be arrested for a debt of £300, owed to a goldsmith and money-lender. It was the omen of his career; and here his mental and his material life are as it were of a piece. His doctrine was above all things a proclamation of the abundance of knowledge and mastery of nature to be obtained by methodical and sedulous inquest; and insofar as he supposed himself to have directly contributed to such knowledge and mastery he has almost completely failed. This failure, fully acknowledged by Spedding,2 is the outstanding fact in Bacon's position as a thinker. To have won a spacious reputation as a new instaurator of science, a widener of the bounds of man's dominion over things, and yet to have missed some of the most available concrete truths and promulgated an abundance of concrete error—this is the paradox of Bacon's fame.

Dixon (pp. 160-1) makes out that the arrest was illegal, but this is sufficiently unlikely.

[&]quot;His new organum or logical machine, which to us is only a name and appears to have been a mistake" (Letters and Life, vii, 474).

And it is not to be solved save by realising that just as his immediate practice in his economic life was a concession to his proclivities and a lapsing from his ideals, involving the frequent breach of his own rules for the conduct of judges, so his handling of the separate problems of nature was a gratification of his instinct of possession rather than of his clear abstract sense of justice in inference. Perhaps no man has more luminously arraigned the normal intellectual vices, the tricks of self-deception, the levities of prejudice: to this day nothing is more commonly remembered from his writings than his vivid enumeration of the *idola*¹ of the cave, the tribe, the theatre, the forum. And yet to one or other of these idols, in the popular sense of the term, he makes frequent sacrifice.

His snare arises, as aforesaid, in the sphere of his genius, his specific energy. Wherever he had the data of a problem fully before him, his gifts of generalisation and comprehension and utterance came victoriously into play; and thus it came about that in Parliament, where other men were devious or shortsighted, he saw and reasoned with a sureness that made him at once a commander in counsel. In him the discursive or intellectual nature was so nearly paramount that the ordinary passions which root in ordinary interests had no disturbing force; hence his abnormal sagacity in nearly all matters of public policy. But this very sufficiency of judgment, where he had to measure himself against the judgments of other men of affairs, wrought for his miscalculation of his faculty in the more occult problems of nature. In

By which Bacon did not mean objects of worship, but phantas-mata or false notions as contrasted with true "ideas." Cp. Hallam, Introd. to Lit. of Europe, Pt. III, ch. iii, § 60; Ellis, Gen. Pref. to Bacon, end.

his youth he had so fully digested the moral and intellectual "colours of good and evil"—to use one of his own labels—that his early collection of antithetic apophthegms, the pros and cons of human qualities and conduct, reads like the harvest of a life's experience; as do many of his earlier essays, which have all the wise-browed weight of ripe meditation. Thus he must early have felt his reflective superiority to most of his fellows, though he mock-modestly says of his antitheta that they "show a juvenile warmth," in that they "abound in the moral and demonstrative kind, but touch sparingly upon the deliberative and judicial."

When, however, he inferred from his superiority in civics a similar superiority in physics, and "took all knowledge to be his province," he committed an error of capital importance. The inferiority of other men's judgment in civics was at once the measure and the witness of his supremacy, since men's judgments were in the last analysis the material of the research, the subject of the science. But when he would get behind the formidable reserve of nature he had no such advantage. He contemned other men's judgments here as elsewhere, but the problem for him and them alike was extraneous to human issues, and other men's inadequacy gave him no certificate of competence. Presuming as he did thus to dispose of the occult as easily as he did of the obvious problem, he never achieved more in it than to discourse with an inspiring suggestiveness, and to impugn other men's presumption while himself proceeding presumptuously. Free of the ordinary passions, the ordinary prejudices of social interest, he was now under the

In the De Augmentis, B. vi, ch. 3, § 12.

rule of his intellectual prejudice, the bias which in him stood for all the egoisms of ordinary men. Thus all his work on the theme of natural science included, to use his own phrase, "a tincture of the will and passions."

VII.

The nature and tendency of his error may be readily seen on a reading of his Wisdom of the Ancients. Scanning the fables of old mythology, he assumed that he comprehended them prima facie, even as a biologist has said the ordinary instructed person sees in a leaf "a flat green object that we know all about already"; and the result is a series of a priori interpretations which never once come in sight of truth. The allegories he divines were never there; myths are simply not what he imagined them to be; and he has illustrated absolutely nothing but his gift for fanciful thought, unbridled by historic tests or comparative method. Turn the same kind of apriorism upon the riddles of nature, and you get the multitude of vain explanations with which he accompanies his appeal to us to search for explanations. He has trusted his sagacity to give him the solution where he has not laboured to compass the data; though he has again and again insisted, as against other men's malpractice, that "those who determine not to conjecture and guess, but to find out and know; not to invent fables and romances of worlds, but to look into and dissect the nature of this real world,

This was partly discerned by his admirer Vico, who undertook to restate the case, but had little better success. See also the criticism of Kuno Fischer (*Francis Bacon*, Oxenford's trans., 1857, pp. 190-200, 375-7), which was not known to me when I wrote the above. Dr. Fischer modestly suggests that only the German mind could reach sound views of Greek mythology. It happens that they were reached by Fontenelle before any German.

must consult only things themselves." And if it be thought unlikely that a man who so clearly saw and pointed the right way should wholly depart from it, let the doubter read the early essay, "Of Expenses," wherein are laid down with masterly precision the perfect rules of private economy, and then note that a habitual deviation from the most essential of those rules is the sole explanation that the essayist's wisest biographer can give of the financial neediness which ultimately brought him to malfeasance and to open shame.

It may truly be said of him, indeed, that with all his spontaneous power and his unparalleled diligence as Chancellor, he did not set himself hard intellectual labours, rather letting his mind work as it would because it worked easily, and tasking it only by way of cataloguing minutiæ, never by way of an intense analysis. Thus, even his life-philosophy has finally the character of his set of acute "antitheta" rather than of a reduction of complexity to a general truth. It is typified in the two essays, "Of Atheism" and "Of Superstition." In the first occurs the famous saying that "a little philosophy inclineth man's mind to atheism, but depth in philosophy bringeth men's minds about to religion"2—a facile falsism, on which one can but exclaim, What a multitude of atheists there must be! To the ordinary paralogism of the design argument he adds the suicidal sophism (1) that "atheism is rather in the lip than in the heart of man," inasmuch as "atheists will ever be talking of that their opinion, as if they fainted in it within themselves, and would be glad to be strengthened by the consent of others"; and (2) "what is most of all,

De Augmentis, preamble: Shaw's trans.
Repeated in the De Augmentis, B. i.

you shall have of them that will suffer for atheism and not recant; whereas, if they did truly think there were no such thing as God, why should they trouble themselves?" By that trick-test every fulmination of Bacon against an error is a proof of his unfaith in his own doctrine, and every Christian missionary and martyr is at heart an unbeliever. Nay, by that test Bacon himself is condemned past hope, for throughout half his works he is perpetually affirming to himself the superiority of the Christian creed over dead paganism -a gratuitous contention, where there was no gainsayer. As for the gloss "The Scripture saith 'The fool hath said in his heart, there is no God'; it is not said 'The fool hath thought in his heart,'" it would be hard to match it for catchpenny quality in the vast literature of comment."

Yet, after the inexpensive summary that "as atheism is in all respects hateful, so in this, that it depriveth human nature of the means to exalt itself above human frailty," we have in the next essay the obviously more sincere reflections that "it were better to have no opinion of God at all than such an opinion as is unworthy of him"; and that "atheism leaves a man to sense, to philosophy, to natural piety, to laws, to reputation; all which may be guides to an outward moral virtue, though religion were not; but superstition dismounts all these, and erecteth an absolute monarchy in the minds of men." It would be hasty to surmise that the man who wrote this was shamming when he wrote the other: the antitheses are put down with the unconcern of unconsciousness; but he is not

These points are brought out more diffusely in the Latin essay De Atheismo, which appeared among the Meditationes Sacrae, with the first essays, in 1597. The essays on "Atheism" and "Superstition" as they stand were first given in the edition of 1612; and that on "Superstition" thus appears to be the later composition.

to be acquitted of insincerity, in the sense of speaking differently in different intellectual moods for lack of having thought out his problem. And to say this, in such a matter, is to say that he has not carried philo-

sophy far.

If, indeed, we compare any of Bacon's representative works with any of Descartes's, we cannot but be conscious, despite the contrary verdict of Leibnitz1 on their notions of the atom, that the Frenchman is the closer analyst, the deeper and harder thinker. And whereas the protestations of orthodox faith in Descartes's works are by way of deliberate safeguard against persecution, Bacon's bifrontal attitude on religious matters seems rather to stand for a divided mind and an alternating opinion. Again and again he remarks on the obstacles put in the way of science by theology;2 yet he not only stands to the scholastic shibboleth of a two-fold truth,3 thus giving theology an arbitrary status outside of reason: he further reverts habitually to the language of prayer and invocation, and can do so within a page or two of the declaration that "God works nothing in nature but by second causes."4

Such inconsistencies, however, are to be looked for in all thinking before Spinoza, sespecially in the reasoning of one who expressly refrained from attempting a new philosophic system. Bacon is not

¹ See it cited by Ellis and Spedding in pref. to the De Principiis (Bacon's Works, Routledge's ed. p. 643).

² Novum Organum, Aph. 62, 65, 89, 96. ³ De Augmentis, B. i; B. ii, ch. 11; B. iv, ch. 3; B. ix; Novum Organum, Aph. 65, 89; B. ii, end.

⁴ De Augmentis, B. i.

⁵ And even Spinoza wrote in 1665: "Nor do I deny prayer to be very useful to us, for my intellect is too small to determine all the means which God has, whereby he leads men to the love of him—that is, to salvation." Epist. xxxiv (xxi).

⁶ Novum Organum, pref.

to be judged by his theism, any more than by his attitude to James I, both being in terms of the limitation of all metaphysic and ethic in his time. As little, of course, is he to be disposed of by noting the shortcomings of his physics. But we shall miss all relevant criticism, all comparative measurement of him, if we fail to note with some exactness how he really stood as a scientific pioneer.

VIII.

As to the shortcomings of Bacon where his critical pretensions were highest, there can be small dispute after the signally candid avowals of Mr. Spedding, who, having handed over to Mr. Ellis the work of appraising the master on his scientific side, thus loyally accepts the result:—

It is impossible, I think, to read Mr. Ellis's remarks upon those parts of his works in which he comes in contact with what we call the exact sciences.....and not to feel that in the faculty of distinguishing differences.....he was (comparatively at least) deficient. This appears both from the imperfect account of the existing condition of those sciences which he gives in the De Augmentis Scientiarum; no notice being there taken of some of the most important advances which had been made by the writers immediately preceding him; and from his own experiments and speculations upon subjects which required their help. Though he paid great attention to Astronomy, discussed carefully the methods in which it ought to be studied, constructed for the satisfaction of his own mind an elaborate theory of the heavens, and listened eagerly for the news from the stars brought by Galileo's telescope, he appears to have been utterly ignorant of the discoveries which had just been made by Kepler's calculations. Though he complained in 1623 of the want of compendious methods for facilitating arithmetical computations, especially with regard to the doctrine of Series, and fully recognised the importance of them as an aid to physical inquiries, he does not say a word about Napier's Logarithms,

which had been published only nine years before, and reprinted more than once in the interval. He complained that no considerable advance had been made in Geometry beyond Euclid, without taking any notice of what had been done by Archimedes and Apollonius. He saw the importance of determining accurately the specific gravities of different substances, and himself attempted to form a table of them by a rude process of his own, without knowing of the more scientific though still imperfect methods previously employed by Archimedes, Ghetaldus, and Porta. He speaks of the "Eureka" of Archimedes in a manner which implies that he did not clearly apprehend either the nature of the problem to be solved or the principles upon which the solution depended. In reviewing the progress of Mechanics, he makes no mention either of Archimedes himself or of Stevinus, Galileo, Guldinus, or Ghetaldus......He observes that a ball of one pound weight will fall nearly as fast through the air as a ball of two, without alluding to the theory of the acceleration of falling bodies, which had been made known by Galileo more than thirty years before. He proposes an inquiry with regard to the lever-namely, whether in a balance with arms of different length but equal weight the distance from the fulcrum has any effect upon the inclination—though the theory of the lever was as well understood in his own time as it is now. In making an experiment of his own to ascertain the cause of the motion of a windmill, he overlooks an obvious circumstance which makes the experiment inconclusive, and an equally obvious variation of the same experiment which would have shown him that his theory was false. He speaks of the poles of the earth as fixed, in a manner which seems to imply that he was not acquainted with the precession of equinoxes; and in another place of the North Pole being above, and the South Pole below, as a reason why in our hemisphere the north winds predominate over the south. This list, for which I am entirely indebted to Mr. Ellis's prefaces and notes, might probably be increased; but the instances enumerated are sufficient to show not only that Bacon was ill-read in the history of those branches of learning (and yet it was in this direction that science was making the most real and rapid advances), but also that upon such subjects his ideas were not clear: this latter defect being no doubt the cause of the

other: for, where he could not readily follow the steps of the investigation, he could hardly appreciate the value of the result.

To this list Dr. Fowler does add a number of other instances, which I will put summarily.

1. Bacon believed, with qualifications, not only in

Natural but in Judicial Astrology.

2. He has many "curious and absurd speculations

on 'spirit.'" (E.g., Nov. Org. ii, 40.)

3. He evidently believed that air and water, under certain conditions, were mutually convertible. (Nov. Org. ii, 48, 111.)

4. He held that fountains originate in the condensation of air within the hollow parts of the earth.

(Hist. Densi et Rari, and Nov. Org. ii, 50, 3.)

5. He makes no mention of Harvey's discovery of the circulation of the blood, which Harvey (then

Court physician) began to teach in 1616.

6. He shows complete ignorance of the theory of projectiles, though it had been partly cleared up by several writers, one of whom (Digges) dedicated his book to Bacon's father.

7. He believed in the existence of bodies having

positive levity, and held that air has no weight.

8. He held that sulphur and mercury pervade the universe, and are the very foundation of matter.

9. He gave his countenance to many of the most absurd fancies of his time, as that water is congealed into crystals; that an ape's heart, "applied to the neck or head, helpeth the wit, and is good for the falling sickness"; that some sorts of bracelets comfort the spirits, "and they be of three intentions—refrigerant, corroborant, and aperient," and so on.

Pref. to the De Interpretatione Natura Proamium, in Works, iii, 510-512, where see the references.

BACON

And still the list is far from complete, for the Bohn editor notes, among other miscarriages, these:—

I. Bacon classes comets among meteors, whereas Seneca in antiquity had classed them with the planets, predicting that the regularity of their motions would yet be proved. (De Augmentis, ii, 3; Nov. Org. ii, 35.)

2. He speaks of astronomy as being degraded by the application to it of mathematics. (De Augmentis,

111, 4.)

3. He falls into the fallacy of saying that "wood and metal are not equally cold" (Nov. Org. ii, 13, 1), and that "heat is somewhat averse to a tangible mass" (Id. par. 40).

4. He alleges that "cold contracts and narrows every substance" (Id. ii, 20, 1), overlooking even the

familiar case of water.

5. He was inclined to believe that the moon was nothing more than illuminated vapour (Id. ii. 36).

To take one more instance, he twice lays it down that the phosphorescence sometimes seen in the sea is due to its being struck violently by the oar, or agitated by storms (*De Aug.* iv, 3, end; *Nov. Org.* ii, 12)—a futility of hypothesis nothing short of childish, inasmuch as he uses the expression "sometimes," thus implicitly admitting that mere concussion is demonstrably not the cause of the phenomenon.

Finally, he can be extremely careless in matters of literary history, on which he writes as dogmatically

as on scientific themes.

The record of blunders and absurdities could easily be still further lengthened; but quite enough has been said to show how precarious was Bacon's knowledge, how over-confident his temper, how far short his mode of judgment fell of scientific circumspection, and how little he did in his own practice to rectify the fallacious methods of which he so eloquently complained.

IX.

To show this much, however, is not to show all. It will perhaps strike the dispassionate reader, even in reading the list of errors and oversights, that after all they are committed by a man more wont to question phenomena, more habitually alert to the mute beckonings of Nature, than all save one in a million of his fellows. To speculate fallaciously is part of the lot of all pioneers: the prime requisite of the truest pioneer is that he shall be given to speculation. Most men, during myriads of years, have looked on the cedar and the hyssop, the flower and the leaf, the whole vast arabesque of nature's significances, with eyes that at best merely noted fact and pried hardly at all for cause. To many, if not most, of Bacon's earlier readers his sleepless questioning of things must have seemed to tell of a strangely unquiet mind; and we can gather from his reiterated allusions to the hindrance put by theology upon science that he had been often met by solemn reproof for presumption, as inquisitive children are still met at times by dull parents. And this unremitting curiosity, to begin with, must have counted for new life among those who could feel the spell of the questioner's speech.

True, he half undid his service by his opinionated disparagement of some who, without his genius for utterance, and with less than his range of interests, patiently plumbed a single mystery, and so laid for

Valerius Terminus, par. 8; Filum Labyrinthi (the English tract of that title), 7; De Augmentis, B. i; Novum Organum, B. i, Aph. 62, 65, 89, 96, etc.

their fellows some fixed footing in the chaos of illexplored Nature. Thus he girds more than once at Gilbert, who virtually established the science of magnetism by experimental methods, where Bacon, advocating just such methods, established nothing.

Some men become attached to particular sciences and contemplations, either from supposing themselves the authors and inventors of them or from having bestowed the greatest pains upon such subjects, and thus become most habituated to them. If men of this description apply themselves to philosophy and contemplations of an universal nature, they wrest and corrupt them by their preconceived fancies, of which Aristotle affords us a signal instance, who made his natural philosophy completely subservient to his logic, and thus rendered it little more than useless and disputatious......Gilbert, too, having employed himself most assiduously in the consideration of the magnet, immediately established a system of philosophy to coincide with his favourite pursuit.¹

And again :-

Men generally make their experiments carelessly, and as it were in sport, making some little variation in a known experiment.....nay, if they set to work more seriously, steadily, and assiduously, yet they waste all their time on probing some solitary matter, as Gilbert on the magnet, and the alchemists on gold. But such conduct shows their method to be no less unskilful than mean; for nobody can successfully investigate the nature of any object by considering that object alone; the inquiry must be more generally extended.²

There is no defending these passages: they are perverse, inconclusive, and misleading. Bacon was but finding formulas to buttress his prejudice, as when he elsewhere dogmatises thus:—

And it is likewise evident that although the opinion of Copernicus about the earth's rotation cannot be confuted by

Novum Organum, B. i, Aph. 54.

astronomical principles, because it agrees with phenomena, yet it may be rebutted by natural philosophy.

In other words, Bacon would not be a Copernican; and if he could not refute the Copernican argument he would overrule it a priori. If mathematics helped Copernicus, then mathematics must in turn be disparaged. Gilbert was a Copernican, so Gilbert must be discredited as a mere specialist. Nothing has done more than these presumptuous follies to bring Bacon into scientific disfavour.

Spedding, indeed, defends Bacon from the charge of unfairness to Gilbert; and it behoves us to think twice and thrice before differing from him. But here we are finally compelled to do so. In his admirable preface to the short De Interpretatione Naturæ Proæmium, where he admits that Bacon's attitude to the new astronomy was that of "a man who does not thoroughly understand it,"2 he writes that Bacon "could follow Gilbert in his inquiries concerning the loadstone; and he was not silent about him, but refers to him frequently, with praise both of his industry and his method, censuring him only for endeavouring to build a universal philosophy upon so narrow a basis"; and in two letters to Whewell he elaborates this defence. Whewell had written to Spedding that Bacon "borrowed from Gilbert..... images as well as thoughts, as I have.....shown;"3 and added: "Almost the only matter for which I find reason to blame him is his injustice to Gilbert, whom he scarcely ever mentions, except to blame him for the narrowness of his method,4 but whose

De Augmentis, B. i, ch. 4.

² Works, iii, 516.

³ Life of Whewell, 2nd ed. p 355.

⁴ Mr. Lee (Great Englishmen of the Sixteenth Century, 1904, p. 248) says that Bacon "ignored" Gilbert's researches. This is an overstatement.

philosophy was really almost as wide as Bacon's own, and solid precisely on account of his starting from such a reality as magnetic force."

Spedding replies first that Bacon expected greater results from his method than Gilbert did, and that this "saves him from the charge of injustice to Gilbert"; and Whewell admits the expectation. In a second letter2 Spedding represents Bacon as regarding Gilbert "(without the least thought of disparaging him, but honestly and seriously) much as you might regard a man who," having carefully made out the law of the ebb and flow of his native river, should on that bare basis frame a theory of tides without studying the oceans. But this really does not amount to a vindication: indeed, the wording of the passage last quoted amounts to a confusion of language. Firstly, Bacon only once or twice praises Gilbert3—once for an "excellent" remark about heavy bodies losing downward motion as they recede from the earth; again for his "diligence"; but the latter praise is followed by a disparagement of Gilbert's perfectly sound and memorably original view that the earth is a magnet; and in half a dozen places Bacon speaks of him with something like contempt, and this where, yet again, Gilbert was right and Bacon wrong. Thus, after approving Plutarch's remark that there might well be solid bodies apart from the earth, he writes:-

But Gilbert has indulged this thought to such excess as to assert that not only the earth and moon, but many other

Life of Whewell, p. 358.

² Id. p. 361.

³ Descriptio Globi Intellectualis, ch. vii, par. 4; De Fluxu et Refluxu Maris, near end. The diligence is also admitted in Nov. Org. B. i, Aph. 54.

solid and opaque globes, are scattered amid the shining globes throughout the expanse of heaven.

Again he groups him with those ancients who in his opinion "destroyed and confounded system" by reasoning that "the earth was a planet and movable, and as it were one of the stars"; and in several other

passages he speaks of him with disrespect.3

Now, not only was Gilbert right and Bacon wrong where they differed in their conclusions, but Bacon's account of Gilbert as basing his whole philosophy on magnetism is untrue. Indeed, it lies on the face of the case that Gilbert followed the best movement of thought in his day, and embraced opinions which he could never have deduced from his study of the magnet. Finally, Bacon never once shows any appreciation of the greatness of the results which Gilbert actually reached in his special research. Therefore, though Whewell finally leaves his blame of Bacon's hostile attitude to Gilbert (in the Philosophy of Discovery), 4 balanced by an account of him in the History of the Inductive Sciences as having "frequently praised" Gilbert "as a philosopher," we must reluctantly but definitely sum up that Spedding for once did not hold the balances quite evenly. He had better have admitted that Bacon erred.

Dr. Fowler, following De Morgan, urges that the Copernican theory was not really substantiated till Galileo, Kepler, and Newton had done their work, and that many of the Copernicans had no very good reasons for their opinions.⁶ But this does not excuse

6 Introd. to Novum Organum, pp. 31-33. 5 Ed. 1857, i, 297.

De Principiis atque Originibus, par. 10.
Descriptio Globi Intellectualis, ch. vi, par. 1.

³ Novum Organum, B. i, Aph. 54, 64, 70; Advancement, B. i. Ed. 1860, pp. 114-115.

⁵ Ed. 1857, i. 207.

the plain animus of Bacon's tone towards Gilbert; and it makes somewhat light of Bacon's constant pretension to be clearing the path for new truth. Like Dr. Whewell, Dr. Fowler disputes Hume's statement that Bacon "rejected, with the most positive disdain, the system of Copernicus": there was rejection, says Dr. Fowler, but not disdain. Yet he can but cite the passages in which Bacon indicates past hesitations, or puts his denial moderately, arguing for the rest that to say of the theory of the earth's diurnal motion "quod nobis constat falsissimum esse" is to be "far from exhibiting the most positive disdain." It is hardly worth while to debate such an issue: Hume's words are nearer the truth than Dr. Fowler's "far from"; and Bacon's At multo fortasse justior movetur controversia,"3 which Dr. Fowler does not quote when citing the context, is again of the nature of "positive disdain"; as are the passages already cited in which Bacon disparages Gilbert for his revival of the belief in the earth's motion.

More to the purpose is it to point out, as Dr. Fowler does, that in the Descriptio Globi Intellectualis Bacon brings against the original form of the Copernican theory some arguments so cogent that they helped to bring about its later modification. But the commentator leaves standing his significant admissions that "Bacon appears, in early life, like the majority, probably, of his contemporaries, to have conceived a strong prejudice against the

1 Novum Organum, ii, 35, 36, 48 (17); De Augmentis, iv, 1; Thema

3 Novum Organum, ii, 48 (17).

Cœli; Descriptio Globi Intellectualis.

² De Augmentis, iv, 1. It is fair to note that the Bohn translation (a revision of Shaw's) in this passage exaggerates Bacon's language, inserting the word "extravagant" where there is no epithet at all in the original; and that again in the passage, iv, 1, it has "may easily be exploded" where the original says only "revinci.....posse."

Copernican theory," and that after some hesitations in middle life he "became positive in his opposition to it"; and it does not greatly avail to point further to "the tenacity with which the Cambridge mathematicians adhered to the Cartesian system long after the publication of Newton's discoveries;.....the slowness of their reception on the continent of Europe, and the obstinate resistance offered by Leibnitz to the Newtonian doctrine of gravitation."1 Bacon, be it repeated, was expressly claiming to make the path straight; and such a claim is still involved in the normal Baconian panegyric. His positive resistance to new truth, then, must tell specially against him; and if it be true, as Dr. Fowler claims,2 that he had a wide influence on succeeding thinkers, there is a fair presumption that his anti-Copernicanism delayed the general acceptance of the truth.

X.

We are on more propitious ground when we come to the pros as regards Bacon's scientific speculation; for he was not always infelicitous in his hypotheses. Dr. Fowler rightly, I think, credits him with original insight in point of his suggestions that formal and physical astronomy should be brought into correlation,³ and that terrestrial phenomena may help us to comprehend celestial.⁴ If it be too much to say in the latter case that "this passage might almost be regarded as a prediction not only of the discoveries of Newton, but of the mode in which he made them," 5 it is at

¹ Introd. cited, pp. 35-36. ² Id. § 14.

Descriptio Globi Intellectualis, ch. v.
 De Augmentis, iii, 4.
 Introd. cited, p. 38.

least true that at both points Bacon beckons science along the path to be followed by Newton, Kant, and Laplace. It is further true that (apparently here taking a hint from Gilbert) he remarkably anticipated Newton's law of Attraction; and that he appears to have reached for himself the true idea that we see the starry sky not as it actually is at the moment of our perception, but as it was some time before, the light requiring time to travel.2 Yet again, he came near the Newtonian conception of the nature of colour;3 he anticipated by nearly fifty years the famous Florentine experiment to test the compressibility of water, using lead instead of silver;4 and he seems to have drawn the true inference, however inexactly. Nay, he had even a glimpse of the fallacy of the doctrine of fixity of species;5 and his famous guess that Heat is a mode of Motion,6 though perhaps reached haphazard,7 at least cannot be pretended to disprove his speculative power.

Still, it is not on those grounds that Bacon can be shown to have been a forwarding force in discovery. The great guess about heat is elbowed by the errors we have noted, and no man who in Bacon's day recognised the latter could well be directly enlightened by the former. Mr. Ellis, while giving Bacon full credit for reaching the true theory of heat and realising the proper mode of proof, avows concerning the entire investigation that, "If it were affirmed that Bacon, after having had a glimpse of the truth

¹ Novum Organum, ii, 36 (3). Cp. the Descriptio Globi Intellectualis, ch. vii.

² Id. ii, 46. ⁴ Id. ii, 45; Hist. Densi et Rari, near end. Cp. Ellis's note to Nov. Org. as cited.

⁵ Nov. Org. i, 66.
⁷ Cp. Whewell, Philosophy of Discovery, 1860, pp. 136-7.

suggested by some obvious phenomena, had then recourse, as he himself expresses it, to certain differentiæ inanes in order to save the phenomena, I think it would be hard to dispute the truth of the censure"; and Whewell, also writing after the laws of heat were established, declares that Bacon's formula "includes no laws of phenomena, explains no process, and is indeed itself an example of illicit generalisation." In any case, Bacon did not help to make the truth clear. Even the true conception of the lapse of time in the transmission of light to us from the stars undergoes abortion, since "unfortunately Bacon proceeds to explain away his conjecture by arguments almost as perverse as the thought itself is felicitous."

It remains to consider, in this regard, the notable plea of Mr. Spedding that Bacon's service has been estimated with a general disregard of his real precept to his fellows, and their failure to obey it. What science has really done, Mr. Spedding argues, is merely to follow Galileo, not to follow Bacon; and Bacon's counsel is still to be taken. If, he goes on—

If Bacon were to re-appear among us at the next meeting of the great British Association, or say, rather, if he had appeared there two or three years ago (for there seems to be something great and new going on now), I think he would have shaken his head. I think he would have said: "Here has been a great deal of very good diligence used by several persons; but it has not been used upon a well-laid plan....... You have been acting all the time like a being who should attempt to conquer a country by encouraging private adventurers to make incursions each on his own account, without

1 Note to Novum Organum, ii, 18.

² Philosophy of Discovery, 1860, p. 137. The Bohn editor, Mr. Joseph Devey, transcribes from Whewell almost verbatim a whole paragraph ending with these words, and signs it "Ed." (Note to Novum Organum, ii, 20, p. 481.) Whewell's Philosophy of Discovery was first published early in 1856, the Bohn Bacon a little later.

³ Fowler, as cited, p. 40.

any system of combined movements to subdue and take possession. I see that wherever you have the proper materials.....your work is excellent; so was Gilbert's in my time, so was Galileo's; nay, even Kepler (though his method was unskilful.....)—because he had a copious collection of materials ready to his hand, and enormous perseverance, however perversely applied, and a religious veracity—did at least hit upon one of the greatest discoveries ever made by one man. But what could Kepler have done without Tycho Brahé's tables of observation? And what might not Galileo have done if he had had a large enough collection of facts? This therefore it is that disappoints me. I do not see any sufficient collection made of materials—that is, of facts in nature—or any effectual plan on foot for making one. You are scarcely better off in this respect than I was; you have each to gather the materials upon which you have to work.Your scholar has his dictionary provided to his hand; but your natural philosopher has still to make his dictionary for himself.

"And I wonder the more at this because this is the very thing of all others which I myself pointed out as absolutely necessary to be supplied......You call me the Father of your Philosophy, meaning it for the greatest compliment you can pay. I thank you for the compliment, but I must decline the implied responsibility. I assure you this is none of mine." I

And so forth. I fear we must here pronounce the wise Spedding to have for once miscarried, somewhat in the manner of his master. His facts are wrong, and his theory is wrong. Enormous collections of facts had been made before he wrote, in zoology, in botany, in geology, in palæontology, by such great observers and systematisers as Linné, Buffon, Cuvier; and still it needed the successive ideas of Goethe, Lamarck, Oken, St. Hilaire, Von Baer, Darwin, to cause the mass to take orderly shape in a luminous

¹ Evenings with a Reviewer, 301-2. Also pref. to the Parasceve in vol. i of the Works, p. 382.

generalisation. As Whewell replied to Spedding, "he is urging upon men of science to do what they have always done"; and, further, he failed to realise that men need ideas to enable them even to see a great many of the facts. At times, perhaps, every discoverer, every theorist who is loyal to inductive tests, becomes conscious of having advanced at random, of having reached his true hypotheses by hazard, of having been slow to deal in an orderly way with his material. But this is part of the proof that, as aforesaid, it is vain to hope to colligate facts usefully to any great extent without a guiding idea.2 Every searcher does collect facts, and make use of the collections of others; but a principle of correlation, when found, is itself a fact; and though much knowledge of details is usually the condition precedent of the discovery, mere accumulation of these will not guarantee it.

The very assumption, indeed, that "facts" are easily known as such, and that we may gather them as we do mushrooms or strawberries, bringing only diligence and strength of back to the work, is in itself a bad misconception; and it seems to be the secret of most of Bacon's blunders. To state a phenomenon without importing any theory, any presupposition, is no such simple matter; witness the bulk of Bacon's own writing. If as a test we take the breathless catalogue of the activities of Solomon's House, in which the *New Atlantis* breaks off, we shall see that the imagined experiments are one and all controlled by prior theories, as often as not delusive,

¹ Philosophy of Discovery, p. 155. ² As Whewell asked in 1860, "Of ten thousand meteorological registers kept by ordinary observers, what good has come to science?" (work cited, p. 155). Compare Jevons, Principles of Science, 1-vol. ed. p. 576. and so come under his own description of the common run of experiments as "directed by too indiscreet a zeal at some prejudged effect." Thus we are told at the start that the sages have caves, some of them three miles deep, which they use "for all coagulations, indurations, refrigerations, and conservations of bodies," whereas we know that the temperature at that depth is anything but refrigerative; and in the next breath we hear that the towers, "the highest about half a mile in height," some of them built upon high mountains and so yielding a total height of three miles, are also used "for insolation, refrigeration, conservation." Again, after an account of varieties of experiments in grafting and in forcing plants, and of poisonings, dissections, and dwarfings, such as had often been tried before Bacon's day without much profit in scientific inference, we are told of a series of a priori preparations of foods, and we read:-

Above all, we strive to have drinks of extreme thin parts, to insinuate into the body, and yet without all biting, sharpness, or fretting; insomuch as some of them put upon the back of your hand will, with a little stay, pass through the palm, and yet taste mild to the mouth.

Here we have the very spirit of forejudgment in unbridled play; and we can guess how Bacon's ideal college of research would have gone to work under him, with its staff of "merchants of light," "depredators," "mystery men," "pioneers," "dowry men," "lamps," "inoculators," and all the rest of them. They would have spent their strength in putting queer questions and collecting bogus facts, multiplying illusory data and worse generalisations, doing anything but think out the great problems under their eyes and test out their empirical solutions.

¹ Preface to the Instauratio.

In short, Bacon, with all his large self-confidence, could not have posed quite so magisterially at a British Association meeting as Spedding would have had him do. With his quick sense of a parliamentary situation, he might rather have turned to his prompter and asked: "Nay, if you make out that they have gained nothing from me, what becomes of my repute? and how argue in one breath that they still suffer chiefly for lack of collections, and that even Kepler in my day had 'a copious collection of materials ready to his hand,' and none the less went to work as bunglingly as you say? Are you not hoist with your own petard? And how, tell me, have I come to have my fame if the one original or truly Baconian counsel I gave be the one they never took?"

XI.

Let us try, going more cautiously to work than Spedding did, to answer that question for ourselves. Let us not ask, with Spedding's interlocutor in his dialogue, "What after all was it that Bacon did for philosophy?" but rather "What is it in Bacon that has won him his intellectual status?" Macaulay's forensic eulogy will not avail to accredit that status, any more than his libel now avails to disgrace the thinker as a man. Every claim made for Bacon as an innovator in scientific logic must be discounted. Not only did great men of his own day, as Kepler and Galileo, do things even as he said they ought to be done, before he offered his counsel, but long before him what was practicable in his advice had been given by others. He was assuredly not the first, by many generations, to insist on the resort to nature, to observation, verification, experiment. John of Salisbury

¹ See Fowler, as cited, §§ 12, 13.

and Richard of St. Victor in the twelfth century, Roger Bacon in the thirteenth, had denounced the blind idolatry of authorities; a score of later humanists had challenged the infallibility of Aristotle; Aristotle himself had given wise precepts that should have enlightened his devotees; and if we are to give the palm to any man of the scientific Renaissance for the absolutely right enunciation of the laws of scientific research, it must be to Leonardo da Vinci, who, in a writing that remained for three hundred years in manuscript, has said: "Theory is the general: Experiments are the soldiers," and abundantly made clear that he lived his doctrine.

Shall we then say with Whewell, who recognises all this, that "if Bacon was not the first to tell men that they must collect their knowledge from observation, he had no rival in his peculiar office of teaching them how science must thus be gathered from experience"?2 Here we are nearer the truth; but Whewell again puts us in some perplexity when, after insisting that Bacon's great precept was "a graduated and successive induction," and that this view "was not only new, but.....has never been adequately illustrated up to the present day,"3 he goes on to say that "His sagacity had taught him that the progress of science must be gradual; but it had not led him to judge adequately how gradual it must be, nor of what different kinds of inquiries, taken in due order, it must consist, in order to obtain success."4 If he thus miscarried as to the mode and speed of advance, wherein does he aid men to know the how? The position is still untenable. And Mr.

¹ See the passages cited by Whewell, pp. 106-7; by Fowler, p. 91; and by Hallam, Introd. to the Literature of Europe, ed. 1872, i, 222-5.

² Work cited, p. 130.

³ Id. pp. 130-1.

⁴ Id. p. 137.

Spedding, as we saw, admits that the *Organum* "appears to have been a mistake," though we have seen him in effect assuming to support Bacon's own claim that by abundant collation of facts special "acuteness and strength of genius" could be dispensed with. We seem driven back to the simpler ground taken up by Mr. Ellis: "It is neither to the technical part of his method, nor to the details of his view of the nature and progress of science, that his great fame is justly owing. His merits are of another kind. They belong rather to the spirit than to the positive precepts of his philosophy."

But can we come at nothing more specific than this? Is it an adequate explanation of a vast literary renown to say that it comes of the "spirit" of the man under notice? Are not all great and long-lasting reputations, where they rest on books, due in greater or less degree to some quality in the writer's utterance, whether a grace or richness of speech or an intensity of tone that reveals a personality as well as a doctrine?

Surely it is so, and surely this is a main part of the explanation of Bacon's fame, as of that of Descartes. None of Bacon's eulogists, I think, has ventured to lay as much stress on his literary as on his other gifts; and yet they are the most salient of all, if by literary effect we understand not merely the outcome of vocabulary and rhythm and imagery, but the prevailing vibration and pressure of mind as well as the effect wrought by an architectonic whole, the entire exposition or structural correlation of parts, alike as to purport and as to form. For who in the literature of prose sets up a more unfailing sensation

¹ Novum Organum, i, 61.

of intellectual vitality and power than does Bacon, even after we have grown distrustful of his science and dubious of his profitableness? M. Rémusat has testified to it, calling it the specific impression of "greatness." But again I urge that the impression is built up by genius for utterance. And if there is anything which Bacon ostensibly ought to have had in terms of his heredity, it was just that gift. His father was famed for his shrewdness and pungency in speech; and his mother was so good a linguist and stylist that her translation of Jewel's Apologia was held worthy of its original. Nay, we have his own mature and deliberate judgment that he was "a man naturally fitted rather for literature than for anything else, and borne by some destiny against the inclination of his genius into the business of active life."1 To the justice of that verdict his whole work testifies. It was not that he was a bad lawyer or a poor politician: he was neither; it was that the literary gift is his master faculty, overbalancing every other. If there is one characteristic that holds of the whole various mass of Bacon's writing, it is the constant cogency and pregnancy of the style, in every order of composition. He never framed a weak sentence; and his undeviating felicity of expression is never once marred by effort at emphasis. Even in translation from his Latin he has so inspired his better renderers that their versions can be read with much of the large enjoyment set up by his English; but early in Shaw's rendering of the De Augmentis, of which the vocabulary is often finely Elizabethan and the cadence no less so (albeit the translation takes unpardonable liberties in the way of omission and

De Augmentis, B. viii, c. 3, ad init. (Routledge's ed. p. 606). Spedding's translation.

condensation), we have such tautologies as "barren sterility" and "easy facility." Of such lapses Bacon was incapable. Too rich in phrase to need to strive for show, he mints his meaning with the security of

perfect power.

Not that he can have attained that consummate hold of language without endless exercise. Probably much of the success of his crowning works is due to the fact that they represent something like the tenth casting of his thesis. We find him saying in effect the same things, with many of the same phrases, in a whole series of drafts—the Interpretation of Nature, the English Advancement of Learning, the English Filum Labyrinthi (the Cogitata et Visa), the Valerius Terminus, the Descriptio Globi Intellectualis, all merging first in the De Augmentis and again in the Novum Organum, as successive presentments of the Instauratio Magna. It is his chaplain, Dr. Rawley, who writes:—

I myself have seen at the least twelve copies of the *Instau*ration, revised year by year one after another, and every year altered and amended in the frame thereof, till at last it came to that model in which it was committed to the press.²

The maximum of effectiveness is thus finally reached by Bacon somewhat as it was by Hobbes when he distilled anew all his most mastering and possessing thoughts in the *Leviathan*. Only when he is doing task-work with no outlook on the universal, as in the *History of Henry VII*, does

² Life of Bacon, prefixed to the Resuscitatio. Works, ed. Ellis and

Spedding, i. 11.

Bohn ed. pp. 3, 27. Perhaps Bacon for once came near a tautology when he wrote "knowledge and learning" in the fine passage in the fifth paragraph from the end of B. i of the Advancement of Learning; but in turning this into the Latin of the De Augmentis he wrote doctrinam et scientiam, which permits of the improved reading "instruction [=teaching] and knowledge."

Bacon's style grow grey; and even then it is never flaccid. It is to be seen aright, however, only in his greater works, which have all the concision of the essays with a larger movement and a richer glow. He has brooded over his intellectual aspirations and indictments till he is charged with concentrated argument, and his thought yields imagery as an electric battery gives sparks. Precisely because he did not fully know the best that had been and was being done, he overflows in reprobation of the futilities of average method, and kindles continuously to a living idea of the better way. It is finally his genius, his sense of intellectual power, that makes him fail to reck his own rede: he has so long been full of his vivid consciousness of seeing the true way in abstract that he cannot surmise how much of patient drudgery should have checked and counteracted his masterful guesses at concrete truth.

XII.

That is, in a word, the essential difference between him and the true man of science. Darwin, with his supreme candour, has avowed that he made hundreds of absurd experiments to test absurd hypotheses: what are left of his ideas are, so to speak, the survivals of a multitude of speculative "variations" after due testing, or what testing he could give them. Bacon, with his intensely active mind, had also his multitudes of guesses, and gave many of them the franchise of his books on far too easy terms: he is finally rather a literary artist than a scientific investigator, though the curiosity of the true investigator was so full-grown in him that, could he only have had his whole mind free to follow up his game, and further have had the wholesome friction of free criticism

from his scientific peers, he might have grown nearly as strong in the concrete as in the abstract. Dr. Rawley claimed for him that "he contemned no man's observations, but would light his torch at every man's candle," yet reveals this:—

His opinions and assertions were for the most part binding, and not contradicted by any; rather like oracles than discourses; which may be imputed either to the well weighing of his sentence by the skales of truth and reason, or else to the reverence and estimation wherein he was commonly held, that no man would contest it with him; so that there was no argumentation or *pro* and *con*. (as they term it) at his table, or, if there chanced to be any, it was argued with much submission and moderation.¹

After all, this naïve testimony is but another proof of Bacon's genius for concentrated speech. Who would debate with that master of thirty legions? Only men of science bent on the facta non verba of the famous motto. The fact remains, after every analysis, that in his own day as in ours Bacon made the specific impression of genius, of abnormal intellectual authority, which for most people defies all reduction by criticism, and from many secures something like worship. Of all the men of Bacon's day, perhaps the most typically literary, in the sense of entire receptiveness to all aspects of literary art, was Ben Jonson; and we know how unaffectedly he brushed aside all questions of official disgrace in his absolute response to the impact upon him of Bacon's genius for speech, oral and written.

So that the great Chancellor lives for us finally not so much as a thinker, or a pioneer of science, or a politician, or an experimenter, though he was all of these, and in politics in particular the most sagacious

Life, as cited, p. 12.

and skilful parliamentarian of his age; but rather as a man of genius, notable in every one of these fields by force of his supreme faculty for thought-composition and utterance, and his unwearying activity of brain. Not less than in regard to Shakespeare's selfthat profoundly different temperament, in whom the gift of speech was lyric, impassioned, creative, rhythmic, poetic, instead of judicial, deliberate, critical, analytic, didactic-one would fain figure him as he looked in the flesh. As it happens, "deepbrowed Verulam" is always limned for us (save in the effigy of his head as a child) with his hat drawn close down on the said brow; and the finely fanciful medallion engraved for Martin's Character of Lord Bacon (1835) is clearly wrong, inasmuch as it makes the head short, whereas from the portrait-bust we know that of the child to have been very long, taking after his mother's. And as his mother was a woman of manifold intellectual activities, discursive, hortatory, meddlesome, rather than balanced and prudent like his father, we may broadly say of him that he was her child, for good and for harm. Like her, he was not much developed on the side of the affections; like her, he was the discursive intelligence incarnate.

We must just content ourselves to realise him as best we may in terms of Harvey's curious likening of his eyes to "the bright, beautiful eye of a viper." It was not at all said in malice: Harvey spoke as a scientific observer, who saw the luminous amber-like beauty of the viper's eye without making any moral detractions from it. No keener eye, in sooth, looked on men and their ways in the apocryphally "spacious times of great Elizabeth" and of her parvanimous successor. Frail as a man in authority, to the point

of incurring public ruin, he is finally for us so much of a sheer intelligence that we hardly think of him as an affectional personality. We conceive of him rather as a mind tied to office; and pay little heed even to the sudden sombre note of censure and repudiation of his wife, which constitutes the sad codicil to his will.

This was verily not Shakespeare!

If it were not for the intellectual imperfections already noted, and his too recurrent flattery of the pseudo-Solomon he was doomed to serve, and the too adroit accommodations to orthodox opinion in what ought to have been his most purely scientific works, our sense of Bacon's intellectual wealth would fall nothing short of the conception of philosophic greatness; and to that verdict we are constantly being swayed by his magistral ways. Truth and error come from him with the same voice and mien of calm authority. In the very paragraph in which, committing the sin he is always censuring, he takes for granted the old dogma that nature is to be divided into the orders of the free, the erring, and the constrained (prima libertatem naturæ tractat; secunda errores; tertia vincula), he suddenly illumines the blind alley he is treading with the clear thought that "man has no power over nature in anything but motion, whereby he either puts bodies together or separates them." John Mill claimed for his father the first recognition of "this essential and primary law of man's power over nature" as "a fundamental principle of Political Economy." In point of fact it had been earlier dwelt upon as such by Verri,2 and

Principles of Political Economy, B. I, ch. i, § 2, note, citing James Mill's Elements, ch. i.

² Cited by McCulloch, Principles of Political Economy, 2nd ed. Introd. p. 56; and after him by Marx, Das Kapital, Kap. i, § 2.

by Destutt de Tracy; and though Verri probably got the thought from Bacon, and Destutt de Tracy certainly did, its origination is in all these citations passed unnoticed, as it is in a later attribution of the idea, by a well-read student, to Professor Marshall. Perhaps Bacon in turn borrowed it; but at all events it is he who has put it in modern currency. And it is in these kindling contacts of his mind with that of the successive generations of posterity that we find the secret of his enduring renown.

Men read him and note his errors, his inadequacies; but even while they detail the errors they are electrified by the penetrating truths, which are worded with the essential force of great oracles. No matter how he may divagate from the true faith in his practice and his elaboration of rules for that, he has seen the way in his inward eye as clearly as ever man did, and defined the wrong paths with the very perfection of critical vision. Others knew better wherein consisted the art of finding new concrete knowledge; but none

¹ Traité d'Économie Politique, p. 82 (= Elémens d'Idéologie, 4e et 5e Pties, 2e. édit. 1818, p. 147), also cited by McCulloch, in note to ch. i, Pt. i.

There is a complete Sommaire de Bacon in the Appendice to the Logique = 3e Ptie of the Elémens d'Idéologie; and in the Discours Préliminaire Bacon's division of learning in the De Augmentis into History, Poetry, and Philosophy is criticised as radically bad. Destutt constantly appreciates the suggestiveness of Bacon while specifying his shortcomings.

The Co-operative Movement in Great Britain, by Beatrice Potter, 1891, citing Professor Marshall's Principles of Economics, B. ii, ch. 2.

It does not occur in the precise form under notice in his English Advancement of Learning, appearing only in the Descriptio Globi Intellectualis (ch. 2) and the De Augmentis, B. ii, ch. 2, and thus seems to be his own late-found idea, unless indeed he found it in Shakespeare. See the Winter's Tale, Act IV, sc. iii. The probability is that it reached Shakespeare from Bacon through Ben Jonson. It should be noted that in the Novum Organum (B. ii, Aph. 50) he speaks of man as operating upon natural bodies in seven ways "besides the simple bringing together and putting asunder of them"; but the details do not affect the principle.

was more imaginatively alive than he to the nature of the forces of error, howbeit his abstract insight into them could no more save him from their snares than his exquisite worldly wisdom could guard him from social shame and downfall. Though the antitheses of Pope and Macaulay are in sooth mere extravagances that darken counsel, there is verily some strange duality in his equipment; and we can but repeat that the angel of light in him is the genius of intellectual perception and utterance, and that the miscarrying spirit emerges in the slackly seconding will, the

magic of his speech concealing the sunderance.

Under the spell of that speech posterity has lain, and will remain. The measure of his innovating virtue is the welcome that was given to him by great innovators. Comenius pronounced the Instauratio "the most instructive philosophic work of the century." Vico named Bacon as the third of his masters, the first two being Plato and Tacitus—a list to which he later added Grotius.2 Leibnitz mentions as a happy incident of his own youth that when he had turned away from the scholastic philosophy there fell into his hands, among other writings by new thinkers, the De Augmentis of "that great man Francis Bacon." Destutt de Tracy, analysing him and discounting him as compared with Descartes, ever and again breaks out in the language of tribute and admiration. From the thought of the great Bacon, he avows, "will forever be re-born all that there is of truth on the earth";3 "the history of Bacon is really the history of the human mind: such

Professor Laurie, John Amos Comenius, 6th ed. p. 69.

3 Logique, Disc. prélim. p. 53, ed. 1818.

² Introd. to French trans. of the Scienza Nuova, 1844, pp. xxvi, xxxiii. Professor Flint, Vico, p. 33.

is the ascendancy of superior men"; later investigators have "limited themselves to following the impulsion given by Bacon.....he is become the soul of their search." So too in the logic of Hobbes, whom he greatly admires, the critic finds "in every line the pupil of Bacon"; and, indeed, if we do but keep in view all the concrete qualifications above set forth, we may fitly say as much of the whole army of scientific seekers since. Those who have never read him have yet partaken of the large impulse he gave out; and those to whom his whole concrete science is naught are moved to new clearness of choice and purpose by his wording of their principles. So much can genius for judgment and utterance avail.

XIII.

As against these inalienable advantages, Bacon's fame incurs one notable danger among late posterity—that, namely, of being gainsaid because of his leaning to political absolutism. In an age in which the ideal of democracy stands more and more for common sense, and that of Cæsarism for the contrary, it is apt to seem a scandal to some that any claimant to the laurels of wisdom should have figured, so recently as the days of James I, on the side of the pretensions of kings versus the rights of men. But to disparage Bacon on that score as we might disparage one who so thought in our own day would be to make a great miscarriage of critical justice. The case must be weighed.

¹ Id. p. 86.
² Id. p. 98.

Hobbes, and Dr. Croom Robertson denies it as against Kuno Fischer and others (Hobbes, pp. 17-21). In the preface to his De Corpore (1655) Hobbes names as instaurators of true natural philosophy in modern times Copernicus, Galileo, Kepler, Gassendi, Mersenne, and Harvey, but says nothing of Bacon.

To begin with, it was impossible that either under Elizabeth or under James the claims of parliamentarism should have been pushed as far as they were under Charles. To govern through the crown must then have been the ideal of every sane statesman. As it was, Bacon felt keenly the injustice of the disfavour meted to him for his championship of the public cause against the Queen's ministers in his early years of parliamentary life: he had urged a course that would have much better safeguarded the crown than did the ministers' own, inasmuch as it would have conjoined royal prestige with justice. But when his policy was spurned, he had simply no remedy. To force the Government to yield to parliamentary pressure in those days was a course that no individual leader could have ventured on: it was only a universally felt grievance, such as the patents of monopoly, that could evoke an opposition so general as to carry the Queen and her ministers before it.

In his dealings with the cause of James, again, Bacon was far from taking an anti-constitutional course. Again and again, through the critical period in which Salisbury was mismanaging the business of the king's debts, alternately begging and blustering for his master, Bacon urged a policy at once of dignity and conciliation, anxiously contending that the king should look always to Parliament for supplies, and never dream of supplying himself. Had his advice been taken, and had not the king been so incurably shiftless and reckless in the matter which lies at the bottom of all revolutions—finance—the affairs of England would certainly not in Bacon's day have drifted as they did towards the catastrophe which befel in the next reign. And it is clear that to

the last the Commons believed in his honesty and his

sagacity.1

It is true that he sought to preserve the king's prerogative, and complimented him on adhering to his rights. But here again it would be a bad mistake to think of him as if he were playing the part of Strafford against Pym and Fairfax. If Falkland could despair of the constitutional genius of Parliament under Charles I, Bacon could not sanely believe in it under James. He had seen too little of it to look there for the salvation of a polity already shaken by the blind passions of fanaticism. To James, on the other hand, he might well look, at the outset, with even more hope than was set up in Colet and Erasmus by the young Henry VIII, or in Melanchthon by the young Charles V; for the Scotch king on his coming to England was past youth, had borne the trial of affairs, and was incontestably a scholar and a student. Not only was it natural that Bacon should turn to such a master with an eager trust: there was no other help to turn to. His scheme for the advancement of science expressly relied upon royal help: only a king's treasury could sustain it. That he should therefore stand, albeit reluctantly and with prudence, for the king's prerogative, was practically a matter of course; and had he done otherwise after his own disgrace, while the king remained personally friendly, he would merely have cut the hopeless figure of the deposed official turned malcontent and demagogue. What cannot be denied is that, besides habitually panegyrising the King, he warmly applauded him for his bigoted and malicious crusade against the heretical Dutch Professor Vorstius,2 and he seems to

Spedding, Evenings, ii, 397; Works, v, 551.

Letters and Life, iv, 313, note 2; v, 142. Cp. S. H. Reynolds,

have facilitated, in his official capacity, the burning of the antitrinitarian heretics Wightman and Legate, when Coke raised legal objections. Concerning this evil episode, on which Spedding is silent, it can but be said that all the bishops applauded the executions, and that all England looked on impassively. The day of toleration had not yet dawned. But it is a sad reflection that Bacon tacitly consented to the death of the last two men slain for heresy in England.

If, finally, Bacon is to be thrust down in historic status for lacking the democratic instinct in such an environment as his, some other distinguished figures must share in his degradation. Luther, who capitulated body and soul to feudalism, not only renouncing the peasants who rebelled against a crushing tyranny, but acclaiming the divine right of all princes to absolute rule - Luther must be discrowned first. Shakespeare himself, it is to be feared, must be challenged; and if he be let pass for a lack of evidence, there are others who cannot be. To say nothing of the profound Hume, so easily Bacon's master in metaphysic, and the wise Turgot, so much after Bacon's own heart as a statesman, we shall have to unlaurel the great Goethe, who, when far in the rear of the French Revolution, met the revival of democratic hope around him with a stiff hostility. He "was no friend of freedom of the press, nor of constitutional popular rights, which seemed to him to be hindrances to vigorous government."3 This in 1816. In the same group, needless to say, will stand one of Bacon's modern disparagers, Carlyle, who

Introd. to Clar. Press ed. of Essays, p. xxxii; and Gardiner, History, as cited, ii, 128.

3 Düntzer, Life of Goethe, Eng. trans. ii, 331.

¹ Gardiner, ii, 129.

² Id. p. 130.

stood for Cæsarism in the full light and stir of the nineteenth century, doing nothing to help democracy, in which he had no faith. If the cancelment of literary diplomas be thus carried on all round with courage and consistency, Bacon's will perhaps go with the rest, despite his three hundred years' distance and his real service to the constitutional principle as he found it at work. But till the assize goes thus methodically to work, his case must stand over.

If, indeed, we are concerned to press against the forlorn Chancellor a really serious and unanswerable charge, it lies only too ready to our hands. It is not the charge of treason to the cause of the people, still less the charge of treason to Essex. The valid indictment against him is that where the nation was but half moralised he was no more so; and that where the king was relatively enlightened he was still benighted. His Advertisement touching a Holy War and his Considerations touching a War with Spain, with the still worse doctrine set forth in the eighth book of the De Augmentis, furnish the proof that with all his discursive intelligence and normal sense of honour he had no ethical depth, no moral originality. "I will never set politics against ethics," he writes, in the very act of doing so. Avowing that an "aggressive war" to avert civil strife is a bad and dangerous expedient, he urges, without a grain of real proof, that "this kingdom hath cause of just fear of overthrow from Spain." And in the De Augmentis he propounds an ethic in which even pretexts for war are dispensed with, after being declared necessary. After a hundred vauntings of the superiority of Christian righteousness to pagan virtue, he puts forth with perfect deliberation the gospel of perpetual war for

¹ Considerations, as cited, in Letters and Life, vii, 478.

war's sake. "But above all," he tells us, in his chapter on "The Art of Empire or Civil Government," "for empire and greatness, it is of most importance that a nation profess arms as their principal honour, study, and occupation. For the things which we have formerly spoken of are but qualifications for the use of arms; and what is qualification without intention and act?.....No nation which does not directly profess arms and devote themselves to the practice thereof, may look to have any special greatness fall into their mouths." Such is the fine flower of Christian philosophy. Aristotle, two thousand years before—Aristotle, whom Bacon so often and so self-sufficiently disparages—had confuted the whole lamentable thesis in a few sentences:—

Facts, as well as arguments, prove that the legislator should direct all his military and other measures to the provision of leisure and the establishment of peace. For most of these military states are safe only while they are at war, but fall when they have acquired their empire: like unused iron they rust in time of peace. And for this the legislator is to blame, he never having taught them how to lead the life of peace.²

And Bacon's own historic summary, showing the invariable decadence of the militarist State, gives the proof a posteriori, though he could not read his own testimony.

We can but say, once more, that we are here listening to a great man of letters, not to a great thinker, a great statesman, or a true sociologist.³ The unregal

De Augmentis, B. viii, ch. 3. Routledge's ed. pp. 610-11.
Aristotle, Politics, vii, 14, end (15). Jowett's translation.

It must be added that Bacon, though often sagacious in his notions of social science, held, like other men of his day, by the bullion delusion. (Letters and Life, vi, 22: Advice to Villiers. Cp. vi, 374.) In the same document, however, Bacon writes: "For matter of Trade, I confess it is out of my profession."

king, with his plans for a European peace, had here gone further in human wisdom than his Chancellor, whose ethic is but that of an average English gentleman of his day—in other words, of a Euphuised barbarian. Indeed, Burghley was here incomparably his superior; and we are almost set wondering whether his sagacities on the more domestic problems of politics may not at times be but echoes of family discourse. On this issue, be it noted, Spedding is content to argue that if Bacon's advice had been taken as to a combined crusade of England and Spain against Turkey, or of Holland and England against Spain (Bacon was ready, nay, eager, for either!), the gain would have been great: in the former case through the co-operation of Protestant and Catholic, in the latter through the check to the advance of Catholicism. The arguments are in fact mutually exclusive, for if the latter is to stand the former must fall; and both take for granted, with a quite startling simplicity, not only that the act of war as such means no moral or political harm, but that either war could be carried through without any prolonged strain. And yet Spedding had before him, what Bacon had not, the long ruin of the Thirty Years' War, which threw back German civilisation for a hundred years. He even argues that the combination against Spain (which, be it observed, would have been made impossible by the proposed coalition for a Holy War) might have put a stop to the Thirty Years' War-as if the spirit which wrought that in Germany could not have wrought another elsewhere. Such are the lapses of the wise, when they are content to assimilate to the political ethic of the average man.

When Spedding could thus conform to that ethic in the nineteenth century, however, it would seem an

unjust disregard of the comparative principle to press our censure against Bacon for holding by it in the seventeenth. We can but say that here, of a surety, he was no instaurator; and that his inability to apply to national relations a single one of the precepts he professed to revere in the individual relation-his commonplace incapacity to think critically on war, where his prosaic old uncle and his vain master had actually done so-will be apt to discount sadly for posterity his unwavering confidence in his own moral superiority. And those of us who yet feel for him some of the sympathetic regard with which he filled Spedding, are glad, on the other side, to be able to recall that from first to last he at least saw that the greatness of nations lay in life, in the well-being of all their members; and that towards Ireland, the corpus vile of so many English experiments in savagery, he always counselled conciliation, magnanimity, and patience. For the cure of his own country he never prescribed the method of murder, here improving on many of his fellow Protestants, though he held with them in their attitude to other races.

XIV.

As regards, finally, his direct influence on men in their relation to religion, we have to note the same singular validity and efficacy of his critical as against his conventional sayings, and as against his unhappy conformity to the persecuting proclivities of King James. A hundred times he stultifies his own precepts of unbridled research by his commonplace resort to Scriptural tests and sanctions, reducing science in the trite old fashion to a commentary on the sacred books. But we feel that these

ineptitudes were partly bids for favour from a priesthood which he knew could but too easily preach down his whole life's work; and all the while he has kept in his text the impeachment of that priesthood's past sins. Men may cite from him platitudes about faith and revelation, God and Scripture, and fatuities about evil spirits, meant for the devil-dreading eye of James; but those are as chaff before the wind of such sayings as these:—

The commandment of knowledge is yet higher than the commandment over the will; for it is a commandment over the reason, belief, and understanding of men, which is the highest part of the mind, and giveth law to the will itself; for there is no power on earth which setteth up a throne or chair of state in the spirits and souls of men but instruction and knowledge.³

For certain it is that God worketh nothing in nature but by second causes; and if they would have it otherwise believed, it is mere imposture, as it were, in favour of God.⁴

As for the narrations touching the prodigies and miracles of religions, they are either not true or not natural, and therefore impertinent for the story of nature.⁵

[Doctrines of design] are properly alleged in metaphysics; but in physics are impertinent, and as remoras to the ship, that hinder the sciences from holding on their course of improvement, and introducing a neglect of searching after physical causes.⁶

Men make themselves, as it were, the mirror and rule of nature. It is incredible what a number of idols have been

bedient to the precepts thereof" (De Augmentis, B. vii, ch. 3).

De Augmentis, B. iii, ch. 2.

Doctrina, the term substituted for "learning" in the De Augmentis, has often the meaning of learning, but it as often has its primary meaning of "teaching," "instruction," and the context shows the meaning of the clause to have been that the only power which can set up a throne in men's minds is the process of persuasion—teaching proceeding on knowledge.

⁴ Id. par. 6. 5 Id. B. ii. 6 De Augmentis, B. iii, ch. 4.

introduced into philosophy by the reduction of natural operations to a correspondence with human actions; that is, by

imagining nature acts as man does."

All superstition is much the same, whether it be that of astrology, dreams, omens, retributive judgment, or the like, in all of which the deluded believers observe events which are fulfilled, but neglect and pass over their failure, though it be much more common.²

In short, you may find all access to any species of philosophy, however pure, intercepted by the ignorance of

divines.3

The man who wrote thus, however he might hedge and temporise, and even lapse into ordinary religious unreason, assuredly made for freethought; even as the denouncer of the idols of the tribe and the den and the market-place, though by his constructive fantasies he might move the first inquirers of the Royal Society to trifle at large, helped in the end to banish arbitrariness from scientific thought. It is thus that genius is justified of her children; and it is in the obscure tenacity of her sway that we must look for the source of the strange dream that he who wrote the Novum Organum wrote also The Winter's Tale.

¹ Id. B. v, ch. 4.
² Novum Organum, B. i, Aph. 46.
³ Id. Aph. 90. Cp. the English Filum Labyrinthi, cc. 6, 7.

⁴ See Sprat's History of the Royal Society for a list of the earlier topics of inquiry.

HOBBES

I.

It has been given to few thinkers to set up more of critical and emotional hostility and less of emotional sympathy than have fallen to the share of Thomas Hobbes; and yet somehow he has never ceased to be a thoroughly interesting figure in the history of philosophy. Without realising the Baconian ideal of a "dry light of truth," he sheds something that the phrase "dry light" perhaps describes better than any other; and he has had the singular fortune to attract thereby, centuries after his day, men who reject his most cherished political principles, while at the same time he has outlived the animus that once bombarded his religious views. There is reason to think that a part of the explanation lies rather in the lucid strength of his style than in his matter, notable as that is.2 And yet there is something in his personality, in the impact of his tough and tenacious argumentation, his unyielding yet unembittered pugnacity, that steadfastly charms the intellect, howbeit without capturing the feelings.

I suppose no moral philosopher gives less notion of moral feeling than he. Aristotle, who on the whole is so unimpassioned an analyst that it is hard to

Whewell, 1872, p. 59; Hallam, Literature of Europe, 11th ed. iii, 99 sq. Cp. Mackintosh, as cited, p. 58; Lewes, History of Philosophy, 4th ed. ii, 229. Lewes, it must be said, makes a very slight study of Hobbes, doing little beyond using the extracts of Hallam.

understand how anybody can either love or hate him, yet has passing pulses of Hellenic aspiration that open up long vistas of emotional life. Spinoza's rigid framework of demonstration vibrates ever and again with the deepest feeling that philosophy can contain. Berkeley is chronically splenetic; Plato often aglow with poetic passion; and Kant with a certain solemn fervour; even the placid Hume has a contagious smile; but Hobbes can be even crustily censorious without making us feel he is heated. One thinks of him always as a rubicund old gentleman of stately forehead, with a rasp in his voice and a clear gleam in his eye; neither greatly hating his enemies nor warmly loving his friends, but capable of debating crisply with either in a fashion constantly stimulating; and loving his argument as he loved nothing else. And so one prefers the portrait which shows him in his hale old age to that reproduced in Professor Croom Robertson's monograph, which presents a rather spruce and handsome cavalier of forty. He is the prince of old bachelors. In his written life no woman's name enters after his mother's save that of his patroness, the Countess of Devonshire, wife and mother of his patrons. The episode of his illegitimate child is but a hint in the background.

It is customary to think of him as typically English, mainly because of his name, which has as Saxon a ring as those of Bacon and Locke. Yet the three men are as profoundly different as men of different

¹ Mackintosh's remark, that in his old age he became "the most imperious and morose of dogmatists," is misleading. It can apply only to his unlucky wrangle with Wallis on mathematics. Charles II privately avowed to Sorbière that Hobbes was "dogmatical," but the term applied to the form of his doctrine rather than to his temper. Hobbes is dogmatical in the sense that Aristotle is, to say nothing of the theologians.

races could well be; and it is notable that Hobbes in no way realised the accepted ethnic ideal on the physical side. His hair was so black in his childhood that at school he was called "the Crow." In those days they doubtless explained the phenomenon by the memorable fact that he was prematurely born through his mother's fright at the news of the coming Spanish Armada, in 1588. He said long afterwards, in his Latin verses on his life, that she bore twins, himself and Fear; an expression which seems mainly responsible for the notion that he was morbidly timorous; but which he meant to point simply to the fact that he recoiled from anarchy and broils, and never dreamt of going to the wars as did the young Descartes. In the battle of ideas, certainly, he never seriously truckled. He even had the defect-said to be English on the physical side, but fairly common even in that aspect, and certainly quite cosmopolitan on the intellectual side—of not knowing when he was beaten.

As to his family, we have some dubious details from his gossiping admirer John Aubrey, whose gift for vacuous babble is a standing warning against belief in his stories. Hobbes the elder is described as one of the ignorant Elizabethan vicars, and as having to fly from his parish of Westport (now part of Malmesbury) on account of a brawl, dying in obscurity elsewhere. The case is quite dark; but the three children, two boys and a girl, were brought up by the father's brother, a well-to-do glover and alderman of Malmesbury, who gave Thomas in particular a good classic schooling. One of his teachers, a young man fresh from college, took such pains with him and others

¹ Vita carmine expressa, 1. 26.

that before he was fourteen Thomas was able to translate the Medea of Euripides into Latin verse. At fifteen he was sent by his good uncle to Magdalen College, Oxford; he studied there when Shakespeare was writing or re-writing Othello and Macbeth; and he is one of the long roll of distinguished men who have testified how little the university did for them. Oddly enough, the Oxford of that day, so far from having earned its later character for devotion to "lost causes," was a kind of "hotbed for sedition," still retaining the anti-monarchic bias originally given to universities in general by the Papacy, which instituted them, and looked to them to help it against the secular power. General looseness of control thus gave a comparatively free head on the one hand to the new Puritan sectaries, and on the other to riot; and Hobbes in his old age spoke of the university as a place where lads, whose multitude already numbered over two thousand, were "debauched to drunkenness, wantonness, gaming, and other vices." Somewhat to his chagrin, he had to admit that the rebellious Puritans were the first to put it in something like order.

In this atmosphere Hobbes comported himself very much as did Gibbon later. The dubious Aubrey pictures him, credibly for once, as rising early on summer mornings to snare jackdaws, and as taking "great delight to go to the bookbinders' and stationers' shops and lie gaping on maps"—surely the most innocent of college dissipations. The college teaching literally did nothing whatever for him. For the scholastic logic he speedily acquired a deep contempt, which indeed was then in the air everywhere, though

¹ Cp. Professor Croom Robertson, Hobbes, p. 15.

he could still speak of Aristotle, a generation later, as "him whose opinions are at this day, and in these parts, of greater authority than any other human writings." Of classics he had already as much as served the turn; and there was nothing else to do, for in mathematics Protestant England was disgracefully backward. Professor Croom Robertson notes that Hobbes at forty knew less mathematics than Descartes had learned at school; a fatal handicap, which left him always ill-founded and incompetent on that side, though he persistently leant to it. So he left college at twenty, after five years' residence, little better schooled than when he entered it. He was to build up his wit in the school of life, and his scholarship by an unaided return to the bases laid in his grammarschool.

For a way of life he had to take, in the Anglican fashion, to supervising a rich young aristocrat. This was the son of Lord Hardwick, later Earl of Devonshire; and with the young Cavendish the young Hobbes lived for a year or two as a companion in sky-larking and a helper in borrowing money—if we can trust Aubrey, who at this juncture becomes even more incoherent than usual. The two young men then made the grand tour together; and now it was that, in contact with the then vigorous intellectual life of France and Italy, Hobbes felt he must begin in earnest to study. Having "almost forgot his Latin," he set himself on his return to recover it and his Greek as well; and his translation of Thucydides, published in 1628, serves to show that he became a competent if not a punctilious scholar. He lived with his patron in the blessed conditions of perfect leisure,

¹ De Corpore Politico (1640), Pt. I, ch. iv, § 1.

entire freedom from pecuniary care, and equal freedom from preoccupation over modern literature. Apart from poetry and drama, for which he can never have cared much, there was no accessible modern literature to speak of, save in theology and scholastic philosophy, for neither of which had he any respect. His interest in the questions which engrossed Bacon was never wide. Then if ever might a student steep himself in the classics, form a Latin style, and feel he was making the best use of his time.

II.

What is most remarkable in Hobbes's development is that he produced nothing till he was forty years old, the age at which Spinoza's work was nearly done. All things considered, we are entitled to say that, had it not been for the rising of the great storm in English politics, Hobbes might be to-day a little known or forgotten personality, unless indeed his style should have served to keep him in view. It was with an eye to the tendencies of English politics under Charles I that he produced even his translation of Thucydides. But for the continued and heightening stress of ecclesiastical and political strife he would have spent his leisurely days over mistaken mathematics, to which as it was he gave so much time, and over elementary physics, on which he is apt to be very poor reading.1 The great pity is that he was not so fully occupied with moral problems as to have had no time for the others, in which he always played the part of an uninspired dilettante.

Professor Croom Robertson, never partisan, and

See the Seven Philosophical Problems and Two Propositions of Geometry, presented to the King in 1662, and published in 1682.

always to be heard with deference, gives him high credit, on the score that he conceived his philosophy so comprehensively as to proceed in thought from the data of mass and motion upwards to human nature and political law, planning as his life's work a set of treatises, De Corpore, De Homine, De Cive. But it is a rash ambition for any man to think to be validly original in such utterly disparate studies as those of physics and civics, especially in the infancy of physics. Even the sociology of Mr. Spencer raises the question whether his biology did not bias and hamper it; though biology is much nearer sociology than are physics and mathematics. And as a matter of fact Hobbes not only attained nothing in physics beyond flashes of insight, but never brought the study in any fruitful connection with his handling of ethics and politics. Professor Robertson loyally admits2 in the end, concerning Hobbes, that "the whole of his political doctrine," as far as De Cive, "has little appearance of having been thought out from the fundamental principles of his philosophy. Though connected in the one case with an express doctrine of human nature, and in the other referred to such a basis to be afterwards supplied, it doubtless had its main lines fixed when he was still a mere observer of men and manners, and not yet a mechanical philosopher. In other words, his political philosophy is explicable from his personal disposition, timorous and worldly, out of all sympathy with the aspirations of his time." In yet other words, his ruling gift was / neither for thinking in symbols and abstractions of form and force, nor for reasoning organically from sub-human to human nature—a process which, to be

useful, should have been through biology as a medium—but for seeing through the tangle of men's passions and verbalisms and moral fallacies, and for putting his case with a keen precision which in itself is a discipline to thought no less than to style. Only by his translations and his moral and political treatises could he approve himself the most powerful English thinker and writer of his day. To produce Hobbes was not the least unwitting service done to freethought

by the Rebellion.

And yet it is in his own doctrinal despite that Hobbes ranks as a freethinker. His great and specific doctrine is one which puts the weightiest of theoretical fetters on all freedom; and it is one of the notable paradoxes of literary history that the most "unsettling" thinker of the seventeenth century was he who most explicitly taught that all argument bearing on religious opinions should be subject to the rigid restraint of the civil power. In his Human Nature, written in or before 1640, he expressly argues, with the smallest appearance of personal faith, that religion is to be under public control as to the fundamental doctrine "that Jesus Christ is come in the flesh," because the Church's interpretation is safer "for any man to trust to than his own." It is true that in this very connection, as Spinoza did later, he lays it down that "all those good opinions which we admit and believe, though they proceed from hearing, and hearing from teaching, both which are natural, yet they are the work of God, for all the works of nature are his, and they are to be attributed to the Spirit of God."2 Here we have the essence of pantheistic naturalism. The argument would logically lead to giving the Church or the

¹ Human Nature, c. xi, § 10.

State precisely the same control over all doctrine whatsoever, which would certainly not have suited Hobbes at the stage he had then reached. But there is no question as to his authoritarian doctrine.

The explanation lies in the course of events which drove Hobbes to meddle at all with political and moral problems. It must never be forgotten that the Puritan movement in politics was not one of mere self-defence against regal and prelatic tyranny, but a strenuous attempt to impose tyranny upon others. The assertion that it stood for religious liberty is one of the stereotyped falsisms of sectarian history. Laud's Arminianism was as hateful and as deserving of punishment in the eyes of the Caroline Puritans as their ceremonial anarchism was in his. Between those forces, which in their struggle led up to civil war, Hobbes stood antipathetic to both, inasmuch as he was on the one hand a Determinist, here siding in part with the Calvinists against the Arminians, and on the other hand a hater of physical disturbance and clerical pretensions. What is true in Determinism was vitiated by the Calvinist theology and ethic, since to add God and Bible to Determinism is to undermine every rational ground for morals; and in any case Hobbes saw how monstrous it was to make a philosophic dispute a ground for civil war. But nothing short of a long agony of civil strife, ending in a gross military despotism, could reconcile Puritans to even a partial regimen of doctrinal tolerance; and Hobbes, though himself indifferent to their theological strifes save in the philosophic aspect, was relatively on the side of tolerance as well as peace and order when he strove to demonstrate that "Religion is Law," and that church doctrine must be defined by the State—that is, by the Sovereign as representing the community.

III.

The shaping of his system can best be understood by noticing the pressures under which he reached it. In the leisurely years of his thirties he had intercourse with, among other notable men, Bacon, who between 1621 and his death in 1626 was devoting himself, in disgrace and retirement, to his studies in natural philosophy. It is told that Bacon specially valued the help of Hobbes as the one of all his secretaries or helpers who could so comprehend his ideas as to note down usefully those he struck out in talk. It is, however, clear that, as Professor Croom Robertson sums up, Hobbes did not get his philosophic lead from Bacon. Bacon helped only indirectly to fix his bias to those physical and mathematical speculations in which he was so unsuccessful. A Baconian he never became, whether in the sense of a practiser of pure induction from phenomena or of an emulator of Bacon's encyclopædism. "Induction has no place in his doctrine of scientific method; and the word, when he uses it three or four times through all his work, and these, again, minor uses, has never the least echo of Bacon's meaning. For experiment in physics.....he had nothing but scorn." An Englishman of his own day, scouting the judgment of the Frenchman Sorbière, who had pronounced him a studied imitator and "a very remaine of my Lord Bacon," makes a reply which to-day needs no addition. Between Bacon and Hobbes, says Sprat,

there is no more likeness than there was between St. George and the Waggoner......I scarce know two men in the world that have more different colours of speech than these two

¹ Croom Robertson, Hobbes, p. 21, note. Cp. Whewell, Lectures on the History of Moral Philosophy, ed. 1862, p. 53.

great Wits. The Lord Bacon short, allusive, and abounding with metaphors; Mr. Hobbes round, close, sparing of similitudes, but ever extraordinary decent in them. The one's way of reas'ning proceeds on particulars and pleasant images, only suggesting new ways of experiment, without any pretence to the mathematicks. The other's bold, resolved, settled upon general conclusions, and in them, if we will believe his friend [i.e., Sorbière], dogmatical."

What held Hobbes was the argumentative side of thought; and the very purpose of making physics a gateway to politics showed how little he sought natural science for its own sake. And always he was

at liberty to follow his bent.

Soon after the death of his beloved young patron in 1628, two years after succeeding to the earldom, Hobbes took a new post as travelling tutor to a son of Sir Gervase Clifton; and after the tour he stayed on in Paris, apparently engrossed in geometry and physics-for only at this time did he first meet with Euclid's Elements-till he was asked in 1631 to become the tutor of his dead patron's son. In the renewed quiet of his Devonshire life began vaguely his conception of a philosophy rising from Motion to Psychology, on the basis of his recognition that diverse motion is the necessary basis of sensation.2 But in 1634, with his young pupil, he made the grand tour for the third time, staying on the Continent in all two and a half years, of which eight months were spent in Paris; and then it was that, in intercourse with the circle round Descartes's friend, Father Mersenne, he began to figure as something of a physicist and geometrician. This was the period of

Sprat, Observations on Monsieur de Sorbière's Voyage into England, 1668, pp. 199-201

² This he seems to have regarded as an idea of his own. (Cp. It is, however, implicit in Croom Robertson, Hobbes, pp. 33-34.) Aristotle, De animalium motione, c. i.

Strafford's preponderance in English politics; and on the political side Hobbes seems to have been well content. Therefore, though *Homo* and *Civis* were to form the second and third parts of his system, the immediate interest lay for him in his ideas *De Corpore*. What then happened was that the political friction of the time kindled into the Rebellion, and he had to put aside his physics in order to frame his politics with express relation to that tremendous emergency. Meeting such men as Hyde and Falkland in his young patron's circle, he could not but give his mind to the vast living problem in which they were embroiled.

Thus it came about that the first fruits of Hobbes's philosophy were the short treatises Human Nature and De Corpore Politico, written and circulated about 1640, though not published till 1650, and followed up in 1642 by the De Cive, the first printed of all. He had seen very clearly what the ecclesiastical wrangle was coming to; and in 1640, on the assembling of the Long Parliament, he departed to Paris, "the first of all that fled." Not till 1651 did he return. It was thus in France, looking from afar on the long welter of the English war and "settlement," that he produced the De Cive and the Leviathan. The first was framed to liberate his mind fully of the political problem, so that he might return to his physics; the second and greater treatise was drawn from him by the prolongation of the war and its consummation in the killing of the king. His achievement of greatness was forced upon him by the very social tempest that he so detested.

IV.

What made Leviathan a masterpiece was above all

the circumstance that it is the quintessence of his thought on its themes. Compared with the De Cive, and still more when compared with the Human Nature and De Corpore Politico, the gist of all which it embodies, it is a trebly refined ore of idea and phrase. Save in so far as it makes out its case along several lines, where one central argument could involve all, it is singularly concise. Given the polemic or propagandist necessity of demonstration and application from all points of view, the Leviathan is one of the tersest of books. Logically "watertight" it is not, but it is probably more nearly so than any treatise of its age on the same order of theme. All or nearly all but the essentials of the argument have been burnt away in a white heat of reflection; and the glittering, pointed sentences stand out like rows of weapons. No work of argument theretofore produced in English is so free of fatty tissue, so swift and direct, so instant in onset: bulky as it is, it is all organic matter, put with the terseness of Selden's Table Talk and the sequence of Pecock or Chillingworth. The first line of the Introduction is a philo-/ sophy in itself, and the potential solution of all the philosophic errors of his day: "Nature, the art whereby God hath made and governs the world....." And in the first three sentences of the book he is in the middle of his psychological thesis, without a breath of the customary palavering preamble. His ideal when he began to form his style had been, as the Latin prose Vita puts it, "that he should be able to write not floridly but Latin-like, and to master the force of words in congruity with thoughts; also that the reading should be perspicuous and facile." No man ever succeeded more perfectly in that pursuit. In the years between 1642 and 1650 there must, I

think, have taken place in Hobbes's mental life a process of deepening and quickening which was to reflect itself in the style of Leviathan. In the same year with that work (1651) he issued what Professor Robertson justly calls "a most rigorous translation" of the De Cive, under the title of Philosophical Rudiments concerning Government and Society. And yet the Rudiments is a much less interesting book than the Leviathan, even in point of style. It has his invariable curt clearness, but not the keenness and radiance of phrase of the larger book. In the seven or eight years between the writing of them he had seen from afar the Civil War fatally evolving itself up to the execution of the king, had himself been at the door of death, and had brooded on death and life in a strange land. The outcome was that Leviathan is touched with memory and experience, where the earlier books are theorisings. The later book has been re-born in passion—such passion as Hobbes could feel.

To a modern reader, accustomed to the division of labour in social, moral, and mental philosophy, there may at first seem to be no need whatever for the outworks of psychology and definition and Scripture; but a little consideration will show that every sentence is a defence against a probable rejoinder. The psychology pertains to Hobbes's naturalistic conception of the social problem: the Scripture is his shield against the supernaturalists. The theological theorists at whom Hobbes trained his guns were sure to retort with doctrines of inner light, inspiration, illumination, and Holy Writ; and at every point he has anticipated them, working all religious pleas down to the "Homo," yet with the deftest avoidance of anything like anti-Scripturalism. The modern reader

may specially wonder for a moment why such a thinker, on such bases of reason and experience, should employ the Scriptural factor at all; but it was absolutely necessary that Hobbes in his day should manipulate it if he were to make any impression on the average man. He therefore addressed himself to his task as a polemist of his age. Spinoza in the next generation had to do the same thing in the very treatise in which, following Hobbes, he maintained that religious or spiritual knowledge was no more "divine" than natural knowledge; and again in the treatise in which he shaped the case for democracy against the absolutism of Hobbes. And for Hobbes, no less than for Spinoza, the exercise was rather exhilarating than otherwise. Whatever he believed, he knew he could turn Scriptural guns on the enemy as easily as those of reason. No political party was ever at a loss for Biblical texts.

I say, "whatever he believed"; but it is pretty certain that at heart he was no Christian, and not even a theist in the strict sense of the term. The line above cited from the introduction works out as pantheism; and his repeated denial of "incorporeal substance" leads to the same end. When he wrote: "It is impossible to make any profound inquiry into natural causes without being inclined thereby to believe there is one God eternal; though [men] cannot have any idea of Him in their mind, answerable to His nature," he cannot conceivably have missed seeing that the term "He," as attributing a whole bundle of modes, is null in the very terms of the proposition, leaving only the name God in the sense of universe. It is true that he expressly repudiates that doctrine in the De Cive:-

¹ Human Nature, ch. xi, § 5; Leviathan, cc. xii, xxxiv.

Those philosophers who said that God was the World, or the world's Soul (that is to say, a part of it), spake unworthily of God, for they attribute nothing to him, but wholly deny his being. For by the word God we understand the World's cause; but in saying that the World is God they say that it hath no cause, that is as much as, there is no God. In like manner, they who maintain the world not to be created but eternal; because there can be no cause of an eternal being. .. They also have a wretched apprehension of God, who, imputing idleness to him, do take from him the government of the world and of mankind; for say they should acknowledge him omnipotent, yet if he mind not these inferior things that same threadbare sentence will take place with them, Quod supra nos, nihil ad nos: What is above us doth not concern us; and seeing there is nothing for which they should either love or fear him, truly he will be to them as though he were not at all."

Yet throughout this as in his other books Hobbes himself systematically "takes from God the government of the world and of mankind" in the ordinary sense of these terms. Again and again he posits it as axiomatic that "the law of nature is all of it divine";2 that it is at the same time "naught else but the dictates of Reason";3 and that, in sum, "God rules by nature only." Again and again, too, does he stipulate that "forasmuch as God Almighty is incomprehensible.....we can have no conception or image of the Deity, and consequently all his attributes signify our inability and defect of power to conceive anything concerning his nature, and not any conception of the same, excepting only this, that there is a God."5 It seems difficult to suppose that so acute a reasoner as Hobbes failed to see that this

² Rudiments, ch. iv, § 24. ³ Id. ch. iii, § 25; De Corpore Politico, Pt. I, ch. ii, § 1.

Philosophical Rudiments concerning Government and Civil Society, 1651, ch. xv, § 14; cp. Human Nature, ch. xi, § 3.

⁴ Rudiments, ch. xv, §§ 8, 17. 5 Human Nature, ch. xi, § 2.

amounted to a bare predication of infinite existence, and difficult to doubt that his caveats against other

men's pantheism were merely prudential.

And in all of Hobbes's political treatises alike, the process of demonstration is essentially non-religious, though religion is always duly introduced. In the Human Nature the eleventh chapter, dealing with things supernatural, is a mere insertion in the exposition: it has no radical or fundamental function. Similarly in the De Cive and the De Corpore Politico the theorem is built up without a single theological premiss. And the fifth chapter of the latter treatise is a mere appendix of texts blandly offered as "confirmation" of what has been set forth as to the laws of nature. It is as if the author said, for the benefit of conventional people: "Having proved our case by reason and argument, let us add a few Biblical quotations." In the Leviathan he expressly declares that the science of the laws of nature "is the true and only moral philosophy." And though in saying that "natural law is the dictate of right reason" he follows Grotius,2 he does not, like him, refer the reason back to God.3 To Hobbes therefore would seem to be due the credit, latterly given to Bishop Cumberland, of having been "the first who endeavoured to construct a system of morals without the aid of theology."4

De Jure Belli et Pacis, 1. I, c. i, § 10. Cp. Croom Robertson,

¹ Ch. xv, near end.

Hobbes, pp. 143, 214.

3 Save incidentally. E.g., Leviathan, ch. xxi, Routledge's ed. p. 101; ch. xxx, end; De Corpore Politico, Pt. I, ch. v, § 1; Rudiments, ch. iii, § 33. It is to be noted that a hundred years later the Swiss jurist Burlamaqui, at the outset of his Principes du Droit Naturel (1748), saw fit to present the collection of "the rules which sheer reason prescribes to men," "considered as equally laws which God imposes on men," as "the law of nature," though his whole argument is strictly utilitarian.

⁴ Buckle, Introd. to Hist. of Civilization, Routledge's ed. p. 240,

Every theological assumption is excluded from the definition in the first chapter of the *Human Nature*: "Man's nature is the sum of his faculties and powers, as the faculties of nutrition, motion, generation, sense, reason, etc." Even when using religious expressions, he offers the stiffest kind of challenge to the ordinary orthodoxy of his day in the closing paragraph of the fifth chapter of the *De Corpore Politico*:—

Finally, there is no law of natural reason that can be against the law divine; for God Almighty hath given reason to a man to be a light unto him. And I hope it is no impiety to think that God Almighty will require a strict account thereof at the day of judgment, as of the instructions which we were to follow in our peregrination here, notwithstanding the opposition and affronts of supernaturalists nowadays to rational and moral conversation.

And if the religious phraseology here be calculated to save his face with people of ordinarily orthodox walk and conversation, it is otherwise with the audacious passage in which he counters the claim of those who

will not have the law of nature to be those rules which conduce to the preservation of man's life on earth, but to the attaining of eternal felicity after death; to which they think the breach of government may conduce; and consequently to be just and reasonable. Such are they who think it a work of merit to kill or depose or rebel against the sovereign power constituted over them by their own consent. But because there is no natural knowledge of man's estate after death, much less of the reward that is then to be given to breach of faith, but only a belief grounded upon other men's saying that they know it supernaturally, or that they know those that knew them that knew others

citing Hallam and Whewell. Hallam, it is true, says "the first Christian writer"; but he seems to mean "writer of the Christian era." Cumberland's incipient naturalism, which somewhat scandalised Whewell, seems distinctly acquired from Hobbes, whom he set himself to answer.

that knew it supernaturally, breach of faith cannot be called a precept of reason or nature.

Those who, with Clarendon, professed to believe that Hobbes in publishing the Leviathan was deliberately seeking to curry favour with Cromwell, can have given little thought to the effect that such a passage was likely to have on that ruler. With all his personal timidity and his readiness to chop texts with Bibliolaters, Hobbes was the last man to palter with a proposition for the sake of conciliating opponents. For the rest, when he wrote:2 "In these four things, opinion of ghosts, ignorance of second causes, devotion towards what men fear, and taking of things casual for prognostications, consisteth the natural seed of 'religion,'" he must have known that he was saying what no separate asseveration of "revelation" and "the word of God" could logically countervail. All his later vindications of himself against the charge of atheism3 are those of the finished dialectician, consummately fighting the wild beasts of bigotry that came at him open-mouthed.

V.

Over the political doctrine of the Leviathan there has been much debate, and this inevitably, for though it is the most coherent and best fortified plea ever made for absolutism, it had to be finally inconsistent just because it was so ratiocinative. Much of the

Leviathan, ch. xv, ed. cited, p. 73.

Leviathan, xii, p. 58. Cp. ch. xi, end.

Seven Philosophical Problems, where, referring to the "Episcopalmen" who call him "an Atheist or man of no religion," he writes: "There is no sign of it in my life; and for my religion, when I was at the point of death at St. Germains, the Bishop of Durham can bear witness of it if he be asked." It would be difficult to be more ironical, and at the same time more wary.

debate is seen to be needless when his position is clearly made out: so much lies in the definitions. That the "sovereign power" is as such necessarily irresponsible, is a truth "so perfectly plain," as Professor Croom Robertson remarks, "when it is once stated, that there is room only for marvel at the kind of objections which have been urged against it." But what is never long clear in Hobbes's system is the location of the sovereign power; and this is the true crux. His formulas about the natural "state of war" and the inveterate egoism and injustice of men are, I think, sound enough; and the gainsaying of them by Cumberland and many others, on the score that universal benevolence involves universal happiness, is no answer to his thesis. Hobbes fully recognises the benefits of a benevolent bias. Few of his critics attend sufficiently to his proposition that "'war' consisteth not in battle only, or the act of fighting; but in a tract of time wherein the will to contend by battle is sufficiently known";2 and few take pains to realise what a spectacle of blind passion and tyrannous selfwill he had witnessed in England during the second quarter of the seventeenth century. But when all is said, his remedy, practically considered, was only another disease, and theoretically considered it is a fallacy in terms. He grounds monarchic sovereignty on a "covenant" made by the commonwealth; and he elsewhere stipulates that the monarch is "bound to observe the laws of nature," which, as he has previously said, impose themselves "for a means of the conservation of men in multitudes."3 But as he further says that the covenant is solely between the

¹ Leviathan, ch. xv; Rudiments, ch. iii, § 29; ch. iv, § 20.

² Leviathan, ch. xiii. Compare the Rudiments, pp. 7-8. ³ Leviathan, ch. xv, p. 77.