



The Causes of Error Roger Bacon

THE CAUSES OF ERROR

In which the four universal causes of all human ignorance are removed. There are four distinctions in this party and in the first distinction there are four chapters. In the first chapter, after the intention of the whole demonstration has been stated, these four causes are criticized in general.

CHAPTER I.

The perfect consideration of wisdom consists in two things, namely, in perceiving what is required for wisdom that it may be known best, and then, in perceiving how wisdom should be related to all things that they may be directed by it in proper ways. For by the light of wisdom (1) the Church of God is directed; (2) the commonwealth of the faithful is disposed; (3) the conversion of unbelievers is procured; and (4) by the excellence of wisdom those who are obstinate in evil can be curbed that they may be thrust far from the bounds of the Church more effectively than by the shedding of Christian blood. All matters, in fact, which need the guidance of wisdom are reduced to the above four, nor can wisdom be related to more. Wherefore, that this wisdom be known not only relatively but absolutely, I shall try here to present to Your Holiness, following the tenor of your recent letter, whatever I can at the present time in a probable demonstration, until a more certain and fuller writing is completed. But, since the subjects under consideration are weighty and uncommon, they demand for human frailty, grace and favor. For according to the Philosopher in the seventh book of the *Metaphysics*, those things which are of greatest understanding in themselves are of least apprehension to us. Indeed, enveloped truth is concealed in the depths and deposited in the abyss, as Seneca says in the seventh book on *Favors* and in the fourth of *Natural questions*; and Cicero says in the *Hortensius* that all our understanding is obstructed by many difficulties, since our understanding is related to what is most manifest in its own nature, as the eye of the owl and the eye of the bat are to the light of the sun (as the Philosopher says in the second book of the *Metaphysics*) and as one deaf from birth is related to harmonic delights, as Avicenna says in the ninth book of the *Metaphysics*. Wherefore we are sufficiently impressed with the weakness of our own intellect in the investigation of truth, to want to remove, as much as possible, extraneous causes and occasions of error from the imperfection of our perception.

There are, indeed, four chief hindrances to the understanding of truth, which stand in the way of every man, however wise, and permit hardly any to arrive at the true title of wisdom; to wit, (1) the example of frail and unsuited authority, (2) the long duration of custom, (3) the opinion of the unlearned crowd, and (4) the concealment of one's own ignorance in the display of apparent wisdom. Every man is involved in these difficulties, every condition of man is held by them. For every one in all the acts of life and study and every occupation uses three

of the worst arguments to the same conclusion; namely, (1) this has been exemplified by our ancestors, (2) this is the custom, (3) this is the common belief: therefore, it must be held. But the opposite to the conclusion follows far better from the premises, as I shall prove in many instances by authority and experience and reason. But if these three arguments are sometimes refuted by the splendid power of reason, the fourth is always before the eyes or on the lips of every one to excuse his own ignorance; and although he knows nothing worth knowing, nevertheless what he knows he magnifies, shamelessly so that he overwhelms and shatters the truth in the consolation of his unhappy stupidity. Moreover, all the evils of the human race come from these deadly plagues; for the most useful and the greatest and most beautiful instances of wisdom and the secrets of all the sciences and arts are ignored; but what is even worse, men blinded by the mist of these four arguments do not perceive their own ignorance, but cover and conceal it with all caution so that they find no remedy for it; and finally, what is worst of all, they think they are in the full light of truth when they are in the densest shadows of error; because of this they hold the most true to be in the bounds of falsity, the best to be of no value, the greatest to possess neither weight nor worth ; and on the contrary they honor the most false, praise the worst, extol the most vile, blind to the truth that all the brightness of wisdom is other than these, disdainful of what they can attain with great ease; and because of the greatness of their stupidity they spend most considerable labors, consume much time, pour out vast expenditures on things which are of no utility or little and of no merit in the judgment of the wise man. Hence it is necessary that the violence and harm of these four causes of all evils be known in the beginning and be condemned and put off far from the consideration of wisdom. For where the first three of these causes dominate, no reason moves; no right judges; no law binds; the injunctions of religion have no place; the dictates of nature perish; the face of things is changed; order is confounded; vice prevails; virtue is extinguished; falsity reigns; truth is puffed away. And therefore nothing is more necessary to this consideration than the sure condemnation of these four causes of error by chosen arguments of wise men which shall not possibly be contradicted.

Since moreover the wise bring the first three together and condemn them at the same time and since the fourth requires a separate investigation because of its special stupidity, therefore, I shall try first to disclose the harm of the three. But although authority is one of them, I speak in no wise of the solid and true authority which is bestowed by the judgment of God on the Church or which arises from the merit and dignity of some one among the saints and perfect philosophers and other wise men who are expert to the full measure of human possibility in the cultivation of wisdom; but I speak of that authority which many men seize upon violently in this world without the help of God, not from the merit of their wisdom, but because of their own presumption and their desire for fame; and I speak of the authority which the unlearned multitude grants (to its own destruction in the just judgment of God) to many. For according to the Scripture the hypocrite often rules because of the sins of the people; I speak, in fact, of those sophistical authorities of the insensate multitude which are authorities in an equivocal sense, as a stone eye or a painted eye has the name of eye but not its power.

CHAPTER II.

The sacred Scripture, moreover, reproves these three causes of error; the holy doctors condemn them; canon law forbids them; philosophy reprehends them. But for reasons touched upon before with reference to philosophic treatments and because the opinions of philosophers concerning these three are very little known, I shall treat principally of the philosophic opinions. Seneca, of course, in the second book of his Letters (near the end) condemns all three of these

banes in a single phrase. He says, *Among the causes of our ills is that we live according to model; we are not regulated by reason but are carried along by custom; that which we would not care to imitate if few were to do it, we do when many begin to do it rather because it is more frequent than because it is more honorable: and error holds the place of right among us when it has been made general.* The Philosopher moreover, attacking throughout his philosophy unworthy authority, asserts in the second book of the Metaphysics that the principal causes of human error are custom and the influence of the masses. And again Seneca in the book on the Happy Life says, *No man errs for himself alone, but he is the cause and author of another's error, and error transmitted from one to another turns us aside and throws us down and we perish by the examples of other men.* And in the second book on Anger, *Because of the evil of custom, he says, vices which have grown with us are removed with difficulty?* And in the book on the Happiness of Life he contends against the opinion of the crowd,

Nothing implicates us in greater evils than that we adapt ourselves to rumor and think those things best which have been received with great approval; nor do we live according to reason but according to likeness and precedent. Thence is that great heaping together of men rushing upon other men. For this befalls man in a great massacre, since people so press upon one another that no one falls without drawing another with him, and the first are the cause of destruction to those who follow. You may see this happen in every life.

And again he says in the same book, *The people, defenders of their own evil, stand against reason;* and further on, *Human affairs are not so well ordered that the better pleases most;* and then follows, *The crowd is the worst argument.* And Cicero in the third of the Tusculan questions says, *When we have been handed over to school masters, we are so filled with a variety of errors, that truth yields to vanity, and nature itself yields to established opinion?* And he says in the Lucullus, *Some, having accommodated themselves to a friend or having been captivated by only the speech of someone whom they have heard, judge of unknown things, and into whatever art or discipline they are borne as by a tempest, they hold fast to that judgment as to a rock; most would rather err and defend the opinion which they had liked, than investigate without obstinacy what they say most surely.* And because of the depravity of custom he asks in the first book on Divine Nature, *Does it not shame him who speculates on nature to seek from minds steeped in custom the testimony of truth?* And against the opinion of the mob, he says in the introduction to the second book of Disputations, *Philosophy is content with few judges, fleeing the multitude deliberately, and suspected and detested by it,* and in the same second book he says, *All things which are done without publicity seem to me the more praiseworthy.* But other authors take up these three errors separately. For in the book of Natural Questions of Adalardus [Adelard of Bath], the question is raised concerning frail authority: *What else is authority of this sort than a halter? For surely as brute animals are led by any halter, and see neither whither nor why they are led, so this very authority leads not a few into danger, taken and bound in bestial credulity.* And in the book on the Eternity of the World it is said, *He who has chosen one side of a question because of love of custom can not rightly distinguish true opinion.* And Averroes at the end of the second book of the Physics says,

Custom is the greatest cause in keeping us from many manifest things. Just as certain actions, although they are harmful, will be easy to the man accustomed to them and as, for that reason, he believes that they are useful, so when one has been accustomed to believe certain false statements from boyhood, that custom will be the cause of denying the truth, as some people have been so accustomed to eating poison that it has become a food for them.

And Averroes likewise holds in the second book of the *Metaphysics*, *When the opposites to principles have become well-known, they are more readily received by the multitude and by those following the testimony of the many than the principles themselves*. And Jerome in the Prologue to the fifth book on Jeremiah asserts that truth is content with few, and it is not terrified by a multitude of enemies. John Chrysostom says likewise in his commentary on Matthew, that they have professed themselves stripped of truth who have armed themselves with multitude.

CHAPTER III.

Whatever has been proved by authorities is determined even more certainly from the experience of any man. For we find in ourselves and in others that these three practices, embracing evils as they do in most instances, adhere very frequently to what is false. But, if occasionally they are found in connection with good and true things, they are almost always imperfect, and they contain but a weak degree of wisdom. As normally the daughter follows the deeds of the mother, the son those of the father, the slave those of the master, the subject those of the king, the subordinate those of the prelate, the disciple those of the master. Because it is customary for the sons of Adam to claim authority and to scatter their examples in the light. For all men, according to Aristotle in the fourth book of the *Ethics*, love their own deeds, as parents love their children, poets their measures, and so with the others. And for this reason many have used too much freedom in writing, and have not hesitated even to insinuate to depraved and bestial men the thought, Why do you not fill up pages of paper? And why do you not write on the back of the sheet? These men are like a lame and purblind shepherd with many sheep which they are neither able nor know how to recall from wandering in the byways of falsity to the healthier pasturage of wisdom, and they are like birds who wish to fly without wings, presuming to the master's place before they are proficient in the grade of good disciple. They fall necessarily into so many errors that idlers comparing themselves to them [these bad workers] deem themselves happy, as, when many run a race, he whom hopelessness will not permit to run notwithstanding that the prize seems precious to him, nevertheless counts himself happy in comparison to him who while racing falls into an unseen pit. And for that reason we see with enlightened faith that for one example of truth, in knowledge as in life; there are more than a thousand examples of falsity. The world indeed is full of examples of this sort, and one example of true perfection easily finds ten thousand imperfect. Nature, in fact, has formed for us in numbers the fitting illustration of perfection and imperfection. For a number is said to be perfect 14 the sum of whose divisors, added, equal the number itself, and there is only one such number beneath ten, namely six, and one between 10 and 100, namely 28, and one between 100 and 1000, namely 496, and one between 1,000 and 10,000, namely 8,128, and so on; and would that it were thus with men and that this was accorded to the human race! But this never was the case, neither in life nor in knowledge, nor will it ever be, even to the final destruction of sin, since not only is there the scarcity of those who are perfect in all virtue and knowledge, but of those who have arrived at the perfection of one virtue or knowledge. The first are and will be and have always been very rare. For they are the truly perfect, but of 10,000 men not one is found so perfect in either condition of life or profession of wisdom; would that there were of the second class of perfect men one in the first ten and so on, that the perfection of numbers might be preserved in men! But it is not thus indeed it is found to be far otherwise. In the same way with respect to custom we prove by experience in our acts what has now been stated in examples of individuals. Let any one go over his life from his infancy, and he will find that in a great many of his acts he very easily transformed evils and falsenesses into custom. For in goods and in truths identity is mother of satiety for human frailty, and unfortunate man