

Chapter VI.

Fallacies Of Ratiocination.

§ 1. We have now, in our progress through the classes of Fallacies, arrived at those to which, in the common books of logic, the appellation is in general exclusively appropriated; those which have their seat in the ratiocinative or deductive part of the investigation of truth. Of these fallacies it is the less necessary for us to insist at any length, as they have been most satisfactorily treated in a work familiar to almost all, in this country at least, who feel any interest in these speculations, Archbishop Whately's *Logic*. Against the more obvious forms of this class of fallacies, the rules of the syllogism are a complete protection. Not (as we have so often said) that ratiocination can not be good unless it be in the form of a syllogism; but that, by showing it in that form, we are sure to discover if it be bad, or at least if it contain any fallacy of this class.

§ 2. Among Fallacies of Ratiocination, we ought perhaps to include the errors committed in processes which have the appearance only, not the reality, of an inference from premises; the fallacies connected with the conversion and æquipollency of propositions. I believe errors of this description to be far more frequently committed than is generally supposed, or than their extreme obviousness might seem to admit of. For example, the simple conversion of a universal affirmative proposition, All A are B, therefore all B are A, I take to be a very common form of error: though committed, like many other fallacies, oftener in the silence of thought than in express words, for it can scarcely be clearly enunciated without being detected. And so with another form of fallacy, not substantially different from the preceding: the erroneous conversion of an hypothetical proposition. The proper converse of an hypothetical proposition is this: If the consequent be false, the antecedent is false; but this, If the consequent be true, the antecedent is true, by no means holds good, but is an error corresponding to the simple conversion of a universal affirmative. Yet hardly any thing is more common than for people, in their private thoughts, to draw this inference. As when the conclusion is accepted, which it so often is, for proof of the premises. That the premises can not be true if the conclusion is false, is the unexceptionable foundation of the legitimate mode of reasoning called *reductio ad absurdum*. But people continually think and express themselves, as if they also believed that the premises can not be false if the conclusion is true. The truth, or supposed truth, of the inferences which follow from a doctrine, often enables it to find acceptance in spite of gross absurdities in it. How many philosophical systems which had scarcely any intrinsic recommendation, have been received by thoughtful men because they were supposed to lend additional support to religion, morality, some favorite view of politics, or some other cherished persuasion: not merely because their wishes were thereby enlisted on its side, but because its leading to what they deemed sound conclusions appeared to them a strong presumption in favor of its truth: though the presumption, when viewed in its true light, amounted only to the absence of that particular evidence of falsehood, which would have resulted from its leading by correct inference to something already known to be false.

Again, the very frequent error in conduct, of mistaking reverse of wrong for right, is the practical form of a logical error with respect to the Opposition of Propositions. It is committed for want of the habit of distinguishing the *contrary* of a proposition from the *contradictory* of it, and of attending to the logical canon, that contrary propositions, though they can not both be true, may both be false. If the error were to express itself in words, it would run distinctly counter to this canon. It generally, however, does not so express itself, and to compel it to do so is the most effectual method of detecting and exposing it.

§ 3. Among Fallacies of Ratiocination are to be ranked, in the first place, all the cases of vicious syllogism laid down in the books. These generally resolve themselves into having more than three terms to the syllogism, either avowedly, or in the covert mode of an undistributed middle term, or an *illicit process* of one of the two extremes. It is not, indeed, very easy fully to convict an argument of falling under any one of these vicious cases in particular; for the reason already more than once referred to, that the premises are seldom formally set out: if they were, the fallacy would impose upon nobody; and while they are not, it is almost always to a certain degree optional in what manner the suppressed link shall be filled up. The rules of the

sylogism are rules for compelling a person to be aware of the whole of what he must undertake to defend if he persists in maintaining his conclusion. He has it almost always in his power to make his syllogism good by introducing a false premise; and hence it is scarcely ever possible decidedly to affirm that any argument involves a bad syllogism: but this detracts nothing from the value of the syllogistic rules, since it is by them that a reasoner is compelled distinctly to make his election what premises he is prepared to maintain. The election made, there is generally so little difficulty in seeing whether the conclusion follows from the premises set out, that we might without much logical impropriety have merged this fourth class of fallacies in the fifth, or Fallacies of Confusion.

§ 4. Perhaps, however, the commonest, and certainly the most dangerous fallacies of this class, are those which do not lie in a single syllogism, but slip in between one syllogism and another in a chain of argument, and are committed by *changing the premises*. A proposition is proved, or an acknowledged truth laid down, in the first part of an argumentation, and in the second a further argument is founded not on the same proposition, but on some other, resembling it sufficiently to be mistaken for it. Instances of this fallacy will be found in almost all the argumentative discourses of unprecise thinkers; and we need only here advert to one of the obscurer forms of it, recognized by the school-men as the fallacy *à dicto secundum quid ad dictum simpliciter*. This is committed when, in the premises, a proposition is asserted with a qualification, and the qualification lost sight of in the conclusion; or oftener, when a limitation or condition, though not asserted, is necessary to the truth of the proposition, but is forgotten when that proposition comes to be employed as a premise. Many of the bad arguments in vogue belong to this class of error. The premise is some admitted truth, some common maxim, the reasons or evidence for which have been forgotten, or are not thought of at the time, but if they had been thought of would have shown the necessity of so limiting the premise that it would no longer have supported the conclusion drawn from it.

Of this nature is the fallacy in what is called, by Adam Smith and others, the Mercantile Theory in Political Economy. That theory sets out from the common maxim, that whatever brings in money enriches; or that every one is rich in proportion to the quantity of money he obtains. From this it is concluded that the value of any branch of trade, or of the trade of the country altogether, consists in the balance of money it brings in; that any trade which carries more money out of the country than it draws into it is a losing trade; that therefore money should be attracted into the country and kept there, by prohibitions and bounties; and a train of similar corollaries. All for want of reflecting that if the riches of an individual are in proportion to the quantity of money he can command, it is because that is the measure of his power of purchasing money's worth; and is therefore subject to the proviso that he is not debarred from employing his money in such purchases. The premise, therefore, is only true *secundum quid*; but the theory assumes it to be true absolutely, and infers that increase of money is increase of riches, even when produced by means subversive of the condition under which alone money can be riches.

A second instance is, the argument by which it used to be contended, before the commutation of tithe, that tithes fell on the landlord, and were a deduction from rent; because the rent of tithe-free land was always higher than that of land of the same quality, and the same advantages of situation, subject to tithe. Whether it be true or not that a tithe falls on rent, a treatise on Logic is not the place to examine; but it is certain that this is no proof of it. Whether the proposition be true or false, tithe-free land must, by the necessity of the case, pay a higher rent. For if tithes do not fall on rent, it must be because they fall on the consumer; because they raise the price of agricultural produce. But if the produce be raised in price, the farmer of tithe-free as well as the farmer of tithed land gets the benefit. To the latter the rise is but a compensation for the tithe he pays; to the first, who pays none, it is clear gain, and therefore enables him, and if there be freedom of competition, forces him, to pay so much more rent to his landlord. The question remains, to what class of fallacies this belongs. The premise is, that the owner of tithed land receives less rent than the owner of tithe-free land; the conclusion is, that therefore he receives less than he himself would receive if tithe were abolished. But the premise is only true conditionally; the owner of tithed land receives less than what the owner of tithe-free land is enabled to receive *when other lands are tithed*; while the conclusion is applied to a state of circumstances in which that condition fails, and in which, by consequence, the premise will not be true. The fallacy, therefore,

is *à dicto secundum quid ad dictum simpliciter*.

A third example is the opposition sometimes made to legitimate interferences of government in the economical affairs of society, grounded on a misapplication of the maxim, that an individual is a better judge than the government of what is for his own pecuniary interest. This objection was urged to Mr. Wakefield's principle of colonization; the concentration of the settlers, by fixing such a price on unoccupied land as may preserve the most desirable proportion between the quantity of land in culture and the laboring population. Against this it was argued, that if individuals found it for their advantage to occupy extensive tracts of land, they, being better judges of their own interest than the legislature (which can only proceed on general rules), ought not to be restrained from doing so. But in this argument it was forgotten that the fact of a person's taking a large tract of land is evidence only that it is his interest to take as much as other people, but not that it might not be for his interest to content himself with less, if he could be assured that other people would do so too; an assurance which nothing but a government regulation can give. If all other people took much, and he only a little, he would reap none of the advantages derived from the concentration of the population and the consequent possibility of procuring labor for hire, but would have placed himself, without equivalent, in a situation of voluntary inferiority. The proposition, therefore, that the quantity of land which people will take when left to themselves is that which is most for their interest to take, is true only *secundum quid*: it is only their interest while they have no guarantee for the conduct of one another. But the arrangement disregards the limitation, and takes the proposition for true *simpliciter*.

One of the conditions oftenest dropped, when what would otherwise be a true proposition is employed as a premise for proving others, is the condition of *time*. It is a principle of political economy that prices, profits, wages, etc., "always find their level;" but this is often interpreted as if it meant that they are always, or generally, *at* their level, while the truth is, as Coleridge epigrammatically expresses it, that they are always *finding* their level, "which might be taken as a paraphrase or ironical definition of a storm."

Under the same head of fallacy (*à dicto secundum quid ad dictum simpliciter*) might be placed all the errors which are vulgarly called misapplications of abstract truths; that is, where a principle, true (as the common expression is) *in the abstract*, that is, all modifying causes being supposed absent, is reasoned on as if it were true absolutely, and no modifying circumstance could ever by possibility exist. This very common form of error it is not requisite that we should exemplify here, as it will be particularly treated of hereafter in its application to the subjects on which it is most frequent and most fatal, those of politics and society.(262)