Thinking To Some Purpose, by Lizzie Susan Stebbing (1939)

Described by the author as an argumentative book about arguing, this book presents some of the fallacies, deceptions and syllogisms which one can be confronted with – knowingly or not. Incidentally, it also unveils some curious characteristics of human nature – curious only if we forget that human beings are not for the most part rational.

A syllogism is a set of conditions (called premises) and conclusion, the conditions being associated in a fallacious way.

A fallacy is a violation of a logical principle; it is a mistake in reasoning, not in what is reasoned about.

If we think of a fallacy as a deception, we are too likely to take it for granted that we need to be cautious in looking out for fallacies only when other people are arguing with us. We come to suppose that a fallacy is a trick and, thus, as involving deliberate dishonesty. Thinking along those lines, we could assume that honesty of intention will suffice to keep our reasoning sound. This is a profound mistake; someone thinking on his own should be on his guard against drawing a conclusion that does not follow from his premises, and act as a genuine investigator in search of true answers to his questions. It is not enough to be honest; we also need to be intelligent; it is not enough to be intelligent; we also need to be well informed.

One of the most famous works on logic, The Port-Royal Logic (1662), has the following opening sentence:

"Logic is the art of directing reason right, in obtaining the knowledge of things, for the instruction both of ourselves and others."

The logician is concerned with studying the various kinds of formal relations that suffice to secure the validity of an argument.

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The book starts with the difficulties of a political leader who has to persuade an electorate to support a policy, but dares not assume that the electors are capable of being rationally convinced.

“The advocate and the politician are more interested in persuasion than in proof (...). The political audience is not dishonest in itself, nor does it desire to approve dishonesty or misrepresentation in others, but it is an audience only imperfectly prepared to follow a close argument, and the speaker wishes to make a favourable impression, to secure support for a policy.”

Stanley Baldwin, Prime Minister and Lord Rector of the University of Edinburgh (1867-1947)
The victory of a party at the polls depends upon the vote of electors who are beset by hopes and fears and who have never been trained to think clearly. Consequently, rhetorical persuasion will in fact be substituted for rational argument.

The citizens of a democratic country should vote only after due deliberation, which involves instruction with regard to the facts, ability to assess the evidence by such instruction, to discount the effects of prejudice as much as possible and to evade the distortion produced by unwarranted fears and by unreliable hopes. Thus to think relevantly is difficult.

Education that has never taught people to follow a syllogism without enabling them to detect a fallacy has left them in constant peril.

And with the fallacy so with its near relation, the half truth. “Half a truth is not only not better than no truth, it is worse than many lies, and the slave of lies and half truths is ignorance”, as stated by Lord Baldwin.

On political education, he insisted that its purpose was twofold: “to clear the mind of cant, and (...) to rest content with having learnt enough to follow the syllogism, knowing perfectly well that to follow the syllogism alone is a shortcut to the bottomless pit, unless you are able to detect the fallacies that lie by the wayside”.

“Human nature being what it is, logic plays but a small part in our everyday life. We are actuated by tradition, by affection, by prejudice, by moments of emotion and sentiment. In the face of any great problem we are seldom really guided by the stern logic of the philosopher or the historian who, removed from all the turmoil of daily life, works in the studious calm of his surroundings.”

Austen Chamberlain, British statesman (1863-1937)

People are sometimes so actuated that a change that would otherwise be beneficial cannot in fact be brought about. This is why, when studying a problem, one must take all possible conditions into account.

Being reasonable is not incompatible with being enthusiastic though. Enthusiasm is, however, a word with a strong emotional meaning; if it means unreasonable passionate eagerness, then it would be incompatible with reasonableness. If it means intense eagerness, there is no incompatibility, provided one has reasoned impartially with due regard for the relevant evidence. Nevertheless, it can be noted that the enthusiastic pursuit of a cause has often led to an intolerant interfering with the freedom of other persons. So one should keep a habit of sceptical enquiry.

When considering slavery, Aristotle came to the conclusion that the difference between masters and slaves was that the latter were lacking rational souls, even though examples of the contrary, for both categories, invalidated the theory. He seemed to have taken it for granted that there must be an answer to any question about the way men behave which would be in accordance with his moral principles and yet not involve a radical alteration of his mode of life.

To make these comforting assumptions is surely dangerous although very common. Reluctance to be shocked as well as laziness may prevent us from questioning the assumptions upon which are based the answers we give to questions directly concerning our daily lives. Thinking is a tiring process; it is much easier to accept beliefs passively than to think them out, rigorously questioning their grounds by asking what are the consequences that follow from them.
Our knowledge about the world is derived partly from empirical generalizations, partly from deductive inferences from these generalizations. Some of these generalizations each of us makes for himself; the majority of those we accept are accepted upon the testimony of other people. The greater part of our knowledge about any topic is due to our acceptance of the testimony of others. In addition to the mistakes to which we are all liable in our own observing and our own interpretation of what we have observed, we have to make allowance for prejudices (in the sense of beliefs – see further) that we may not share and for deliberate dishonesty that we may not suspect.

**List of fallacies enumerated in this book:**

- The fallacy of arguing from a specially qualified case to a conclusion that ignores the qualification. Example: he feels relaxed whenever he goes to watch an opera; he is home now, listening to an opera, so he must feel relaxed. The premisses are not exactly the same, so the argument may be fallacious.

- Being too keen on definition: demanding a definition that sets forth precisely determinable characteristics which are not in fact sharply distinguishable (which can vary in scale for instance). Many people erroneously suppose that it is impossible to think logically about anything that is not clear-cut. See the law of excluded middle or binary thinking. Using a restrictive definition can automatically exclude any proposition that cannot logically meet the strict definition. Example: there is no true poet nowadays, one who can write real poems and not what is written by modern poets today.

- Exaggerated facts (=overstatements, sweeping facts): “everybody knows that...” or “we all know that the socialist party are purely predatory” (which contains three generalizations). The unpopularity of being moderate and the desire for certainty are at the root of those mistakes, as we want to condemn or praise wholeheartedly. On the other hand, regarded as an attempt to attract attention and win agreement, exaggeration may fail of its effet, just as shouting may.

- The law of excluded middle: ignoring varying degrees, discarding intermediate states along the whole range between 2 opposite characteristics. Example: being full or empty. See binary thinking.

- Binary thinking: considering that something is either right or wrong (especially when appertaining to complex paradigms like capitalism, a certain country, person, etc) Variation: drawing a hard-and-fast line between two things that are different by treating them as though they were logical contradictories when they are not. Example: nationalism is different than internationalism, but these are not logical contradictories.
The fallacy of the undistributed middle: the traits of some members of a group are attributed to all members of that group. It is sometimes the case that an attack upon some members can be easily twisted into an attack on all members of that group.

Cherished beliefs: beliefs people so want to retain that it is very difficult for them to oppose or question them.

Entertaining a prejudice (=pre-judging a question): accepting without evidence a belief for which it is reasonable to seek evidence.
Often, a prejudice is defined as a belief, or opinion, that the thinker holds because it is to his advantage that it should be true.
The process of first believing and then finding reasons for this belief is called rationalizing one’s belief.

The fallacy of special pleading: being unwilling to apply a principle to one’s own case. Example: someone thinking that being poor confers a moral advantage and principles to one’s children, but being unwilling to apply this to his own family if he had that goal for his children.
Or a poor man complaining about the luxurious way in which rich people live, yet being too ready to spend money in the same sort of way if he is lucky enough to win a fortune.

Tied suggestions: use of words carrying with them suggestions of emotional attitudes \(\rightarrow\) emotionally-toned language.

Question-begging words: a word is said to beg the question if its meaning conveys the assumption that at some point that issue has already been settled. The language implies a conclusion that has not been in any way confirmed by facts. People resorting to this are called question-beggars.
Example: those opposing [a political candidate] are doing an unpatriotic thing; if it results in a victory of the opponents, they will be in the position of people who, when the nation is in peril, have stabbed it in the back.

Potted thinking: holding defined beliefs without mastering or enquiring about the evidence upon which they ought to be based, because of laziness, business or ignorance, which saves us from the trouble of thinking.
Examples: slogans, simplifications (in particular, simplifying an antithesis: fascism’s consequences make democracy irreproachable), binary thinking, etc.
\textit{Variation:} Contentign oneself of reading headlines, without taking the effort of going through the arguments of an article.

Thinking influenced by one’s personality (e.g. conflict-driven, cautious, accommodating, etc), one’s job and environment.
Persuasion: to bring about the acceptance of a conclusion, by methods other than that of offering grounds for natural conviction (i.e. to satisfy by rational argument: adducing evidence in support of the proposed conclusion). Example: propaganda, most of advertisements.

Repetitions: it is an empirically discovered fact that when we have often heard or seen words expressing a certain statement, we have a tendency to accept that statement – something that advertisers and public speakers take advantage of. A slight variation in the manner of expressing that statement, whilst not in any way diminishing the effect of repetition, may lead you to feel that there is an additional reason for acting upon the advice taken. Another cause of success in advertising is our need for expert guidance, which they satisfy by resorting to quotes and other distinctions calculated to inspire confidence in the minds of the ignorant (although no indication is given that the recommendation are given by qualified, disinterested persons).

Similar views in newspapers owned by the same group are not independent instances, but intended repetitions.

Crooked argumentation: deliberate, dishonest use of fallacies and/or incorrect facts.

- diversion from the point (the secret of much crooked arguing): it's intellectually difficult for an audience to keep to the point despite the complexity of details. Resolute hard thinking is the only remedy. In carrying on a discussion with other people we may allow ourselves to be diverted if our opponent succeeds in making us look ridiculous, with or without justification. On such occasions it is important that we should keep our tempers; an angry man is not likely to think clearly, still less to argue effectively. A form of diversion is to take the opposite of what the other person is saying, and attributing an incorrect, possibly emotionally toned characteristic. For instance, if the speaker says that not all is well with our public school education, his opponent may argue: "So you are an advocate of sending your boys to these namby-pamby crank schools, are you?". The original speaker must refuse to accept this diversion, pointing out that his moderate statement does not entail the travesty of it as presented by its opponent, or even the denial that public schools are better than private schools; the assertion was merely that they are not as good as they conceivably might be. It is surprising how often this trick occurs. To admit that there is something to criticize in the marriage laws may be distorted into the contention that we don't believe in marriage at all. To recognize that there are some things that are better done in the USA than in England may be regarded as equivalent to denying that anything is better done in England than in the USA. Another example, related to armaments: one asks, "Don't you think it is more dangerous to export those fancy goods to foreign countries than, say, children's crackers?"; to which the contender replies, "Well, I nearly lost an eye with a Christmas cracker, but never with a gun". There is an obvious diversion from the point, under the guise of a contemptuous joke.

- the fallacy of irrelevant conclusion (or ignoratio elenchi in Latin, meaning the mistake of disregarding the opponent's contention): it consists in counter-arguing by affirming something which is not contradictory to the thing asserted, but which is seen as an argument. It is, of all the fallacies, the one which has the widest range. Example: in the debate related to fox hunting, one asserts that the practice is cruel to the foxes; to which the contender argues that those who condemn fox-hunting are cowards.

Variation: accepting the rhetoric/persuasion of a charismatic speaker, without critically assessing his arguments because of his commanding manner and confident tone of voice (especially as he is putting forward a statement which he knows to be extremely doubtful..).
Uncritical acceptance of imperfect analogies (one of the gravest difficulties in reasoning). Even in the case of a good analogy, there is always a point at which the analogy breaks down. Our tendency to forget this is exploited by those who aim at persuading us to accept their views without offering us any ground that would be acceptable to a reasonable thinker. Example: our country is like a ship in distress; vote for our party, as we will prevent it from hitting the rocks, put it on the right course and therefore we will salvage that ship. This seems very reasonable to vote for this party, although the expressions “prevent it from hitting the rocks” and “put it on the right course” have not been translated into actual proposed actions.

Dangers of abstractions: we believe certain words to have a meaning, yet we do not know what these words stand for. Example: how to define what the nation wants? Another example: some people are prepared to die or kill for the sake of liberty without clearly knowing what liberty means.

The fallacy of using words that shift in meaning, depending on the context or on the subject. Example: in the context of a struggle between 2 groups, “to appease the situation” may have multiple meanings: to give satisfaction to either of the group, to both groups, or even to no group at all.

There are people who like to listen to lectures or speeches that they do not properly understand, who prefer a speaker who uses some words whose meaning they do not know or which do not lead to specific points; how else can we explain the willingness of an audience to listen to speeches full of words which have no precise reference, sometimes with enthusiastic agreement? Example: “The modification of the past as quickly as possible to meet the circumstances of the future is the one policy which is going to bring us as a Government and as a nation up, up and up, and on, on and on.”

Establishing a conclusion by selecting instances that are favourable to one’s contention whilst ignoring those that conflict with it.

The fallacy of affirming the consequent: it is fallacious to conclude – where there is a relation between 2 propositions, one, the antecedent, leading to the other, the consequent – that from the affirmation that the consequent is true, the antecedent can likewise be asserted to be true. The consequent may indeed have many different possible antecedents. Example: if he won a prize in the sweepstake, he would go to Paris; he has gone to Paris, therefore he won a prize in the sweepstake. The argument is fallacious, as he may have gone to Paris for another reason.

There is a resemblance with the fallacy of the undistributed middle, provided the argument involved the traits of a group. Example: all weak people are sometimes tempted to lie; that man is sometimes tempted to lie, therefore he is weak. Usually, we state our arguments less fully, omitting a premiss that is tacitly assumed. Thus the above argument would assume a form like “he is weak, as he is tempted to lie”. The speaker may be assuming the premiss “all weak people are sometimes tempted to lie”, in which case his argument is invalid, as seen previously; or he may be assuming the false premiss “only weak people are tempted to lie”, in which case he has not established his point, since the premiss is untrue. Only from this shortened argument, we cannot know which sort of error he committed – a formal fallacy or an error in fact.
The fallacy of denying the antecedent: from the denial of the antecedent, it does not necessarily follow that the consequent can be denied. Example: if you give her flowers, she will be happy; since you have not given her flowers, she mustn't be happy. For it to be true, the antecedent should have started with "only if". Applied to politics, the fallacy would be to argue (as it is actually often the case) that if a given restriction is not beneficial to some sections of the community, it cannot be for the welfare of the communicated as a whole.

Ignorance of the relevant facts, or incapacity to differentiate facts from views. Incompatible with the freedom to reason with regard to them. To decide presupposes deliberation, and one cannot deliberate in the void.

How to avoid being mistaken?

1. Gather relevant facts, and spot what are only views.
2. Compare our sentiments with those of other people who disagree with us on this matter and yet seem to be as reasonable as we are.
3. Take note of the fact that an emotional bias in favour of a view tends to make us select instances favourable to it and simply fail to notice anything that tells against it. Consequently it is desirable to make a deliberate search for contrary evidence.
4. Do not allow a prejudice to lead us to overstatement. To believe nothing good of the enemy is a sign of prejudice.
5. Ask ourselves what the "cash value" or objective meaning of an argument is, instead of hearing the argument and agreeing based on the seniority or importance of the speaker. A sentence that cannot be understood by the hearer as referring to an objective meaning is either strictly nonsensical or else merely an incitement to an objectless emotional attitude.