

# Fallacies

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Fallacies are things that people commit, and when they commit them, they have done something wrong. Committing a fallacy is a kind of wrongful doing.<sup>1</sup> Put this way, two questions naturally arise: (1) what kind of activity (or activities) are people engaged in when they commit fallacies and (2) in what way (or ways) are they doing something wrong. This essay is intended to sketch an answer to these questions.

One common definition of fallacies answers both of these questions at once: to commit a fallacy is to argue invalidly. On this definition, the activity is arguing, and the wrong committed is doing so invalidly. On the assumption that any proposed definition should conform to established intelligent usage, there is much to be said against this proposal. First of all, not every fallacious argument is invalid. Blatantly circular arguments, where the conclusion merely repeats a premise, are models of validity, and, with luck, can be sound as well, yet they are considered fallacies. So even if we restrict our attention to arguments, it is not true that invalidity fully captures the wrong-doing involved in committing a fallacy.<sup>2</sup>

Beyond this, we sometimes call things fallacious which are not instances of arguing at all. This arises in two ways. First, and this is now widely recognized, many of the so-called informal fallacies are not instances of bad arguments, but, instead, instances of improper *substitutes* for arguments. Into this category fall appeals to force, emotion, pity, etc. Here the wrong-doing seems to be an attempt to establish something by means other than argumentation where argumentation is demanded. Secondly, assumptions, principles, and ways of looking at things are sometimes called fallacies. Philosophers have spoken of the naturalistic fallacy, the genetic fallacy, the pathetic fallacy, the fallacy of misplaced concreteness, the descriptive fallacy, the intentional fallacy, the affective fallacy, and many more. And outside of philosophy, we also hear sophisticated people using the term 'fallacy' to characterize things which are neither arguments nor substitutes for arguments. For example, the China expert Philip Kuhn

speaks of the *hardware fallacy*. This, according to him, is the mistaken assumption common among Chinese intellectuals that China can import Western science and technology without importing with it Western (i.e., decadent) values as well.

It seems, then, far from clear what activity people are engaged in when they commit fallacies, and it is also unclear what it is they are doing wrong when they do so. One response — *and it may be correct* — is that we are dealing with what Wittgenstein calls a family of cases. Things are called fallacies if they look sufficiently like other things that we call fallacies. These similarities may criss-cross and overlap in various ways, some fading out in some regions, new ones emerging in others. For this reason, we may call two things both fallacies without finding anything *significantly* similar between them. To suppose that this could not happen is to commit, what we might call, the *essentialist fallacy*. To repeat, this may be the correct account of the nature of fallacies, and the diversity of the use of the concept of a fallacy gives some initial support to this idea, but here we shall try to avoid this approach by suggesting a simple account of the nature of fallacies that will encompass them all: including, for example, both the fallacy of denying the antecedent and the hardware fallacy.

Perhaps perversely, we shall begin with the hardware fallacy. Here we are dealing with a belief that Chinese intellectuals (presumably) hold. What kind of belief is it? First, if the author of this fallacy is correct, it is a false belief or at least an unfounded belief. But we do not call beliefs fallacious just because they are false. A person who says that Bismark is the capital of South Dakota (rather than North Dakota) has not committed a geographical fallacy. We think that Kuhn calls this a fallacy because of the particular *role* that this belief plays in the reasoning of Chinese intellectuals about the West. It is a background principle that they adopt in making decisions over a wide range of particular cases. Now if that principle is false (as Kuhn thinks it is) or even merely unfounded, its use has an unacceptably high tendency to generate false or unfounded beliefs. That, it seems, is why Kuhn calls it a fallacy.

Now using this example as the starting point, we shall offer the following rough and ready characterization of a fallacy:

The term 'fallacy' is our most general term for criticizing anything used for the fixation of beliefs that has an unacceptably high tendency to generate false or unfounded beliefs relative to that method of fixing beliefs.

We use the term 'anything' in this characterization of fallacies in order to indicate that all sorts of things play a role in the fixation of belief, including patterns of inference, background propositions, and substitutes for arguments. We speak of an *unacceptably high tendency to generate false or unfounded beliefs* to provide a way of distinguishing fallacious inductive arguments from non-fallacious inductive arguments. Thus the person who reasons as follows:

I once encountered a rude French waiter.  
 Therefore  
 All French waiters are rude.

has committed the fallacy of hasty generalization. We call this a fallacy because hasty generalization is a notorious source, perhaps the chief source, of our false or unfounded beliefs. Contrast this with the following inductive argument:

The observation of a large number of crows under suitably varied circumstances has not revealed one with natural red pigmentation.  
 Therefore:  
 No crows have natural red pigmentation.

Of course, it could turn out that there is a crow somewhere, perhaps in the Himilayas, with red pigmentation, so a good solid piece of inductive reasoning can give us a false conclusion. Yet we do not want to say that a fallacy has been committed here because the general procedure employed, drawing an inference from suitably large unbiased samples, does not have an unacceptably high tendency to generate false or unfounded beliefs.

These last remarks suggest another important feature of fallacies: We call something a fallacy when it is an instance of a *general* procedure (or what have you)<sup>3</sup> for fixing belief that has an unacceptably high tendency to generate false or unfounded beliefs. Thus, in our example, both inductive reasoners wound up with a false belief, but one committed a fallacy and the other did not, because one of them employed a pattern of reasoning (hasty generalization) with an unacceptably high tendency to produce false or unfounded beliefs; the other did not. This suggests the following amplification of the original characterization of a fallacy:

The term 'fallacy' is our most general term for criticizing any general procedure (or what have you) used for the fixation of beliefs that has an unacceptably high tendency to generate false or unfounded beliefs relative to that procedure for fixing beliefs.

Let's first test our account on some standard formal fallacies. A person who denies the antecedent (reasoning, that if  $p$  then  $q$ , but not  $p$ , therefore not  $q$ ), has first of all reasoned invalidly. Now a belief based upon an invalid argument is unfounded, at least relative to that argument, and beliefs that are unfounded often turn out to be false. But we do not seem to treat every instance of an invalid argument as a fallacy. A person who argues:  $p$  therefore  $q$ , where  $p$  and  $q$  are arbitrary propositions, has not, it seems to us, committed what we would call a fallacy. It might be suggested that such an argument commits a fallacy of relevance. Well perhaps, but that response will not do for arguments of the following form:

$$\frac{p \vee q}{p \& q}$$

Although invalid, it seems strange to call this pattern of argument fallacious. It seems strange because it is hard to imagine anyone stupid enough to reason in this way, or stupid enough to be taken in by such reasoning. Of course, if people did find this pattern of reasoning persuasive, they would, under its influence, arrive at unfounded beliefs. We would then have the *or/and* fallacy. But, as far as we know, this pattern of reasoning has no tendency to take people in.

But, presumably, the fallacy of denying the antecedent does have this capacity to mislead people in an unacceptably high number of cases. Why is this? One answer is that in denying the antecedent, we are using a pattern of inference very similar to valid patterns of inference and thus it is easy to confuse them. This doesn't strike us as persuasive. Is the similar valid inference that of *affirming* the antecedent? What could be more different from *affirming* an antecedent than *denying* it? Denying the consequent, which is a valid pattern of inference, seems to be similarly remote from denying the antecedent.

We suspect, though we cannot go into this in detail, that pragmatics are important here. Very often, when a person uses a sentence of the form 'If  $p$ , then  $q$ ,' she will conversationally imply a commitment to the reverse conditional 'If  $q$ , then  $p$ .' If someone says 'If Harold doesn't help, then I won't either,' that, in many contexts, will conversationally imply that she *will* help if Harold does. This is true because, in some contexts, it would be conversationally odd for her to say that she won't help if Harold doesn't when, in fact, she does not plan to help in any case. So, in many contexts, what superficially appears to be an instance of the fallacy of denying an antecedent, is no such thing; it is an instance of denying the consequent of an unexpressed conditional that is conversationally implied. The correct comparison then, is not between the bad procedure of denying that antecedent and the good procedure of affirming the antecedent, but between those contexts where apparent cases of denying the antecedent are not invalid because of conversational implications, and those others where denying the antecedent cannot be legitimated in this way. It is easy to see how cases of this kind might be confused with one another. On the other hand, it is not easy to imagine how the inference from  $p \vee q$  to  $p \& q$  could be legitimated by an appeal to conversational setting. Since it does not have apparent occurrences in conversational settings that can, in fact, be legitimated, it has no tendency to fool us. That, it seems, is why we are content with calling arguments of this form invalid without dignifying them with the title of a fallacy.

A second reason that denying the antecedent has a capacity to mislead is that arguments of this form are often advanced as inductive arguments, and here they can be quite persuasive. For example:

Bill will get drunk if he goes to the party.  
But he is not going to the party.

Therefore: He will probably not get drunk.

If we know, as background information, that Bill is not a solitary drinker, that he doesn't frequent bars, and the like, this reasoning can be entirely acceptable.

Next consider circular arguments. In its most blatant form, a circular argument simply uses the conclusion itself as the premise for the argument:

$$\begin{array}{r} 2 + 2 = 4 \\ \hline \text{Therefore } 2 + 2 = 4 \end{array}$$

This argument is not only valid, but sound. It should be obvious that if we were to adopt the policy of arguing in this transparently circular way, we would find ourselves committed to a great many unfounded and false beliefs. Given any arbitrary proposition, which may be either true or false, a transparently circular argument, though always valid, will have no capacity to yield a founded belief. Of course, it is hard to imagine anyone being seduced by a *transparently* circular argument, but circular arguments can be less transparent, and hence more seductive, in at least two ways: (1) instead of repeating a premise verbatim, the premise may restate the conclusion in different words, and (2) the circularity may go unnoticed if the circle is large enough.

Moving now to the so-called informal fallacies, we encounter a very mixed bag, but for all their diversity, they all seem to share the generic quality of being methods of fixing belief that have an unacceptably high tendency to yield unfounded or false belief.<sup>4</sup> Consider the appeal to pity (the argument *ad misericordiam*). Oliver Wendell Holmes said that hard cases make bad law. By that, he did not mean that *difficult* cases make bad law, but rather that cases where judges and juries are swayed by irrelevant feelings of sympathy or pity can yield improper decisions that set unfortunate precedents, that make for bad law. It is a commonplace that people's beliefs can be swayed by appeals to various emotions. Since there is often no close connection between the truth of a belief and the emotions that generate or shape it, it should be clear that, in general, appeals to emotion can have an unacceptably high tendency to fix false and unfounded beliefs. That, if the present approach is correct, is why we speak of fallacies in this area.

Similar remarks hold for other informal fallacies such as appeals to authority. Now, of course, there is nothing inherently wrong with appeals to authority, so we might better speak of the fallacy of improper appeals to authority, and then go on to explain the various forms that these improper appeals to authority take. Looked at this way, it is not hard to see why improper appeals to authority count as fallacies. Improper appeals to authority look much like proper appeals, thus we have a tendency to make such appeals with the result that we are led into unfounded or false beliefs.

To come full circle, we want to look once more at *propositions* that are said to be fallacious. Propositions can play a role in the fixation of belief

both as premises of arguments and as part of a theoretical framework in which inquiry takes place. Austin, for example, spoke of the *descriptive fallacy*, i.e., of our tendency to think that the only, or at least the only important, use of language is to make assertions. The existence of questions and imperatives alone shows this principle to be false; why, beyond this, does Austin wish to call it a fallacy? The answer is that philosophers (at least used to) take it for granted that the primary function of language is to make assertions. This belief served as a *framework* or *general background principle* that entered constantly into their reasoning and, if Austin is right, led them to accept unfounded or false beliefs about the nature of language. It is not as a falsehood, but as a potential generator of falsehood, that the descriptive fallacy is a fallacy (if it is a fallacy).

Now for some elaborations and qualifications. Traditional catalogues contain the fallacy of appeals to force (the argument *ad baculum*). Now it does seem odd to suppose that a *belief* could be fixed by force. "Believe this or I'll break your thumb!" hardly seems to be a reliable method for inducing belief. On the other hand, the use of force can induce assent and various other forms of conduct. In the normal case, we try to get someone to assent to something by getting him to believe it; and similarly, we often try to get someone to do something by convincing him that it is the right or appropriate thing to do. In contrast to this, an argument *ad baculum* usually attempts to produce the assent or the conduct without inducing it through belief. Since there is no systematic connection between the command of force and the truth of the assent or reasonableness of conduct that the person commanding the force may wish to produce, arguments *ad baculum* have an unacceptably high tendency to produce unfounded and sometimes false assent, and unfounded or otherwise unjustified conduct. Thus by expanding our account of fallacies to include assent and conduct as well as belief, the argument *ad baculum* gains standing as a fallacy.

Lying presents a special problem. Lying is a pervasive and remarkably effective way of fixing false and unfounded belief, yet the person who lies is not usually said to have committed a fallacy in doing so. We can also imagine that, sometime in the future, beliefs will be fixed effectively using electric brain probes. Again it would be odd to suggest that either the person probed or the person probing is committing a fallacy, say the electrical fallacy. This suggests that our definition is, at the very least, too wide. Perhaps the answer to this is that fallacies are always, in a *very general way*, connected with arguing. In this essay we have seen three ways in which fallacies are related to arguing: (1) in the simplest case, it is an argument itself that is fallacious; (2) we also have fallacies that arise from substituting some other persuasive device for arguments, where argument, in fact, is demanded; and (3) we speak of fallacies when a false or unfounded framework or background proposition plays a recurrent role in

the production of arguments that have an unacceptably high tendency to yield false or unfounded beliefs. Neither lying nor the use of brain probes for fixing belief seem to be sufficiently close to arguing to count as fallacies.

Perhaps it is disappointing to be told that the term "fallacy" is simply the most general term of criticism of general procedures (or what have you) used in the fixation of belief that has an unacceptably high tendency to generate false or unfounded beliefs. The definition yields nothing like a *theory* of fallacies. The disappointment here is similar to that which one feels when told that the word 'good' is our most general term of commendation. Presumably, people began their inquiry into the meaning of the term 'good' because they thought it could provide some substantive insight into the nature of good things. Being told that the word 'good' is our most general term of commendation disappoints this expectation. It turns out that there are all sorts of grounds for commending things, and, *as far as the meaning of the word 'good' goes*, there is no reason to suppose that there is anything common — or interestingly common — among them. Given this, it is possible to say that the word 'good' is univocal (if it is univocal) without committing oneself to the claim that all good things must have something interesting in common. In the same way, by saying that the term 'fallacy' is our most general term for condemning generators of unfounded or false beliefs, we leave open the possibility that no *substantive* general theory of fallacies is possible.

To make the comparison in a different way: if the term 'good' is simply our most general term of commendation, then we have no reason to expect that the grounds or reasons for particular commendations will be part of the meaning of the word 'good.' In the same way, if the term 'fallacy' is our most general term for condemning generators of unfounded or false beliefs, there is no reason that the grounds or reasons for these condemnations should be part of the meaning of the term 'fallacy.'

We shall not claim that this account of fallacies is exactly correct. There are bound to be odd cases — and maybe not so odd cases — that will cause difficulties. Even so, it strikes us as being broadly correct and if that's right, a wet blanket has been thrown on some of the recent discussions of fallacies. As far as we can see, pretty much all of those things that have been called fallacies are fallacies, and they are called fallacies for pretty much the same (boring) reasons.

#### NOTES

<sup>1</sup> People also self-consciously employ fallacious procedures to mislead others, but if humans did not have a tendency to commit fallacies, i.e., to be taken in by them, it is hard

to see how this practice of using fallacious procedures could work. So, for us, committing a fallacy is the primary notion.

<sup>2</sup> This point has been made by John Woods and Douglas Walton in "Fallaciousness without Invalidity," *Philosophy and Rhetoric*, 9, 1976, 52–54.

<sup>3</sup> This qualification is needed in order to include the possibility of *propositions*, rather than just arguments and substitutes for arguments as candidates for the title of being fallacious. We shall come back to this.

<sup>4</sup> To repeat, we mean unfounded relative to the method of fixing the beliefs.

**ABSTRACT.** Fallacies are things people commit, and when they commit them they do something wrong. What kind of activities are people engaged in when they commit fallacies, and in what way are they doing something wrong? Many different things are called fallacies. The diversity of the use of the concept of a fallacy suggests that we are dealing with a family of cases not related by a common essence. However, we suggest a simple account of the nature of fallacies which encompasses them all, viz., the term "fallacy" is our most general term for criticizing any general procedure used for the fixation of beliefs that has an unacceptably high tendency to generate false or unfounded beliefs, relative to that method of fixing beliefs. Very different sorts of things called fallacies are examined in the light of this account, e.g., denying the antecedent, circular arguments, so-called informal fallacies, and propositions said to be fallacies. We do not provide a *theory* of fallacies. Still, on our account pretty much all of those things that have been called fallacies are fallacies, and they have been called fallacies for pretty much the same reasons.