

## On the Fallacies II

### 2. *The Fallacy of Composition and Division.*

The fallacy of composition takes collectively what is meant to be taken one by one. The fallacy of division is the converse: taking one by one what is meant to be taken collectively. In argument, it results in a syllogism with four terms:

- The students at this university are from thirty different states.
- You are a student at this university.
- Therefore you are from thirty different states.

“Student” in the first premise is, of course, used collectively; in the second premise, distributively. That is, the same word stands for two different things, so that there is no true middle term.

One of the common causes of this fallacy stems from the assumption that what is true of the whole must be true of the parts, and vice versa. So a person might argue that because every episode of a play is plausible and interesting (in itself), then the whole story of the play must be plausible and interesting.

Cooperative undertakings often suffer from this illusion: The movie must be good because every actor in it is a top star; it must be a beautiful church because every architect and artist involved is tops in their field. It is true that the whole *might* show the characteristics of each of the parts, or contrariwise. But the fallacy consists in holding that they *must* do so just because they are related as part and whole. You’ve probably heard this fallacy many a time. “What’s good for General Motors is good for America...” is just one example.

Another variant of this fallacy is the one known as *sorites* (from the Greek word meaning to “heap”), which consists of piling up instances of things true of individuals, and then asserting the same things as true collectively. The spendthrift fallacy is like this; “It will only cost \$5 each for the movie, and only \$2 each for the gas, and only \$10 for dinner, and only, and only, and only...” The spendthrift can justify his lack of budget by not looking at the whole, but seeing only the parts as inexpensive. Many a man has fallen into deep debt by thinking he only has \$130 debt to the credit card, but has similar amounts to ten other credit cards.

Students can make this mistake. Take a student who has three hours to study at night. “Only 10 minutes for a snack, only ten minutes for a phone call, just one song on the radio, just play with the poodles for ten minutes...” It’s easy with such thinking to fritter away a whole evening and waste much time.

Notice how this fallacy enters into our thoughts regarding irritations. One person, after a long series of minor irritations or provocations, erupts into anger at another. Each one of these irritations taken by itself, is insignificant. The truth is that the outburst was caused by the trivial incident, plus many others. Often both parties engage in a futile and confused wrangle with neither person arguing the same point—one focusing on the single episode; the other, on the whole sequence.

Another variant of this is the fallacy of continuous questioning, which insists on putting precise limits to things which in themselves are imprecise. “So, if a man has two thousand hairs, is he bald? What about one thousand? What about one hundred? What about...” I once overheard someone in an argument saying, “So a good Catholic goes to Mass every Sunday of the year? What if he misses one Sunday? What about two Sundays, is he still a good Catholic? What about three...”

Gamblers often use the fallacy of division to justify their expenditures. If a coin (let’s assume this is a regular and not a trick coin) comes up heads each time for twenty consecutive spins, the gambler is likely to argue to himself that the odds, instead of being fifty-fifty, are considerably in favor of the coin turning up tails on the twenty-first throw. But in fact (coins having no memory) the odds remain precisely fifty-fifty on every throw. Now it is indeed probable that the twenty heads will be balanced out by twenty tails, but this might happen only after a very long sequence. The gamblers fallacy consists then, in applying to a single case (the part) what holds good for a large group of cases (the whole).

You hear this sort of thing in advertisements from insurance companies: “Mary Jones’ house was demolished by a tornado, and it could happen to you, so you are jeopardizing the future of your loved ones if you do not take out tornado insurance.” Pressure tactics like this are unscrupulous.

A company may entice you to spend money in an inordinate way, but getting you to focus on a small amount. “\$100 down, and you can walk away today with your new DVD/VCR combination TV and stereo system with a new pair of Boeing 747 speakers!” Needless to say, you might have the \$100, but \$100 every month for the next thirteen years is another thing.

I hope that the discussion of these fallacies is helpful, so that you can become wise as serpents in being able to identify fallacious thinking, and as innocent as doves in avoiding the use of it.

There are four more of the linguistic fallacies I would like to discuss.