

Now that we've covered argumentation you've been exposed to better and worse kinds of arguments. An argument is good if its premises support the conclusion. In a *deductive* argument this is referred to as *validity* – this means that (if an argument is valid) if the premises were true (regardless of whether or not they are) the conclusion would have to be true; validity is concerned only with the structure of an argument. In an *inductive* argument, the support of the conclusion by the premises is identified as either *strong* or *weak*. It is strong if the conclusion is *probably* true assuming that the premises are true.

In inductive and deductive arguments, when we are looking at the structure we can determine if an argument is fallacious or not. A fallacious argument is one wherein the premises don't actually support the conclusion – despite the fact that they may seem to initially. For example:

All humans breathe
All mammals breathe
Therefore, all humans are mammals

Here all the premises are true and the conclusion is true as well. This may give the appearance that the argument is valid. But remember that validity looks at the *structure* of the argument not the content. Isolating for the structure the argument becomes

All A are B
All C are B
Therefore, All A are C

If this argument type was valid it would mean that the certainty of the conclusion was guaranteed by the premises – that is, *if* the premises were true the conclusion would have to be. But consider the following example:

All humans breathe
All reptiles breathe
Therefore, all humans are reptiles

Here we have retained the structure of the original argument, and we still have true premises, but we see that we have a false conclusion; but remember that you cannot have a false conclusion and true premises in a valid argument. This means that the argument is invalid. More significantly, it means that *any* argument of this kind is invalid. We call this a *formal* fallacy. A formal fallacy is a fallacious argument that can be identified by looking at the structure of the argument alone. Many of the questions on your quiz concerning argumentation contained fallacies – arguments that might look right at first blush, but upon further consideration you might have realized that the premises didn't actually support the conclusion.

These kinds of fallacies, with which you are now familiar, are different than *informal* fallacies. Informal fallacies still involve a lack of support from the premises for the conclusion, but in a different way. In informal fallacies you have to consider the content and the context of the arguments. You have to know things about the world to determine whether an argument contains an informal fallacy. Because of this, informal fallacies are much more pervasive in your

everyday lives. They will come from your friends, family, teachers, politicians, salesmen, employers, and even yourselves. All informal fallacies are attempts to advance a point without really doing the legwork or supporting that point properly.

As you read through the selection of informal fallacies (which is only a sample of the many different kinds of informal fallacies that there are), think of things that might have been said to you in the past that resemble these ways of arguing. Keep these in mind for the duration of the course – look for them in the things your peers say or in the writings of the philosophers that we will be covering. You will never find yourself in a position wherein someone isn't trying to convince you of something, and to aid them they will often offer fallacious arguments. Remember these informal fallacies and be prepared!