Chapter 4 begins an important discussion on how to evaluate arguments. The basics on how to evaluate arguments are presented in this chapter and then subsequent chapters will provide further details. Fundamental themes in this chapter:

(1) The definition of a cogent argument in terms of ARG;
(2) The distinction between a cogent argument and one that is sound in the sense of having true premises that deductively entail the conclusion;
(3) The preliminary explanation of A, R, and G;
(4) The notion that R and G can be satisfied in different ways: deductive validity, inductive strength, analogy, conductive reasons;
(5) The distinction between A, R and G (in the case of R and G, more likely to be an issue for some instructors than for students);
(6) The conception of the challenge of argument and how one may fail to meet it;
(7) The notion that the quality of (much) discourse is vastly improved if people meet the challenge of argument instead of dodging it.

In Chapter 4 Govier provides many excellent examples of the process of evaluating arguments and you should study these examples closely. They serve as a model for how to engage in the dialogical process of evaluating arguments.

When putting forth an argument, you are doing three things:

   i. Asserting the premises
   ii. Asserting that if the premises are acceptable, then the conclusion is acceptable
   iii. Asserting the conclusion

When evaluating an argument, we pay attention to (i) and (ii). To reject an argument is to find fault either with the premises or with the relationship of the premises to the conclusion.

Cogent Arguments

When is an argument cogent? Govier points out that good arguments are cogent arguments and poor arguments are not cogent. So what makes for a cogent argument? There are three conditions:

1. The argument’s premises are acceptable. The evidence being offered for a particular conclusion must be acceptable evidence. That is, it is reasonable for us to accept the premises. Ask yourself: do you have good reason for accepting the premises on which the argument is based? If not, then there is no good reason for accepting the conclusion.
Notice that the standard here is not the standard of truth. Arguments will often employ premises that we simply don’t know at the time to be true. The standard of acceptability is weaker than the standard of truth.

2. The **premises are relevant** to the conclusion. Do the premises give some reason or provide at least some evidence in favor of the conclusion? Do they have some bearing on the acceptability of the conclusion?

   Premises are relevant to the conclusion when, if acceptable, they constitute some reason to believe the conclusion is true.

3. The **premises provide sufficient grounds** for the conclusion. Do the premises provide enough evidence to make it reasonable to accept the conclusion.

**The distinction between relevancy and sufficiency**

Relevancy and sufficiency are difficult to distinguish in a precise way but are clear enough if we look at an example.

1. I’ve had dinner at the student cafeteria twice and both times the food has been terrible.
   
   therefore
   
   2. The cafeteria staff is incapable of preparing a decent meal.

Is the premise relevant to the conclusion? Certainly it seems so. What could me more relevant to the issue of whether the cafeteria staff can prepare a decent meal than that it doesn’t make you sick. Does it provide sufficient grounds for the conclusion? Think about how strongly worded the conclusion is. Are two incidents at the cafeteria sufficient to support this strongly worded conclusion? Here we might say that the premise is relevant to the conclusion but not sufficient. An argument can provide premises that are relevant to the conclusion without providing sufficient grounds for accepting the conclusion.

**Meeting the R and G Conditions**

There are four different ways in which premises may meet the R and G conditions:

1. **Deductive entailment**: the strongest connection that you can have between premises and conclusion.

   In a deductive argument, if the premises are true or acceptable, the conclusion must be true or acceptable. If all of the premises of the argument are true, it is impossible for the conclusion to be false. This is what logicians mean by the concept of validity. In any argument where the truth of the premises entails the truth of the conclusion, both the R and G conditions will be satisfied.
For Example:

1. If you work hard, then you will be a success in life.
2. John has worked hard.
   Therefore,
3. John will be a success in life.

2. **Inductive Generalization**: In such arguments, we use premises about past experiences to infer a conclusion about all experience or some future experience. Behind all such inferences is the assumption that our experience is fairly uniform. For example:

   1. Every time that I have eaten in the school cafeteria, the food has been cold and unappetizing.
   Therefore,
   2. It is likely that tonight the food will be cold and unappetizing.

With IG, as well as with the other types of argument structure we will consider, the connection between premises and conclusion is not as strong as in deductive entailment. In such cases, the premises can be acceptable and the conclusion still be unacceptable. There is always the possibility that the conclusion may later have to be rejected.

3. **Arguments from Analogy**: These arguments rest on a comparison between two things. Typically an argument from analogy claims that two kinds of things are alike in some respects and that the first has some further characteristic. It then moves to the conclusion that the second thing shares this characteristic. For example:

   Simple appliances like toasters and washing machines break down. They are not completely reliable. The same companies that make these appliances make nuclear reactors, which are much more complicated. It is very likely, then, that nuclear reactors will also be susceptible to break-downs.

   1. Simple appliances like toasters and washing machines break down and are not completely reliable.
   2. The same companies that make these appliances make nuclear reactors.
   3. Nuclear reactors are more complicated than these simple appliances.
   Therefore,
   4. It is likely that nuclear reactors will be susceptible to break-downs.

4. **Conductive Arguments**: In this type of argument we generally have several independent factors which, considered together or additively, are taken to add up to enough support for the conclusion. Each of the premises count separately in favor of a conclusion because each is relevant to it. Here, though, the evidence provided by the premises is not linked. So if one premise turns out to be unacceptable, the others are not affected. For example:
You really ought to accept the new job offer. You will be making much more money. The location is a lot better and you will be working with better trained individuals.

1. You will be making much more money in the new job,
2. The location of the new job is a lot better.
3. You will be working better trained individual in the new job.
Therefore,
4. You really ought to accept the new job offer.

**The steps to evaluating an argument**

To evaluate an argument as cogent or not, you should go through the following steps:

1. Standardize the argument.
2. Determine if the premises are acceptable.
3. Determine if the premises are relevant to the conclusion.
4. Determine if the premises provide adequate grounds for the conclusion.

If the argument passes all three conditions, it is cogent. Notice that if you determine that the argument is not cogent, this is not the same thing as determining that the conclusion is unacceptable. You simply have determined that the argument does not offer adequate justification to accept the conclusion. The conclusion may yet be proven acceptable by providing a better argument.

**Evaluating an Argument: An Example**

Consider Geena Maharaj’s op-ed “An argument to legalize marijuana,” which you can read [HERE](#). Focusing on the core argument (and ignoring for the sake of space all the subarguments), how would I standardize and assess this op-ed?

Here’s a possible standardization of the core argument:

1. Tobacco and alcohol are legal.
2. Tobacco and alcohol are more harmful than marijuana.
3. Legalizing marijuana would generate income and lower prosecutorial costs.
4. Tobacco, via nicotine, is more a serious gateway drug than marijuana.
5. Marijuana serves an important medial purpose. Therefore,
6. Marijuana should be legalized.

I had to make some decisions regarding what should be included and what should be excluded. I decided to treat most of the first two paragraphs as window dressing and background information. When the author indicates that she has “four solid reasons” I took that to indicate that her core argument was these four solid reasons, and not the material about lots of people smoking marijuana or the students of St. Thomas approving of its legalization. After all, those two reasons are very weak and so I surmise that the
author didn’t intend to include them as part of her argument. That lots of people do something is not a strong reason for approving of something. And the survey about St. Thomas students is not representative. So I think those claims should be excluded as part of the core argument.

The overall argument pattern is conductive and the premises are independent (not linked)—though there is a link between premises 1 and 2.

In turning to the ARG conditions, premise 1 is clearly acceptable on the basis of common knowledge. Are premises 2 – 5 acceptable? As we will see, one way to show that a premise is acceptable is to support it in a subargument, which is what our author does. Each of these premises is supported with strong evidence in the op-ed and if we were to work through the ARG conditions for each subargument, I think we could conclude that the premises are all supported by cogent arguments. So they pass the A condition.

The R condition is applied to each premise in a conductive argument and so we have to ask whether the premises each independently give us some reason to think that marijuana ought to be legalized. I think they clearly do. Each gives us some positive reason to think it would be reasonable to legalize marijuana. They are all positively relevant.

What about the G condition? Our core question is whether the author has provided sufficient grounds for her conclusion. Here we have to consider whether there may be other reasons why we ought not to legalize marijuana and so we have to do some brainstorming. Are there good reasons to think legalizing marijuana would produce problems? Give this question some thought. This is part of the hard work entailed in fully engaging in the process of critical inquiry. There are no easy shortcuts here. Next weigh your answer against the evidence provided by the author. If you judge that the author’s positively relevant premises outweigh any negatively relevant reasons you can come up (after giving it some good thought) then the argument passes the G condition.

Evaluating or creating an argument: common mistakes

When creating or evaluating an argument, we often make some common mistakes:

(i) Begging the question: often times when people argue, the premises they use in their argument merely repeat, with slightly different words, the conclusion they want you to accept. In such a case, the premises do not offer any genuine evidence for the conclusion but, instead, offer pseudoevidence. When you argue, you must find evidence for your conclusion that doesn’t already assume what you are supposed to be arguing for.

Consider the following simple examples of begging the question:

1. Everybody has a right to choose what to do with their own lives.
   therefore,
2. People should be able to decide for themselves when they want to die.
1. People have a right to smoke in public places.
   therefore,
2. I am perfectly entitled to smoke in public places if I wish to do so.

Here’s a slightly more complicated example. Can you discern why it begs the question?

Overheard at a faculty meeting: “The quality of teaching performance cannot be measured. No matter what administrators at campuses around the country might say, teaching performance is simply not the kind of thing to which you can assign measurable variables and then compare a bunch of numbers at the beginning of a course and again at its end. That isn’t the way it works.”

(ii) Ignoring the premises: Oftentimes when evaluating an argument, people will focus solely on the conclusion and evaluate it rather than the argument. Remember that the conclusion is supposed to be acceptable because it has acceptable premises supporting it. It is a mistake to focus on the conclusion while ignoring the premises that are supposed to support it. You have to separate your evaluation of the argument from your prior belief about its conclusion. This is especially true with conclusions that we are already inclined to accept. Just because you think a conclusion is acceptable, it doesn’t mean that the argument is a good one.

(iii) What you have shown: When you have shown that an argument is not cogent, you have shown that the author of the argument failed to support his or her conclusion with adequate reasons. The conclusion is not justified by the reasons the arguer put forward. You have not shown that the conclusion is unacceptable. You have not refuted a claim or a theory simply because you have shown that one or more of the supporting arguments for it are faulty. To refute a conclusion, you would have to come up with an independent argument supporting the denial of that claim.