Chapter Six
Linking Evidence to Claims

In many ways, the most important part of any argument is the claim because it is the element that stakes out the arguer’s position. Once the claim is stated, evidence and links become the other essential elements. Evidence was discussed in the previous chapter and the subject of this chapter is links.

The link\(^1\) sometimes is not even stated in the argument. Whether stated or unstated, the link is the reasoning process that connects evidence to claim. Different kinds of links frequently separate arguments into common types. For instance, certain kinds of links regularly appear in “arguments from principle,” while others are used in arguments by “analogy.”\(^2\) Still other links are apparent in “arguments by dissociation.” In each of these cases as well as others, links most clearly identify the type of argument employed.

Links, unlike evidence and claims, frequently are unstated. Because links are so closely associated with patterns of reasoning, audiences will usually understand the link even if it is not explicitly stated. Thus, debaters can take advantage of those familiar patterns and leave the links unsaid.

This chapter certainly does not exhaust the kinds of links that debaters have at their disposal but it does describes several of the more commonly used kinds of links. Links discussed in this chapter represent some very frequently used methods of connecting evidence and claims. These links are briefly described in the following illustration then more completely in the remainder of this chapter.

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\(^1\) The original term Stephen Toulmin used was “warrant.” This text uses the simpler and more direct term “link.” Toulmin, Stephen. *The Uses of Argument.* Cambridge: Cambridge University Press, 1958. Print.

\(^2\) Links are so central that they sometimes define the nature the argument itself. As a result, links are described by the phrase “argument by . . .” Thus, language such as “argument by generalization,” “argument by analogy,” etc. is not uncommon. Thus, this chapter will frequently use the “argument by” phrase to describe certain links. This chapter will frequently use the “argument by” phrase to describe certain links.
## Argumentative Links

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority</td>
<td>Support a claim by associating that claim with the opinion of experts in the field.</td>
<td>Former UN Secretary General Kofi Annan has announced repeatedly that millions in Africa are dying of AIDS.</td>
</tr>
<tr>
<td>Generalization</td>
<td>Create an association between particular examples and a more general rule.</td>
<td>I have three debaters who are failing my class, so I am beginning to question how serious debaters are about their classes.</td>
</tr>
<tr>
<td>Analogy</td>
<td>Create associations between things that are similar or dissimilar. This kind of link is used to create or criticize claims of similarity.</td>
<td>China’s economic power in the twenty-first century will be like America’s in the twentieth century.</td>
</tr>
<tr>
<td>Causal links</td>
<td>Create associations between causes and effects. This kind of link is used to create claims of causal association.</td>
<td>Smoking leads to heart disease.</td>
</tr>
<tr>
<td>Principle</td>
<td>Connect a particular situation to a general principle.</td>
<td>Capital punishment is always unjust because it violates the principle of the right to life.</td>
</tr>
<tr>
<td>Incompatibility</td>
<td>Evaluate one thing as incompatible with something else.</td>
<td>Persons who oppose abortion by arguing that taking a life is immoral are logically bound to oppose capital punishment as well.</td>
</tr>
<tr>
<td>Dissociation</td>
<td>Create new categories by dividing an old category into two new ones.</td>
<td>Opposition to abortion is not a matter of a “right to life.” It’s a matter of a right to human life.</td>
</tr>
</tbody>
</table>

### Argument by Authority

An authoritative link is used to create a positive association between an arguer’s claim and the statement of some authority. But what exactly is “an authority?” People who have
engaged in certain positive acts become “authorities” and their words carry more weight than those of persons who are not authorities. For example, persons who have earned advanced degrees in nuclear physics are considered authorities in that subject, and audiences tend to accept, without further argument, what they say regarding nuclear physics. A person with a degree in French literature would not be accepted as an authority on nuclear physics.

To assess the adequacy of an authoritative link, debaters should ask at least three questions about the particular source used to support the claim:

1. **Is the person an expert?** Many qualities identify people as experts, but usually experts hold advanced degrees or have particular experiences that give them access to information beyond that available to the general public.

2. **Is the person an expert in a field relevant to the claim?** Even if a person is a well-recognized expert, his or her expertise might not be in an area relevant to the argument. A person trained in nuclear physics may be a qualified source about nuclear energy but is not likely to be as qualified to talk about international relations.

3. **Is the person trustworthy?** Trustworthiness is related to a person’s ability to make relatively unbiased conclusions. An authority may lack trustworthiness either because of a lack of honesty or because they are unwilling to change their pre-formed opinions. In the statement by the former director of the U.S. Central Intelligence Agency George Tenet to U.S. president George W. Bush, Tenet told Bush that the prospects of finding weapons of mass destruction in Iraq would be a “slam dunk.” Tenet’s prediction proved to be false. Some believe Tenet was being dishonest; some believe he was simply unable to get past his previous beliefs about Iraq and weapons of mass destruction.

Thus, authoritative links are used to connect statements of experts directly to the claim that a debater wishes to make. Debaters need to take care to make sure only to use authoritative links to support appropriate kinds of claims as well as taking care to ensure that the is really an expert, is an expert in the particular field under consideration, and is trustworthy.

**Generalization**

An argument by generalization can be used to describe an entire group by presenting evidence from specific cases selected within that group. Such an argument almost always

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3 See for instance, The Toronto Star, December 15, 2004, A10 and The Washington Post, December 16, 2004, A37. The reference to “slam dunk” comes from the sport of basketball. When a player is left virtually alone on the court with the ball, the player may forcefully “dunk” the ball into the basket, hence, “slam dunk.”

4 The argument by generalization will be described more fully in Chapter Eighteen.
relies on examples as evidence (discussed in the previous chapter). Generalization is based on the probability that examples selected from a group are likely to exhibit many of the same features as the group as a whole. In other words, by examining a representative sample of a group, one is able to make a statement about the group as a whole. The assumption is that characteristics observed in the group probably belong not just to the sample, but also to the group as a whole.

Thus, an argument by generalization begins with evidence about specific examples and moves to a claim regarding the group as a whole. For instance, a debater wanting to argue that student athletes will become successful business people should begin by examining examples of students who were athletes in school and who later became successful in business. To construct such an argument, the debater would describe several representative examples of student athletes then would show how each of them turned out to be successful in business. The point of the argument is not simply to describe the members of the group – the examples of student athletes—but to argue that the entire population of student athletes (or at least a substantial portion of them) shares the characteristic of becoming successful business people. Thus, the argument is designed to link examples chosen from a sample of student athletes to the entire population of student athletes.

The above example illustrates a descriptive claim, the most common type of claim supported by argument by generalization. The argument only shows that they become successful business people. It does not explicitly state that being a successful businessperson is good or bad. This description however, like all or most descriptions, has evaluative dimensions. If one believes that successful business people are fundamentally unhappy, the argument could be used to argue that participation in athletics is a bad idea. If, on the other hand, one believes that becoming a successful businessperson is valuable—because it provides a good income, stability for a family, etc.—then this argument can be used to argue that participation in student athletic programs is valuable. Probably most people believe that success in business is valuable, but the point is that although the argument is explicitly and primarily descriptive, it contains implicit evaluative dimensions as well.

Like all arguments, some arguments using generalization links are better than others. The adequacy of a generalization link is based on at least two assumptions: (1) that a sufficient number of examples are presented as evidence, and (2) that the examples are representative of the entire group. For example, to argue that student athletes become successful business people only by pointing to a couple of examples would not be sufficient as a generalization. In this particular case, two examples are not sufficient to allow the debater to make a statement about student athletes in general. The second question to be asked about the adequacy of a generalization link is whether the examples are representative of the group as a whole. If the examples of student athletes came, for instance, from a single university, one might not be able to argue that they are representative of the entire population of student athletes. More will be said about the adequacy of this and other kinds of links in Chapter Ten, “Fallacies in Argumentation.”
Argument by generalization functions because several examples drawn from a group are linked to the overall group. This link allows debaters to create descriptive arguments. Other kinds of links can also be used to create descriptive as well as other kinds of arguments.

**Analogy**

In an argument by generalization, a claim about a group is based on information about selected members of that group. The link created by analogy is different. Analogy, based on an association of similarity, occurs when the arguer makes a claim about one member of a group based on the features of some other member. As a generalization link moves from specific cases to a generality, a link by an analogy moves from one specific case to another.

Two subtly different kinds of analogy will be discussed in this chapter: using the first kind, the debater simply argues that one example is similar to the other; in the second kind, the debater argues that two examples are so similar in known regards that we also can expect them also be similar in unknown regards.

With regard to the first kind, a debater might simply want to establish the similarity between the two examples. For instance, consider the claim that “Life in 21\textsuperscript{st} century China will be like life in 20\textsuperscript{th} century United States.” Such argument makes a statement about 21\textsuperscript{st} century China based on the similarities between it and life United States in the 20\textsuperscript{th} century. To make such an argument, an arguer needs to describe some features of life in 20\textsuperscript{th} century United States and then show that those features are likely to be present in 21\textsuperscript{st} century China. The similarities of the features of these two examples then allow the arguer make the general claim that, “Life in 21\textsuperscript{st} century China will be like life in 20\textsuperscript{th} century United States.”

The conclusion of this analogy is a general one about similarities between the United States and China. This type of analogy might be used for evaluative purposes. If life in 20\textsuperscript{th} century USA was good, life in 21\textsuperscript{st} century China might also be expected to be good. So in a general way, something we know about the first example (life is good in 20\textsuperscript{th} century USA) predicts something we do not know about the second (life will be good in 21\textsuperscript{st} Century China). However, this prediction is only implicit and is not an explicit part of the analogy. The specificity of the prediction becomes explicit in the second kind of analogy.

In the second case, analogies also can be developed to argue that two examples are so similar in known regards that they are also expected to be similar in unknown regards. This kind of argument by analogy also uses two parallel cases. The cases are said to be parallel because they both contain known similar features. However, the first case contains a known feature that is unknown in the second case. This argument by analogy infers that the features known in first case and unknown in the second probably are present in both cases.
Following the earlier example, the arguer focuses on similarities between two parallel cases, China and the USA. The arguer might suggest that these two cases are similar in two known regards: the presence of strong economic power and increasing numbers of women in the workplace. Based on the presence of these two known similarities, the arguer then infers that a known feature of the first case, a general lowering of the rate of unemployment, will also be present in the second case. Thus, the claim made in this argument is that 21st century China will witness a general lowering of the rate of unemployment. The analogy allows the debater to infer that something known in the first case is present, although unknown, in the second case.

In many instances, an argument by analogy supports a descriptive argument. Consider again the general analogy that 21st century China will be like 20th century United States. A precise reading of this claim suggests that it simply describes, without evaluating, life in 20th century USA and 21st century China. However, this analogy and actually most analogies are at least implicitly evaluative because the audience already evaluates the first case (life in 20th century USA) in a particular way and therefore will likely come to evaluate the second case (life in 21st century China) in the same way. In this case, depending on the audience, people may have either negative or positive associations with 20th century United States. They may see the United States as an arrogant superpower and a terrible polluter, or on the positive side may see the United States as an economic powerhouse and as an advocate for human rights. So, depending on whether the audience sees the 20th century United States as positive or negative, the argument by analogy will lead them to evaluate 21st century China in the same positive or negative way. Thus, an analogy has the function of transferring the positive or negative evaluation of the 20th century United States to 21st century China.

A precise reading of the second example’s claim that “21st century China will witness a general lowering of the rate of unemployment” also indicates that this is a descriptive claim. A more insightful reading, however, suggests that the claim is also evaluative given the assumption that most audiences lowering the rate of unemployment to be a positive thing. Thus, a more subtle reading of this claim indicates that it is evaluative as well as descriptive.

**Argument by Causality**

Causal links, as their name implies, are used to construct arguments of cause and effect. Constructing an argument about cause and effect is especially difficult because we cannot observe causes; we can only infer them. Over the years, people have developed a variety of ways to infer cause and effect relationships. Three of those ways include: absence and presence, change over time, and correlation.

One of the common ways to support a cause and effect relationship involves comparing the absence and presence of possible causes and effects to find potential relationships between the two. Using the idea of presence, a person might first notice the simultaneous
presence of a suspected cause and suspected effect. Observers might notice that the United States, a country in which citizens own a large number of guns, has a large number of murders—specifically about 160,000 murders per year in a population of 300 million.\(^5\) Thus, the simultaneous presence of a suspected cause (a large number citizen-owned guns) and a suspected effect (a high murder rate) might lead an arguer to suggest the number of guns contributes to the high murder rate. But the simultaneous presence of cause and effect does not provide particularly good evidence of a cause and effect relationship. Someone might also point to other factors in the United States that could be the real cause of the high incidence of murder—factors like racial strife or inadequate numbers of police in some major cities. In other words, alternative factors unrelated to the suspected cause (citizen-owned guns) might be the actual cause of the effect (high murder rate).

In order to argue that alternative factors such as those mentioned above are not the real cause, the arguer looks not only to the simultaneous presence of the suspected cause and effect, but to simultaneous absence as well. In the above example, the arguer might look for an instance where the suspected cause (citizen-owned guns) is absent, pointing for instance, to the case of China where citizen-owned guns are illegal. The question then becomes, whether the suspected effect (a high incidence of murder) is or is not present in China. The arguer could then point to the fact that the likelihood of being murdered in the United States is four times higher than the chance of being murdered in China. Therefore, the arguer could conclude that when both the suspected cause (citizen gun ownership) and the suspected effect (high rate of murder) are absent, citizen gun ownership contributes to the high rate of murder in the United States.

So one method of supporting a causal relationship is to use the simultaneous presence and absence of the cause and effect. By itself, the simultaneous presence of a suspected cause and effect does not provide particularly strong evidence of a causal relationship. However, the added evidence of the simultaneous absence of the suspected causes and effects makes much better evidence for a cause and effect relationship.

A second way of arguing for a cause and effect relationship is change over time. When someone argues that one thing causes another, he or she frequently does so by observing that some change in the first thing is accompanied by a corresponding change in the second. The person is able to observe the changes in both, and on the basis of these changes, can infer that the change in the first caused the change in the second. For instance, a man who changes from a high fat to a low fat diet and loses five kilos in a month might infer that reducing the fat content in his diet caused his weight loss. Two things were observed: a change in diet and a loss of weight. From these observations, the arguer inferred that the changes in diet caused weight loss.

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A third way to make inferences about cause and effect relationships is to examine correlation. To use the method of correlation to infer a cause and effect relationship, an arguer can point to the fact that the incidence of the suspected cause and the suspected effect rise and fall in relationship to one another. So for instance, the arguer will suggest that as the frequency of the suspected cause increases, the frequency of the suspected effect also increases. Of course, many are quick to state that correlation and causation are not the same things. Although correlation is not causation, correlation is one test of a causal relationship. If two events are not correlated, then any inference that they are causally related to one another would be wrong. So using the method of correlation, a debater might argue that smoking is one of the causes of lung cancer because as the incidence of smoking increases within a society, the incidence of lung cancer increases as well. Such a correlation provides evidence, if not perfect evidence, that smoking causes lung cancer. Correlation by itself may not be sufficient to prove a causal relationship, because correlation does not rule out other potential causes (living in a polluted area, genetic disposition to lung cancer, etc.). Still, correlation is method to make at least an initial inference regarding a causal relationship.

A fourth method of supporting a cause and effect relationship involves controlled empirical studies. As stated earlier, correlation and simultaneous presence of suspected causes and effects are imperfect methods of inferring causal relationships. Sometimes scholars are able to design controlled empirical studies that help to offset those imperfections. So for instance, an empirical study might examine the relationship between smoking and lung cancer while controlling for the effects of other possible causes (pollution, genetics, etc.) and might discover that even considering the potential effects of these alternative causes, the causal relationship between smoking and lung cancer still is substantial.

Debaters frequently use argument by causality to judge actions based on their consequences. A debater first uses causal links to convince the audience that a particular action will cause certain consequences. In this case, the argument is that an action (smoking) leads to a consequence (lung cancer). Then the debater can argue that an action that has good consequences is justified while one that has bad consequences is not. Thus, in the smoking example, the debater maintains, either implicitly or explicitly, that society has an obligation to stop people from smoking to reduce the negative consequences of that action.

We must consider a variety of factors when judging the adequacy of this argument. As causes are inferred but not directly observed, they are difficult to prove and, even in the best of circumstances, cannot be proven completely. A more complete discussion of causal links is included in Chapter Twenty.

**Principle**

Creating a link from a principle to a claim is a useful technique for supporting an argument of evaluation—especially in cases when debaters must justify a particular
action. Whereas the argument by causality is used to judge an action based on its consequences, the argument by principle, as its name implies, judges an action based on the principles involved. A simple comparison might clarify the distinction between consequences and principles. Why, for instance, is cheating on a college examination a bad idea? An argument based on consequences might suggest that cheating is a bad idea because students who are caught risk being expelled from school. An argument from principle might say you should not cheat because cheating goes against the important principle of honesty. Debaters using argument from principle ordinarily claim that principles are more important than consequences and that when consequences and principles point in opposite directions, people should follow their principles.

An argument from principle ordinarily has three parts. First, a debater must select a principle. Second, the debater should argue for the importance of that principle. Third, the debater should apply the action being contemplated to the principle. One action sometimes justified on principle is the abolition of capital punishment (the death penalty). This example can be used to explain the three parts of an argument by principle.

In the case of capital punishment, the debater might, for instance, select the sanctity of human life as the appropriate principle. Having selected this principle, she or he then would turn to a consideration of the importance of that principle, perhaps suggesting that we should never violate the sanctity of life because life is the essence of human existence. Without life, the very essence of humanity is gone. Having selected the principle and shown why it is important, the debater would then apply the action to the principle showing how capital punishment quite obviously violates the sanctity of human life because it involves the intentional taking of a human life.

One of the difficulties with the previous example is that many people do not accept the principle of the sanctity of human life in all situations. For instance, most societies are willing to set aside this principle in matters of self-, family, or societal defense. In other words, most societies agree that taking a human life in self-defense, in defense of one’s family, or in defense of one’s nation is justified. As a result, some debaters might revise the argument slightly by modifying the selected principle and, as a result, the rest of the argument. This modified argument would, of course, need to argue that capital punishment is not needed for societal defense.

The adequacy of an argument from principle depends on several assumptions. First, the argument presumes that the articulated principle is sound in general or at least in the context in which it is being applied. Frequently persons who use an argument by principle claim that the principle applies universally. For example, some claim that the sanctity of human life is absolute and universal—that no cases exist when the intentional taking of human life is justified. In other cases, arguers might define a specific context in which the principle is applicable. A debater might be unwilling to defend the sanctity of life as an absolute and universal principle and might acknowledge certain instances where the principle should be set aside. The debater might therefore refine the principle by arguing that the sanctity of life should apply in situations that do not involve self-defense or defense of one’s family or community.
A second assumption of the argument from principle is that the action being defended applies unambiguously to the principle. A debater would have little difficulty demonstrating that capital punishment applies clearly to the principle of sanctity of human life as capital punishment obviously ends a human life; however, the debater would have to construct a more elaborate argument to show that capital punishment applies to the principle against taking a life except in self-defense. In this case, the debater would need to argue that capital punishment is not necessary for a society to defend itself against potential murderers. She or he could argue that capital punishment is not necessary for self-defense for a variety of reasons, for instance suggesting that life imprisonment without parole, instead of capital punishment, is a sufficient means of societal self-defense. Whether the principle involves the sanctity of human life in general or the sanctity of human life except in cases of self-defense, the debater needs to establish that capital punishment is unequivocally related to the principle.

**Incompatibility**

Incompatibility is a kind of argument used to refute an opponent’s argument and, by implication, support the debater’s own. Using this kind of argument, a debater attempts to show that an opponent holds incompatible views on a particular issue and that as a result, one of those views must be discarded. For instance, a debater using this argument might argue, “How can my opponent be a supporter of human rights and still support the U.S. war in Iraq?” The assumption is that the U.S. war in Iraq was incompatible with human rights, and, thus, a person cannot logically support both simultaneously and that as a result, the opponent cannot logically support the war.

The argument from incompatibility has its foundation in principles of both logic and physics. A principle of physics maintains that two objects cannot be in the same place at the same time. Analytic philosophers hold to a precept they call the “principle of noncontradiction.” This principle states that an object cannot simultaneously be X and not X. These two principles are similar to an argument by incompatibility but are not the same. Although two objects cannot be in the same place at the same time, an arguer can, even logically, hold two positions that seem incompatible. The difference is that the properties of the physical world are not amenable to change by interpretation. You cannot “interpret” the physical world such that you and an oncoming train will be able to occupy the same space at the same time. However, an arguer may be able to interpret the “U.S. war in Iraq” and “human rights” so that they are not incompatible.

The argument by incompatibility can function in a variety of ways. First, an argument by incompatibility can allow a debater to argue, “view’s held by an opponent are different from views held by the same opponent in a different time or place.” Such a suggestion, if supported, allows a debater to cast doubt on the current argument of the opponent. If a person makes opposite arguments at one time (or in one place) than in another time (or place), that person arguably loses a great deal of credibility and his or her arguments become more suspect. Second, an argument of incompatibility can help a debater argue,
“the views of my opponent are incompatible with some accepted fact or value.” If a debater makes a statement that is incompatible with facts or values, those statements arguably cannot be trusted. Third, an argument by incompatibility allows a debater to argue, “refusal to act in this particular situation is incompatible with our values.” If principles or values demand a certain course of action, yet we are not moving toward that action, an argument by incompatibility can suggest a change in action or policy.

Thus, the argument by incompatibility is an interesting way to make arguments of value—especially in debates where the opposing debaters are expected to state their own positions. Because most people have come to believe consistency is important, incompatibility warrants can be very persuasive. Argument by incompatibility will be discussed in more detail in Chapter Twenty-Two. The next category of arguments is sometimes used in reaction to arguments of incompatibility.

**Dissociation**

Most of the previous kinds of arguments operate by linking various concepts with one another. The causal argument associates cause and effect, argument by example associates several examples with one another, argument by authority associates persons and acts. The last type of argument is different because it takes as its starting point a unified concept and divides it into two different concepts using a process called dissociation. 6

The process of dissociation starts with a concept that the audience is assumed to value, and then divides that concept into two new concepts, one of which is valued and one of which is not. Then the arguer shows how valuing one of the new concepts and opposing the other can avoid the incompatibility. In this manner, the argument by dissociation is a means to argue against an argument of incompatibility.

At one point in the history of many cultures, a concept of the place of women was valued and agreed upon. In those cultures, the place of women was in the home, supporting her husband and her children. Any woman who stepped outside of that “place” was not valued. However, the notion of a woman’s place has changed. Many cultures now are coming to think that the real place of women is much larger than simply in the home. So the place of women has been dissociated into two concepts: the traditional woman’s place and the real woman’s place which might more appropriately be called “women’s roles in society.” This dissociation is developed by repeated argument about the place of women until the “place of women” that was at one time a unified concept is now divided into two concepts; the traditional place of women and the real roles for women in society. So imagine a female advocate’s response when someone accuses her of not respecting that a woman’s place is in the home. She might argue by dissociation that “I

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do not restrict a ‘woman’s place’ to the traditional notion of supporting a home, husband and children. In reality the role of women in society is much broader, including not only the home, but things like careers, service to society, government service, etc.” By dissociating the concept of a “woman’s place” into the dual concepts of “traditional women’s place” from a “real women’s role in society,” she is able to answer the incompatibility.

Although one of the uses of the argument by dissociation has to do with resolving incompatibilities, it has other uses as well. More of those uses as well as more detail about argument by dissociation will be presented in Chapter Twenty-Three.

**Summary**

This chapter has described a variety of methods of linking evidence to claims. One purpose is to catalogue various methods that debaters can use to draw such links. Another purpose is to encourage the debater to think about ways that certain kinds of evidence can be used in conjunction with certain kinds of links in order to support certain kinds of claims. In all cases, care needs to be taken to make sure that links are clear and adequately drawn.