

# Technical Communication



## **4. CONSTRUCTING ARGUMENTS**

# Consider the Context of your Argument



- **Argument:** arrangement of facts and judgments about the world
  - *Features A, B, and C characterize the site.*
  - *Company Z is dominant because of factors X and Y.*
- Understand your audiences broader goals
- Work within constraints

# Understand Audience's Broader Goals



- People act according to the interests of
  - Their organization (company, university)
  - Themselves

## **Broad Interests**

- Security
  - People resist controversial actions that might hurt their own interests
- Recognition
  - People like to be praised for hard work
  - People do not like to be humiliated.
- Personal and Professional Growth
  - People want to develop and grow on the job and in their personal lives.

# Working within Constraints



- Types of constraints

1. Ethical
2. Legal
3. Political \*
4. Informational
5. Personnel (Colleagues, workers)
6. Financial
7. Time
8. Format
9. Tone

# Crafting a Persuasive Argument

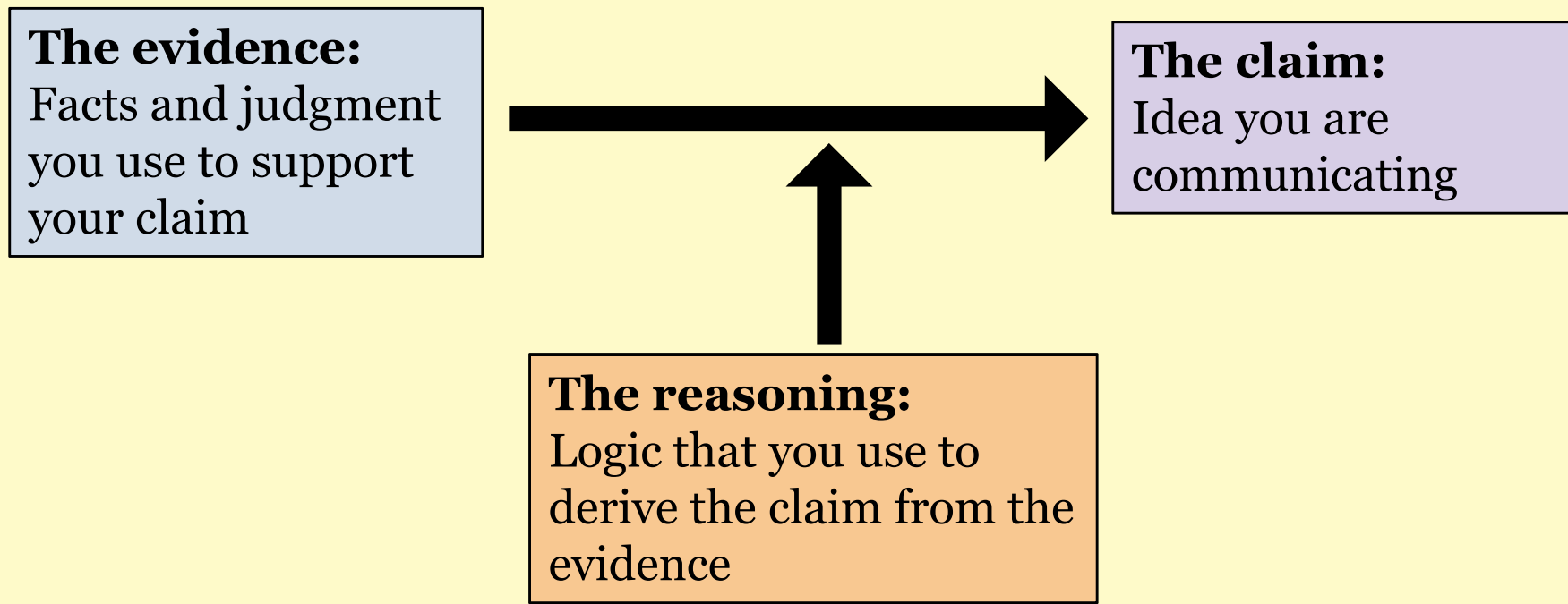


- I. Identifying the elements of your argument
- II. Use the right kinds of evidence
- III. Consider opposing viewpoints
- IV. Decide where to present your claim

# I. Identifying elements of your argument



- Claim
- Evidence
- Reasoning



## II. Use the right kinds of evidence



- Common sense
- Numerical data
- Examples
- Expert testimony

# III. Consider Opposing Viewpoints



- When presenting an argument, present the opposing points of view
  - If you don't, your opponent will simply assume you didn't consider possible problems in your claim.
- Tactics:
  - “Opposing argument is based on illogical reasoning, inaccurate, or incomplete facts.”
  - “Opposing argument is valid but less powerful than your own.”
  - “There might be a way to reconcile the two arguments.”
- Be gracious and understated



# IV. Deciding where to present the Claim



- How do you order the argument?
  - Often best to start with the claim
  - Sometimes – present evidence first, and then claim.
- Audience and venue affect order
  - Newspapers, ect → claim is first
  - Cinema, Poetry → claim is last

# Avoiding Logical Fallacies



## Types of logical fallacies

1. Ad hominem (argument against the speaker)
2. Argument from ignorance
3. Appeal to pity
  
4. Argument from authority \*
5. Circular argument (begging the question)
6. Either-or argument
  
7. Ad populum (bandwagon argument)
8. Hasty generalization (inadequate sampling)
9. Post-hoc
10. Oversimplifying

# Logical Fallacies (con't)



## 1. Ad hominem (argument against the speaker)

<i>Fallacy</i>	<i>Explanation</i>	<i>Example and Comment</i>
<i>Ad hominem</i> , also called <i>argument against the speaker</i>	Argument against the writer, not the writer's argument.	"Of course Matthew favors buying more computers — he's crazy about computers." The fact that Matthew loves computers doesn't necessarily mean that his argument for buying more computers is unwise.

# Logical Fallacies (con't)



## 2. Argument from ignorance

<i>Fallacy</i>	<i>Explanation</i>	<i>Example and Comment</i>
Argument from ignorance	A claim is true because it has never been proven false, or false because it has never been proven true.	<p>“Nobody has ever proven that global warming is occurring. Therefore, global warming is a myth.”</p> <p>The fact that a concept has not yet been proven does not necessarily mean that it is false. Perhaps the measurement techniques are insufficiently precise or not yet available.</p>

# Logical Fallacies (con't)



## 3. Appeal to pity \*

<i>Fallacy</i>	<i>Explanation</i>	<i>Example and Comment</i>
Appeal to pity	An argument based on emotion, not reasons.	<p>“We shouldn’t sell the Ridgeway division. It’s been part of the company for over forty years.”</p> <p>The fact that the division has long been a part of the company is not in itself a good reason to retain it.</p>

# Logical Fallacies (con't)



## 4. Argument from authority \*

<i>Fallacy</i>	<i>Explanation</i>	<i>Example and Comment</i>
Argument from authority	An argument that a claim is valid because the person making the claim is an authority.	<p>“According to Dr. Smith, global warming is definitely a fact.”</p> <p>Even if Dr. Smith is a recognized authority in this field, saying that global warming is a fact is not valid unless you present a valid argument to support it.</p>

\* **Note:** *Argument from authority* is often good and necessary, but must be used properly.

# Logical Fallacies (con't)



## 5. Circular argument (begging the question)

<i>Fallacy</i>	<i>Explanation</i>	<i>Example and Comment</i>
Circular argument, also called <i>begging the question</i>	An argument that assumes what it is attempting to prove.	<p>“Compaq is more successful than its competitors because of its consistently high sales.”</p> <p>Because “more successful” means roughly the same thing as achieving “consistently high sales,” this statement says only that Compaq outsells its competitors. The writer needs to explain <i>why</i> Compaq outsells its competitors and is therefore more successful.</p>

# Logical Fallacies (con't)



## 6. Either-or argument

<i>Fallacy</i>	<i>Explanation</i>	<i>Example and Comment</i>
Either-or argument	An argument that poses only two alternatives when in fact there might be more.	<p>“If we don’t start selling our products online, we’re going to be out of business within a year.”</p> <p>This statement does not explain why these are the only two alternatives. The company might improve its sales by taking measures other than selling online.</p>



# Logical Fallacies (con't)



## 7. Ad populum (bandwagon argument)

<i>Fallacy</i>	<i>Explanation</i>	<i>Example and Comment</i>
<i>Ad populum argument, also called the bandwagon argument</i>	An argument that a claim is valid because many people think it is or act as if it is.	<p>“Our four major competitors have started selling online. We should too.”</p> <p>The fact that our competitors are selling online is not in itself an argument that we should.</p>

# Logical Fallacies (con't)



## 8. Hasty generalization (inadequate sampling)

<i>Fallacy</i>	<i>Explanation</i>	<i>Example and Comment</i>
Hasty generalization, sometimes called <i>inadequate sampling</i>	An argument that draws conclusions on the basis of an insufficient number of cases.	<p>“The new Gull is an unreliable car. Two of my friends own Gulls, and both have had reliability problems.”</p> <p>Before reaching any valid conclusions, you would have to study a much larger sample and compare your findings with those for other cars in the Gull’s class.</p>

# Logical Fallacies (con't)



## 9. Post-hoc

<i>Fallacy</i>	<i>Explanation</i>	<i>Example and Comment</i>
<i>Post-hoc</i> reasoning (the complete phrase is <i>post hoc, ergo propter hoc</i> )	An argument that claims that, because A precedes B, A caused B.	<p>“There must be something wrong with the new circuit breaker in the office. Ever since we had it installed, the air conditioners haven’t worked right.”</p> <p>Maybe the air conditioners are malfunctioning because of the circuit breaker, but the malfunctioning might have other causes.</p>

# Logical Fallacies (con't)



## 10. Oversimplifying

*Fallacy*

*Explanation*

*Example and Comment*

Oversimplifying

An argument that omits important information in establishing a causal link.

“The way to solve the balance-of-trade problem is to improve the quality of the products we produce.”

Although improving quality is important, international trade balances are determined by many factors, including tariffs and currency rates, and therefore cannot be explained by simple cause-and-effect reasoning.

# Presenting yourself effectively



- Professional Persona
  - Cooperativeness
  - Moderation
  - Fair-Mindedness
  - Modesty

**Ex:** An engineer trying to argue for his plan:

This plan is certainly not perfect. For one thing, it calls for a greater up-front investment than we had anticipated. And the return-on-investment through the first three quarters is likely to fall short of our initial goals. However, I think this plan is the best of the three alternatives for the following reasons... Therefore, I recommend that we begin planning immediately to implement the plan. I am confident that this plan will enable us to enter the flat-screen market successfully, building on our fine reputation for high-quality advanced electronics.

# Using Graphics and Design to Persuade

The image shows a screenshot of the Apple website's homepage. At the top is a navigation bar with the Apple logo and links for Store, Mac, iPod + iTunes, iPhone, Downloads, and Support, along with a search field. The main content area features a large advertisement for the MacBook Air. The headline reads "The world's thinnest notebook. **MacBook** Air." Below the headline are two video thumbnails: "Watch the ad" and "Watch the guided tour". A large image of the MacBook Air is shown on the right, resting on an orange protective sleeve. Below the main advertisement is a "Hot News Headlines" section with a link to "Bob LeVitus 'still loving the iPhone'". At the bottom, there are four promotional tiles: "iPhone. Now in 16GB." with an image of the iPhone; "iPod touch. Now in 32GB." with an image of the iPod touch; "Pretty in pink." with an image of a pink iPod; and "iTunes Movie Rentals" with an image of a laptop displaying a movie rental.

Store Mac iPod + iTunes iPhone Downloads Support Search

The world's thinnest notebook. **MacBook** Air.

Watch the ad Watch the guided tour

Hot News Headlines | Bob LeVitus "still loving the iPhone"

iPhone. Now in 16GB.

iPod touch. Now in 32GB.

Pretty in pink.

iTunes Movie Rentals

# Linking Persuasion to Ethics



- **You are most persuasive if you are honest!**
  - Honesty determines the acceptability of your current work,
  - Affects acceptance of future publications,
  - Affects extent to which your work will become widespread,
  - Reflects on your organization and colleagues.