

Technical Communication
Engineering 100.250

Persuasion and Argumentation
Proposals

Persuasion

- What is it?
- How does it differ from argumentation?
- How do you achieve it?

Persuasion

Be aware that the techniques of persuasion
can be dangerous in unethical hands.

Ethical point

- Aristotle said it was necessary to be aware
of the misuse of rhetoric, *not to misuse it
oneself*, but to be on guard against it.

What is persuasion?

- Crudely, convincing someone to give you
what you want.

What might those things be?

Things engineers might ask for

- Actions
- Permission
- Money
- Belief

Any others?

What do you first consider in deciding how to persuade?

You consider audience.

I always talk a lot about audience.

Understanding your audience will help you with

- Organization
- Level
- Tone
- Appeal

What things are useful to know about your audience?

- How much they know about the issue.
- What predispositions they may have on it.
- What their opinion is on the matter.
- What kind of personality they have.

What else?

Should we consider their emotional state?

Three recognized appeals

- To Reason
- To Emotion
- To Ethics

They are used in different situations.

The appeal to reason is simply an appeal to rational argument.

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It supposes, of course, that your audience is rational.

The appeal to emotion tries to whip up feelings in favor of something, but without much rationality.

The ethical appeal involves moral arguments.

So, there are three different appeals.

Where do you see them?

In engineering, two appeals predominate

- Appeal to reason
- Appeal to ethics

Three recognized appeals

- To reason
- To emotion
- To ethics

They are used in different situations.



Persuasion in action

The vacuum cleaner salesman

The salesman's three goals

- Establishing goodwill (or trust)
- Showing a problem
- Suggesting a solution

Argumentation

- Recall that it's not the same as persuasion
- It is the term used to describe the reasoned setting out of a position.
- Therefore, what appeals should be used?

The basis of an argument

- Claim
- Support

Different ways to look at arguments

- Classical Approach
 - Deductive argument
 - Inductive argument
- Toulmin Model
 - a more modern approach

Who was the greatest athlete of the 20th century?



Babe Didrikson Zaharias

http://www.realcleartsports.com/lists/best_athlete_golfers/babe_didrikson_zaharias.html?state=stop

Babe Didriksen was the greatest athlete of the 20th century, she

- won two gold medals and one silver for track and field events in the 1932 Olympics
- was an excellent baseball player
- was an excellent tennis player
- was an all-American basketball player
- was the leading female professional golfer in the 1940s and 1950s

The Earth is a sphere

- Ships disappear over the horizon from the hull upward.
- The shadow of the Earth on the moon is circular.
- Ships sailing in one direction over the surface of the earth will, in time, return to their home ports.

What is missing?

How about this argument?

- On 1 September 2007 the Appalachian State University football team defeated the University of Michigan's football team.
- The final score in that game was Appalachian State 34, U of M 32.

What is missing?

The Toulmin model: a new way of looking at arguments

How are these arguments different?

What is missing?

Toulmin Model:

The Toulmin approach sees an argument as a progression from accepted facts or evidence (data) to a conclusion (claim) by way of a statement (warrant), which establishes a reasonable relationship between them.

Adapted from Hodges, John, et al. (1990). *Harbrace College Handbook, Eleventh Edition*. Orlando: Harcourt Brace.

Thus a warrant

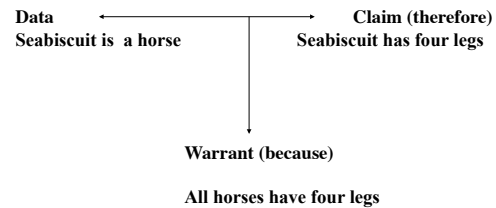
- is a generally accepted view or opinion
- serves to justify the conclusion drawn from the data
- warrants are often assumed or left unexpressed.

Thus a warrant

- is a generally accepted view or opinion
- serves to justify the conclusion drawn from the data
- **warrants are often assumed or left unexpressed.**

– But this can be very dangerous if the warrant is not obvious to your audience.

Example of argument as Toulmin Model



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Thus a warrant

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- **warrants are often assumed or left unexpressed.**

– But this can be very dangerous if the warrant is not obvious to your audience.

Find a warrant

- Claim: The iPad 2 computer is portable.
- Data: The iPad 2 weighs 1.33 lbs (601g)
- Warrant?

iPad2



<http://commons.wikimedia.org/wiki/File%3AIPad2.jpeg>

Find a warrant

- Claim: The Generac GP 3250 electric generator is portable.
- Data: The Generac GP 3250 weighs 115 lbs (52.16 kilos).
- Warrant?



http://www.electricgeneratorsdirect.com/images.php?products_id=5531

Generac GP 3250 electric generator

Warrants may be thought of as belonging to three classes

- Authoritative
- Motivational
- Substantive

After W. Brockriede and D. Ehninger (1960); C. Kock (2006).

Authoritative warrants

- Depend on the general assertion that a qualified authority would support the conclusion based upon the evidence.

Motivational warrants

- Depend on an appeal to the audience's values.

Substantive warrant

- Resemble more conventional forms of argumentation
- Fall into one of six categories
 - Cause and effect
 - Sign
 - Parallel case
 - Analogy
 - Generalization
 - Classification

What warrant would work here?

- Claim: Rodrigo is cold
- Data: Rodrigo is shivering

Which type of warrant is this?

- Claim: Rodrigo is cold
- Data: Rodrigo is shivering
- Warrant: shivering often indicates that a person is cold.

Which type of warrant is this?

- Claim: Rodrigo is sick.
- Data: Rodrigo is shivering.
- Warrant: shivering often indicates that a person is suffering from a fever.

What warrant would work here?

- Claim: Janet will live to be at least 90 years old.
- Data: All of Janet's parents and grandparents lived to be over 90 years old.

Which type of warrant is this?

- Claim: Janet will live to be at least 90 years old.
- Data: All of Janet's parents and grandparents lived to be over 90 years old.
- Warrant: People can expect to live as long as their immediate ancestors.

Substantive. Which?

Perhaps generalization, perhaps analogy.

Which type of warrant is this?

- Claim: eating oranges will help prevent colds
- Data: oranges are a good source of vitamin C
- Warrant: Linus Pauling states that vitamin C is effective in preventing colds

Authoritative

Which warrant?

- Claim: Graduate engineering student Robert Smith plagiarized his doctoral thesis at State University.
- Data: Over the last two years, the engineering college of State University has found nine of its graduate students guilty of plagiarism on their doctoral theses.
- Warrant?

Substantive: generalization

Arguments are of two kinds

- Arguments of fact
- Arguments of policy

Arguments are of two kinds

- Argument of fact
 - This is about what *is* or *is not*.
- Argument of policy
 - This is about what *should* or *should not* be.

How independent are they?

Relationship between arguments of fact and arguments of policy

- Facts often need to be established before you discuss policy.
- Arguments of fact must often precede arguments of policy.

What argument of fact might precede this argument of policy?

“The Federal Government should impose a rule that any automobile manufactured in the United States after 1 January 2015 must have a combined city-highway rating of 52 miles per gallon of gas.”

Proposals

NB: TC3 is now out!

About the proposal assignment

- We will use an informational abstract as an overview
- ***We will not use a cover page***
- ***We will not use a table of contents***

Proposals

- Are covered in pages 27 to 35 of your text
- Are persuasive documents

A persuasive document does two things

- It makes a claim
- It furnishes support for a claim

A proposal does two things

- It makes a claim:
 - ***“You need job X done”***
 - ***“I can do job X”***
- It furnishes support for a claim:
 - ***“Here is the proof that I can do job X”***

Is a proposal purely persuasive?

What might your claims be in this class?

- The design that I propose for a microprocessor-based toy
 - Can be built by a team of four
 - Can be completed in six weeks
 - Will be educational
 - Can be economically produced

Any others?

What would constitute proofs that you can do the job you propose?

- Knowledge
- Experience
- Sufficient time
- Sufficient personnel

So, you are basically saying

- Here is work you need done
- I can do the work
- Here's why I can do the work

All of which tends to breakdown into these sections

- Background
- Details of proposed work
- Explanation of evaluation of proposed work
- Material, personnel and equipment requirements
- Explanation of expertise
- Budget (*not applicable in this case*)

Background

- Information needed by the audience to understand the details of the proposal

What might this be in this case?

Perhaps a detailed description of the game?

A detailed description of a microprocessor-based educational toy is not

“It's just like *Angry Birds*, but it involves quantum mechanics.”

Erwin Schrödinger
1887 to 1961



<http://ru.laser.ru/gallery/minta/index.html>

Details of proposed work: specific tasks

- Explanation of how the work meets the proposed objectives
- How work will be completed
- When work will be completed

What might this be in this case?

Explanation of evaluation

- Telling the reader how to judge whether the work has been successful

What might this be in this case?

Material, personnel and equipment requirements

- Examples in this case might be the hardware and software required

Explanation of expertise

- Here you tell the reader why you (or your team in the case of large projects) can do the work

Simplified proposal structure

- Overview: informational abstract
- Simple introduction including scope of proposed work
- Background: information needed by the reader to understand the proposal
- Details of proposed work: clear description of the tasks needed to accomplish the proposed work and a statement of how long it will take to accomplish them.
- Explanation of how the work will be judged to be successfully completed.

Simplified proposal structure, cont'd

- Material, personnel and equipment requirements for proposed work
- Explanation of the proposer's expertise
- Statement of the qualifications of those who propose to do the work
- Conclusion: statement of the main recommendations of the proposed work and statement of how it meets the requirements established by the proposer or the client

Abstracts: brief summaries of reports

- They come in two types:
 - Informational
 - Descriptive

Purpose of an abstract:

“The abstract enables prospective readers to determine whether the report will be useful and whether they need to read all of it or only parts of it.”

Hodges, J. C. (1990). *Harbrace College Handbook, 11th Edition*. Chicago: Harcourt Brace.

Descriptive abstracts

- Describe what the report is about
- Are often like a table of contents in paragraph form

Informative abstracts

- Are “the report in miniature”
 - States all the essential points
 - Gives the reader all essential information
 - Are generally longer than descriptive abstracts

Descriptive abstracts

- Tell what the topic of the report is
- Don't tell much about what the report says

Informational abstracts

- “. . . Gives the gist, or essence, of a piece of writing; it includes the most significant material in the writing. It is the report in miniature.”

Mills, G. and Walter, J. (1978). New York: Holt, Rinehart

Abstract

We propose to create a device that distorts the human voice when users speak on the telephone. The device would allow users to call others and sound like one of six celebrities whose vocal characteristics will be programmed into the device. We believe the device would be a popular novelty device, and our team could produce a prototype of this device in six weeks at a cost of \$5,200.

(Informational)

Abstract

This report is a proposal for a vocal distortion device. It gives background explaining what it is and how it would work, there is a schedule of work for its development, an explanation of how the prototype may be judged a success, an explanation of the expertise of the team proposing to develop the device and there is detailed budget for its development.

(Descriptive)

Summation

- Persuasion and argumentation are different
- Toulmin model explains arguments as claims supported by data by means of a warrant
- Toulmin warrants are of three sorts: authoritative, motivational and substantive
- Arguments of fact precede arguments of policy

Summation, cont'd

- Proposals are persuasive documents
- The sections work together to support the claim that the proposer can do work that the client needs
- Abstracts are of two kinds:
 - Descriptive
 - Informational