# A Primer on Argumentation and Refutation

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# MAKING AN EFFECTIVE ARGUMENT

It is not enough to have a 'good idea.' That's because the world is filled with opinionated people who have other, competing ideas. When those ideas are in conflict, people simply prefer their own. There is more confidence in the author of the personal opinion. If a speaker simply offers an opinion, a listener is likely to agree with the elements of the opinion that she already held and reject the rest. The formation and expression of one's opinion may occupy time but it is unlikely to persuade or move another person or audience.

How is it that your opinions might triumph, that they will effectively engage an audience or trump the conflicting opinions of others? Opinions organized as arguments may be an effective tool. An argument is more than an opinion—it is the best possible expression of an opinion and defensible. Effective speakers anticipate the points of agreement and patterns of disagreement with an audience and construct arguments that consider opposing positions (*argument anticipation*). Good speakers generate reasons and evidence to support their opinions. Ultimately, effective arguments are developed and used to prove that an opinion is both more likely to be true than false and more credible than conflicting opinions.

An argument has 3 elements -A - R - E. It is an expression that includes an Assertion, Reasoning, and Evidence.



# The Elements of an Argument

# Assertion – An unsupported claim; an opinion

#### Examples:

- I am tired.
- Iran is a rogue state.
- Nebraska is a red state.
- My dorm room is in a frightful state.

# Reasoning – Analysis of the claim; the logical examination of an opinion

- I am tired. There was so much street noise outside my apartment last night that I only got 3 hours of sleep and I need at least 8.
- **Iran is a rogue state**. The country will not adhere to its international obligations, even the agreements to which it is a signatory.
- **Nebraska is a red state**. Red states are those that have Republican political identification and Nebraska is solidly Republican.
- My dorm is in a frightful state. I live like an animal. There is half-eaten food thrown under the bed. There are chew marks on the furniture. There are bones on the closet floor.

# Evidence – Information (expert testimony, narratives, statistical references, historical and contemporaneous examples, model program evaluations, etc.) used to verify reasoning

- I am tired. There was so much street noise outside my apartment last night that I only got 3 hours of sleep and I need at least 8. In fact, my personal physician, Dr. Jonas Salk, recommended that I get 10 hours of sleep whenever possible.
- Iran is a rogue state. The country will not adhere to its international obligations, even the agreements to which it is a signatory. For example, Iran signed the Non-Proliferation Treaty but will not allow IAEA inspectors to examine its nuclear power facilities. In fact, both the Iranian Government and the IAEA acknowledge that Iran has unsealed nuclear facilities that were previously closed by the IAEA.
- Nebraska is a red state. Red states are those that have a Republican political identification and Nebraska is solidly Republican. Nebraska voters have supported the Republican presidential candidate in every election since 1968.
- My dorm is in a frightful state. I live like an animal. There is half-eaten food thrown under the bed. There are chew marks on the furniture. There are bones on the closet floor. I have been asked to clean it or vacate it by the Dean of Students and the Department of Public Health. Here are the notices I received today.

#### Simple argument example

I did not enjoy "Seed of Chucky." Although I like the silliness of low-budget horror, the movie has a confused story, lack of suspense, and embarrassingly weak attempts at humor. There is no suspense in re-doing the axthrough-the-door scene from "The Shining" and derivative or repeated humor isn't more clever or interesting just because it is delivered by a puppet.

#### More sophisticated argument example

A definitive review and close reading of medical peer-review journals and government health statistics shows that American medicine frequently causes more harm than good. It may be the case that medical care is the leading cause of death in the country. The Institute of Medicine reported that nearly 100,000 die each year just from medical errors in hospitals. The Journal of the American Medical Association reported on a adverse drug reaction study's conclusion that more than 250,000 people are killed annually from that cause. In fact, there are comprehensive reviews of medical journal reports on adverse drug reactions, medical errors, secondary infections, and unnecessary surgeries and other medically-induced illness and injury labels medicine as the nation's leading cause of death, with more than 700,000 annually.

# ANTICIPATING AND REFUTING AN ARGUMENT

Public communication necessarily involves refutation. Because listeners have their own set of opinions, the expression of any of particular insight may inevitably threaten or conflict with one or more of an audience's considered perspectives. In some respects, therefore, public speaking may produce disagreement, even hostility. The audience my not exhibit any overt hostility to the speaker – disagreement may be more subtle and private, a hidden, silent persuasive barrier for the speaker. What to do? As part of opinion formation, a presenter should anticipate and tactfully counter or accommodate potential resistance. This is known as **argument anticipation**. In a rather simple manner to anticipate challenging questions, disagreements, or other critical commentary. One should begin by imagining listeners' reaction to the presentation: What will the audience think of the speech? Will they disagree with any major issues? If so, is it possible to adapt the presentation or evidence to make a more nuanced or tactful presentation? In this way, a presenter ought to be able to craft the best possible and defensible expression of an opinion for general and specialized audiences. The argumentation anticipation sequence is a thinking exercise that can be imagined as follows

- Speaker prepares text
- Speaker anticipates audience reaction What will the audience think when the speaker says that?
- Speaker adapts to prospective comments from audience
- Speaker anticipates audience reaction to adaptation—What will the audience think when the speaker says that?
- Speaker adapts to prospective comments from audience regarding adapted text
- Speaker anticipates audience reaction to adaptation—What will the audience think when the speaker says that?
- Speaker adapts to prospective comments from audience regarding adapted text
- Etc.

There are, in addition, formats that may provide opportunities for more formal give and take, more direct refutation and negotiation. The speaker may engage in questions or comments from an audience. In roundtable discussions, individuals may participate in direct and indirect agreement and disagreement with other panelists. In these circumstances, it is necessary to understand and apply the principles of refutation.

*Refutation* is the process of proving that a claim or argument is inappropriate, wrong, or counterproductive.

Effective refutation includes argument anticipation, a range of refutation options, and a clear and direct expression of disagreement.

# **Refutation Options**

There are 4 primary tools for effective refutation:

#### • Relevance

A presenter may explain one or more reasons that an opposing claim is irrelevant to the discussion; a decision-maker or evaluator should not consider it.

#### • Significance

One may demonstrate that her issue is more important than other issues – it is more significant; it matters more. The speaker should consider qualitative significance: the matter of degree, and quantitative significance:, the number of cases to which an idea applies. The best arguments have **both** – the issue should matter a great deal to many people. For example, one might offer the following expressions of 'hunger.'

- Hunger is a problem for people throughout developing countries. (No expression of qualitative or quantitative significance)
- Hunger is a chronic condition that profoundly affects morbidity and mortality, particularly for children. According to the American Academy of Pediatrics, chronic hunger inhibits physical and intellectual development, significantly impairing the body's growth and cognitive development, hunger undermines the body's immune system, making it more difficult to fight infections or heal. Hungry children are likely to die from measles, mumps, iron-deficiency, and other preventable illnesses. (Expression of qualitative significance)
- According to the UN's Food and Agricultural Organization, each day, over a billion people in the world lack basis food needs and more than 10 million children die annually of preventable starvation and related illnesses.

(Expression of quantitative significance)

- Hunger is a chronic condition that profoundly affects morbidity and mortality, particularly for children. Each day, based on 2005 reports of the Food and Agricultural Organization of the United Nations, over a billion people in the world lack basic food needs. According to the American Academy of Pediatrics, chronic hunger inhibits physical and intellectual development, significantly impairing the body's growth and cognitive development, hunger undermines the body's immune system, making it more difficult to fight infections or heal. Hungry children are likely to die from measles, mumps, iron-deficiency, and other preventable illnesses. CAREUSA estimates that 35,000 children under the age of five die of starvation or preventable infectious disease daily. It adds to more than 10 million children annually, excluding humanitarian crises caused by war, civil insurrection, and environmental disaster. Furthermore the problems of growing inequality, poverty, and hunger are getting worse. (Expression of qualitative and quantitative significance)

#### • Turn/Capture

It is possible to 'capture' an idea (the increasingly popular term is to 'spin' an issue) by demonstrating either that (1) a negative consequence applies more to opponents' positions than to one's own or that (2) an opponent's issue is relevant but it is not negative, but positive. For example, in arguing about the federal budget deficit, a political candidate might argue either (1) "You are correct – the deficit threatens economic growth and the delivery of social services. But my opponent is more likely to increase the deficit and here is the reason..." or (2) "You are correct – the deficit will increase during my administration but additional federal spending will support long-term economic growth policies in the United States, improve economic stability in the countries purchasing US debt, and ensure support for expanded defense and disaster relief operations. That is preferred in the short-term..."

#### • Answer

If an opposing idea is relevant and authoritative, and you are unable to capture it, then you must answer it by constructing a challenging argumentative reply, with appropriate reasoning and evidence.

### **Refutation Form (4-Step Method of Refutation)**

The 4-Step Method is an organizing principle for direct refutation. (It is, in fact, a critical thinking exercise, in which a person demands legitimacy and roof for an idea before adopting it.) It is designed for a speaker to identify the issue will she challenge, frame the basis of disagreement, make an effective rejoinder, and reach a conclusion that explains the consequence of the dismissal of an opposing issue. These are the steps –

- 1 She said
- 2. But she is wrong...
- 3. Because...
- 4. Therefore...

In the 4-step method, a speaker (1) identifies the appropriate issue; (2) recognizes that the opposing position is problematic, (3) explains, through the presentation of arguments, one or more reasons that the opposing claim is dysfunction; and (4) summarizes what it is means to the outcome of the discussion if there is effective refutation of the facts and opinions of another idea.

The four-step method should not be applied rigidly, literally. In other words, a speaker would not say "she said…but she is wrong…because…therefore…" again and again.

#### **Example**

John Kerry criticized the war in Iraq by arguing that it "has cost \$200 billion and counting." This is inaccurate. The cost for Iraq operations is approximately \$125 billion, according to the Office of Management and Budget. Kerry artificially raised the price of the Iraq conflict by including funds earmarked for military and security operations in Afghanistan, as well as some of the major costs of homeland security. In addition, Kerry said that he would not "cut-and-run" from Iraq; criticized the Bush administration for under-funding the training of Iraqi security personnel; he also criticized the administration for failing to expand veterans' benefits for those serving in Iraq. In other words, Kerry has suggested that the expense is too high and not high enough. His exaggerations on this point and the fact that he may spend as much or more on Iraq undermine his credibility as a critic of the administration of the war.

# **Evidence Evaluation**

It may be the case that refutation will include the evaluation of evidence. Evidence may be analyzed in any or all of the following ways:

- Source qualification and credibility of the author
- Conflict of interest (political position or financial gain that might prejudice the evidence)
- Recency (timeliness of data, method, publication date)
- Internal reasoning (method of analysis, causal reasoning, etc.)
- Consistency with other arguments
- Contradiction with other evidence (e.g., consensus opinion may be preferred to a single report)