

PERSUASION



Karla Silva

Persuasion

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1: INTRODUCTION TO PERSUASION

1.1: What is Persuasion?

1.2: Theoretical Frameworks for Persuasion

1.3: Persuasion Research Articles

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1.1: What is Persuasion?

What does persuasion mean to you? Can you think of any times that you have tried to persuade someone to do something? Some examples may include college students trying to persuade their instructors to provide them with an extension on an assignment, to accept an already late project, or to change a poor grade. College students persuade their friends to take specific classes or recommend specific instructors. They may even persuade one another to live in a specific part of town, attend a particular party, or eat at a certain restaurant.

Persuasion is a facet of communication that is seen across many interpersonal and familial relationships. Parents may try to persuade their children to clean up their room, pick a certain major, or abide by a curfew. Romantic partners persuade one another to decorate their home in a particular way, apply to a new job, or move to a new city. Persuasion is also pervasive in professional environments. Potential employees need to persuade future employers of their skills and abilities to secure a job offer. Conversely, employers need to persuade potential employees of the benefits of working at their organization to ensure they accept the job. Many professions, including advertising, sales, and politics are dependent on the ability to leverage persuasion to achieve desired outcomes.

We also need to consider the channels of persuasion that are influencing our choices. The advent of print media (e.g., newspapers, magazines), electronic media (e.g., radio, television, the Internet), and, more recently, social media (e.g., Facebook, Instagram, TikTok) provide additional avenues through which persuasion occurs. These mediated sources of persuasion include specific appeals to buy products or services (e.g., advertising), as well as the more nuanced persuasion to adopt and promote a particular lifestyle, behavior, or popular opinion abounding on different platforms.

This all suggests that persuasion is utilized in almost all areas of our lives. However, most of us have never specifically thought about how much time we spend persuading others and being persuaded ourselves. It is important to realize, however, that this does not mean you are already persuasion experts. You have likely learned quite a bit about what works and what does not by trial and error; however, there is a long, rich history of the academic study of persuasion. Scholars across philosophy, psychology, communication, advertising, political science, health, and others have systematically studied persuasion for centuries. Aristotle, an ancient Greek philosopher who lived nearly 2,400 years ago, wrote extensively about how to persuade others. Around 300 years later, Cicero, a Roman statesman and philosopher, wrote several books on his beliefs about persuasion and rhetoric. Another 100 years after that, Quintilian, a Roman educator and rhetorician, opened a school on rhetoric and oral persuasion. More recently, social scientists have conducted thousands of experiments over decades to study persuasion and have developed rich theories to describe, explain, predict, and control persuasion phenomenon.

This open-educational resource is designed to survey the social-scientific approach to persuasive communication; thus, it will focus on the social science theory, research, and application of persuasion. This study of persuasion naturally begins with a discussion of the social scientific concept of persuasion itself.

Definitions are typically used to clarify a concept. These definitions provide distinctions about what is included in a concept and what is not. Definitions, however, can be troublesome as it is always possible to provide objections to any given definition. Some people may find a specific definition too broad, while others may find that same definition too narrow. This is because there are always gray areas in which the application of the concept is arguable (see O'Keefe, 2016). For example, with any concept, there are some cases that almost everyone agrees are cases of the concept (for example, ketchup is a condiment), and there are some cases that almost everyone agrees are not cases of the concept (for example, a burger bun is not a condiment). There are also some cases that fall into a gray area wherein many people disagree (for example, is hummus a condiment? or is it a dip?).

O'Keefe (2016) argues that, instead of definitions, focusing on the shared features of paradigm cases of a concept can be used to clarify the concept. These paradigm cases are "the sorts of instances that nearly everyone would agree were instances of the concept in question; they are straightforward, uncontroversial examples" (O'Keefe, 2016, p. 2). Identifying the common features of paradigm cases provides the opportunity to understand a concept's ordinary application without requiring the rigid distinctions required in a definition.

A paradigm case of persuasion would therefore be shared features that are usually involved when we say that someone has persuaded someone else. O'Keefe (2016) provides five common features of paradigm cases of persuasion:

#1: When we say that one person has persuaded someone else, we are usually referring to instances in which there was a successful attempt to influence.

The concept of persuasion inherently includes the notion of success. For example, it does not make sense to say, “I persuaded her, but I failed.” It does make sense to say, “I tried to persuade her, but I failed.” This distinction indicates that simply saying “I persuaded her” implies a successful attempt to influence her.

#2: When we say that one person has persuaded someone else, we are usually referring to instances in which one person intends to persuade the other.

The concept of persuasion inherently includes the notion of intent. For example, if I say “I persuaded Casey to take Intercultural Communication,” you will likely conclude that I intended to procure that outcome. If I instead said “I accidentally persuaded Casey to take Intercultural Communication,” you would likely conclude that I did not intend to do so. The inclusion of the word “accidentally” is necessary to negate intent, which implies that usual use of the term assumes that the persuasion was deliberate.

#3: When we say that one person has persuaded someone else, we are usually referring to cases in which the person being persuaded has some measure of freedom (e.g., free will, free choice, and/or voluntary action).

The concept of persuasion inherently includes the notion of freedom of choice for the person being persuaded. For example, if I steal my roommate’s textbook to study for an exam, one would not say that I “persuaded” my roommate to lend me their textbook. By contrast, asking my roommate to borrow her textbook by convincing her that doing so was necessary for me to pass my exam is ordinarily recognized as an instance of persuasion.

When the person being persuaded has minimal or questionable freedom, it becomes debatable whether it is an instance of persuasion or not. For example, if I told my roommate that if she does not lend me her textbook I would evict her from the apartment and she complies, is this an instance of persuasion? There is no simple answer to this question, but this is an example of a borderline case of persuasion because the person’s freedom is not as obvious as the paradigm case example.

#4: When we say that one person has persuaded someone else, we are usually referring to instances in which the influence was achieved through some mode of communication.

The concept of persuasion inherently includes the notion that communication was used to achieve the outcome. For example, if I pushed my roommate down the stairs to get them to clean up a mess they left in the kitchen, this would not be an instance of persuasion. If I talked to my roommate and convinced them to go downstairs to clean up the mess they left in the kitchen, this would be considered persuasion. These two examples are distinct because the second uses communication, whereas the first does not.

#5: When we say that one person has persuaded someone else, we are usually referring to instances in which the person being persuaded has a change in mental state (that may or may not lead to a change in behavior).

The concept of persuasion inherently includes the notion that the person being persuaded has had a change in mental state. Some paradigm cases may be described only as changes in a mental state. For example, I could say “I persuaded Alex that adding a Communication Minor was helpful for his career goals.” This statement implies a change only in what Alex thinks about adding the minor. Some paradigm cases may be described as behavioral changes, which imply an underlying change in a mental state. For example, I could say “I persuaded Alex to add a Communication Minor.” This statement indicates that Alex changed his behavior, which has an underlying assumption that Alex’s thoughts towards adding the Communication Minor also changed as a precursor to the behavior change. This indicates that even when a persuader’s eventual goal is to influence what someone does, persuasion is usually accomplished by first changing what someone thinks. Persuasion thus ordinarily means that one person has influenced another by influencing their mental state, not directly influencing their behavior.

In persuasion theory and research, the relevant mental state has traditionally been an individual’s attitudes. Even when the ultimate goal is to persuade someone to change their behavior, the presumption is that that goal will be achieved by changing the person’s attitudes. As we will see later on when we examine individual persuasion theories, there are a wide variety of mental state precursors to behavior change beyond just attitudes.

What is Persuasion?

O’Keefe (2016) connects these five paradigm cases of persuasion into something that looks roughly like a definition of persuasion: “a successful intentional effort at influencing another’s mental state through communication in a circumstance in which the [person being persuaded] has some measure of freedom” (p. 4). This definition does not eliminate the gray areas of the concept of persuasion as it leaves open questions around how much success is needed or how intentional the effort needs to be. These shared features of paradigm cases of persuasion can, however, clarify the concept of persuasion and thus center the

study of persuasion on instances that meet these criteria.

References

O'Keefe, D. J. (2016). *Persuasion: Theory and Research (Third Edition)*. Thousand Oaks, CA: Sage Publications.

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1.2: Theoretical Frameworks for Persuasion

We use theories to interpret the complex and ambiguous world around us. For example, theories help us understand health and illness, self-control, creativity, religion, spirituality, biology, physics, psychology, sociology, and, yes, persuasion. This chapter distinguishes between three types of commonly used theories: lay theories, folk theories, and scientific theories.

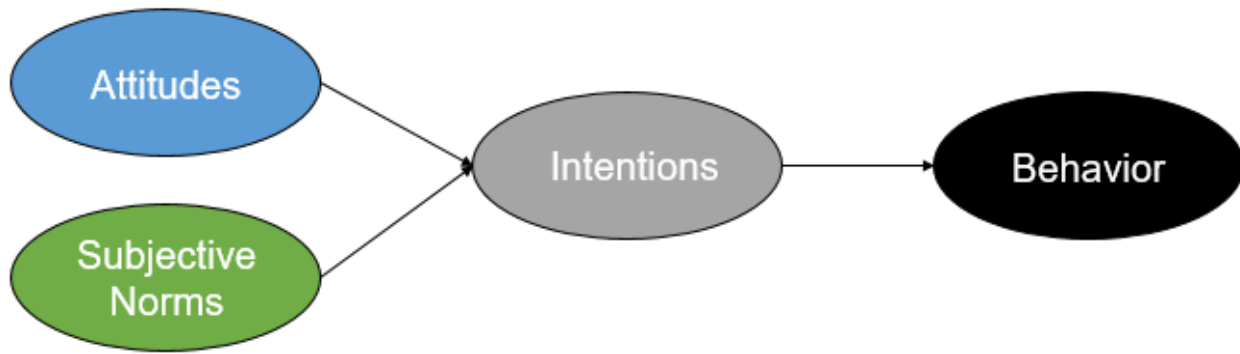
Lay and folk theories are informal, common-sense explanations used to understand various phenomena. Lay theories tend to be individual and idiosyncratic, whereas folk theories are shared by specific subgroups of people. Let's start with an example that illustrates lay theories: Obesity is a prevalent global public health concern. Each of you may have your own lay theory about what causes obesity as well as how to treat obesity. You might believe that obesity is caused by a lack of knowledge, and therefore you might believe it is necessary to educate individuals to treat obesity. Someone else might believe that obesity is caused by a lack of access to healthy foods, and therefore might believe it is necessary to increase access to affordable healthy foods to treat obesity. These are lay theories, as they are based on our individual experiences and beliefs.

Now, let's use the same topic, obesity, to explore example scenarios of folk theories. Some groups of people in the United States may believe that obesity is caused by individuals making poor choices and therefore would be solved by individuals making better choices. Other groups of people in the United States believe that obesity is caused by environmental factors and therefore would be solved by changing the environmental characteristics (e.g., unsafe neighborhoods, lack of access to healthy food) that promote obesity. As these are beliefs held by subgroups of the larger population, they would be considered folk theories.

Conversely, scientific theories are derived and tested from empirical observations. They are used to produce hypotheses, generate discoveries, and offer practical guidance. To continue with the above examples, there are many scientific theories used to understand obesity. For example, the biomedical perspective focuses on the pathophysiology and other biological approaches to the health condition. Examining obesity using this biomedical perspective would include observing the biological underpinnings of the disease (e.g., metabolism, cholesterol levels, thyroid functioning). The biopsychosocial perspective emphasizes the importance of understanding human health and wellness from a more holistic point of view that includes the biological, psychological, and social determinants of health. Examining obesity using this biopsychosocial perspective would include observing various psychological determinants of obesity (e.g., depression, anxiety) and/or social determinants of obesity (e.g., cultural food preferences, access to healthy foods).

Now that we've introduced lay, folk, and scientific theories generally, let's turn to looking specifically at the discipline of persuasion. There are lay, folk, and scientific theories regarding how to best persuade someone to adopt a particular mental state or behavior. For example, you might personally believe that people do not know enough about factors that cause obesity, and, therefore, you may try to provide them with information in order to persuade them to adopt healthy behaviors (a lay theory of persuasion). Many public health organizations (a subgroup of people) hold a similar folk theory and have disseminated public health campaigns designed to increase knowledge about obesity and persuade people to adopt health behaviors (a folk theory of persuasion); however, scholars who study persuasion from a scientific perspective recognize that persuading someone to change their behaviors is not always as simple as these lay and folk theories suggest and instead apply scientific theories to understand persuasion.

A scientific theory used in persuasion can be defined as an abstract system of concepts and their relationships that help us understand a phenomenon. For instance, persuasion researchers have observed that many people know that exercise and healthy foods would prevent and treat obesity, yet they still do not engage in those behaviors. Persuasion researchers therefore use these observations, and others, to create scientific theories about persuasion. For example, the Theory of Reasoned Action (Ajzen & Fishbein, 1980) is shown in the diagram below.



The Theory of Reasoned Action predicts that **behavior** is directly determined by an individual's **intentions** to engage in the behavior. The arrow that goes from intentions to behavior shows this relationship. Intentions, in turn, are directly predicted by (1) an individual's **attitudes** towards the behavior (i.e., the individual's evaluation of the behavior as positive or negative) and (2) **subjective norms** (i.e., an individual's perceptions of whether or not important others think they should engage in the behavior). The arrows that go from attitudes and subjective norms to intentions depict these relationships.

Let's focus on one behavior related to obesity: exercising daily. The Theory of Reasoned Action suggests that an individual's exercising daily (**behavior**) is directly predicted by their intentions to exercise daily (**intentions**). These intentions, in turn, are predicted by the individual's **attitudes** towards exercising daily (e.g., "I think exercising daily is important/important") and **subjective norms** (e.g., "I think my spouse thinks I should exercise daily"). In order to persuade someone to start exercising daily, the Theory of Reasoned Action suggests that you would need to change the individual's attitudes and subjective norms about exercising daily. This change in attitudes and subjective norms is predicted to positively influence intentions to exercise daily, which then positively influence their performance of the behavior itself.

Remember that a scientific theory can be defined as an abstract system of concepts and their relationships that help us understand a phenomenon. The Theory of Reasoned Action includes four concepts (attitudes, subjective norms, intentions, and behavior), as well as the relationships between those concepts (behavior is predicted by intentions, and intentions are predicted by attitudes and subjective norms). The Theory of Reasoned Action is just one example of the many different scientific theories used when studying persuasion. More broadly, a scientific theory should meet five basic characteristics:

#1: Testable: Scientific theories are tested through a series of scientific studies. Sometimes the evidence supports the theory, and sometimes the evidence fails to support the theory. The important thing is that it has to be possible to gather empirical evidence to test the theory's proposed relationships.

#2: Replicable: Scientific studies that examine scientific theories should be able to be copied or reproduced exactly. This means that there must be enough information readily available about the theory so that others can test the theory as well.

#3: Stable: Scientific theories should stand the test of time. In other words, when other people test the theories, they should get the same results. If they do not, the theory may need to be revised based on the newly acquired evidence.

#4: Simple (aka Parsimonious): Scientific theories should be as simple as possible. The principle of parsimony states that a scientific theory should provide the simplest possible explanation for the phenomenon. As we will see later in this book, persuasion researchers noticed that the Theory of Reasoned Action failed to explain several aspects of intentions and behaviors and therefore added additional concepts to the theory, which later became the Theory of Planned Behavior (Ajzen, 1988, 1991). This made the theory less simple, but it is now better able to predict behavior.

#5: Consistent: Scientific theories should agree with other scientific theories, meaning that a principle in one theory should not directly contradict another. When inconsistencies do occur, scientific studies should be used to gather evidence to address and amend the discrepancy.

What is Persuasion Theory?

Using this understanding of scientific theory, we can apply it to persuasion. "Persuasion theory" can be defined as an abstract

system of concepts and their relationships that help us understand persuasion. Additionally, considering our previously arrived upon paradigm cases of persuasion in Chapter 1, **persuasion theory is defined as an abstract system of concepts and their relationships that help us understand a successful, intentional effort at influencing another's mental state through communication in a situation in which the person being influenced has some measure of freedom.**

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1.3: Persuasion Research Articles

The study of persuasion requires you to read, understand, interpret, and synthesize persuasion research articles that have been published in academic journals. Without extensive training in research methods and analysis, this can sometimes seem like a daunting task. The goal of this chapter is therefore to provide you with some basic background information on key things to look for when reading a scientific article. Research articles usually include the following components: (1) abstract, (2) introduction, (3) literature review, (4) research methods, (5) results, (6) discussion, (7) conclusion, and (8) references. There are key pieces of information to look for in each section, which are detailed below and summarized in the table at the end of this chapter. This chapter uses this sample research article to provide an example:

Karnowski, V., Leonhard, L., & Kümpel, A. S. (2018). Why users share the news: A theory of reasoned action-based study on the antecedents of news-sharing behavior. Communication Research Reports, 35(2), 91-100.

Abstract

The abstract is the first part of the article you will see and is usually a very short paragraph. The abstract summarizes the topic and purpose of the study, the scientific theory guiding the research, the methods (e.g., participants, research design), the main findings, and the conclusions. The abstract is a great place to start to get a general sense of what the research article is about.

Karnowski et al., 2018 Example: The abstract is a freely accessible portion of the research article and is therefore provided below. You will need to use your university access to read the remainder of the article.

Abstract

Social media have become an integral part of online news use, affecting how individuals find, consume, and share news. By applying the Theory of Reasoned Action (TRA), this study investigates the effects of motives, attitude, and intention on news-sharing behavior among German social media users ($n = 333$). Findings show that news-sharing attitude and subjective norms have a positive effect on news-sharing intention, which in turn has a positive effect on actual news-sharing behavior. Taken together, we see that a new media behavior in the early phases of its societal diffusion—like social media news sharing in Germany in 2015—can mainly be explained by a rational choice logic and is rooted in the motives of socializing and information seeking. This finding thus reflects the double nature of social media as a means for both information retrieval and social grooming.

As you can see, this abstract provides information about the topic of the study (i.e., social media and news consumption). This abstract also clearly states the scientific theory used to guide the research (i.e., the Theory of Reasoned Action). This abstract does indicate that 333 German social media users were included in the study, but it does not include the study design. The abstract provides information about the main findings (i.e., news-sharing attitudes and subjective norms influence intentions, which, in turn, influence behavior). The abstract also includes the authors' conclusions about the use of social media for information retrieval and social grooming.

Introduction & Literature Review

The introduction section includes the main background information on the topic being investigated as well as the main goals for the research study. The literature review section analyzes, synthesizes, and incorporates scholarly research that has previously been done on the topic. The literature review also describes the scientific theory being used to guide the study (also referred to as the theoretical framework), summarizes previous empirical work on the scientific theory, and includes any proposed extensions to the scientific theory that the study examined. This section also includes the research questions and hypotheses, which should

stem from the relationships between the concepts articulated in the scientific theory. Sometimes, the introduction and literature review sections are presented together, and other times they are presented as separate sections. They also may or may not be labeled “Introduction” and/or “Literature Review.”

Karnowski et al., 2018 Example: This article does not label its sections “Introduction” or “Literature Review” and instead jumps right into providing the introduction information. The authors introduce the topic of rising social media use and news sharing via social media. The authors clearly state that they are using the Theory of Reasoned Action. They include a summary of the Theory of Reasoned Action as well as previous relevant research. There are three hypotheses that stem directly from the Theory of Reasoned Action:

H2: Subjective norms will have a positive influence on news-sharing intentions.

H3: News-sharing attitudes will have a positive influence on news-sharing intentions.

H4: News-sharing intentions will have a positive influence on news-sharing behaviors.

The authors also propose some theoretical extensions, which are evident in the remaining hypothesis and research questions.

Research Methods

The research methods section may be called a variety of different things: “Methods,” “Methodology,” or “Materials and Methods” are commonly used. The research methods section contains key information on **the participants** included in the study, **the design** of the study, and **the measures** used to collect the data.

There are several important things to look for with respect to the participants. You should look for the total number of participants, the characteristics of the participants, and the sampling method used to gather the participants. The total number of participants can vary widely, but is almost always provided. The research article should also provide some demographic information about the participants (e.g., gender, age, political affiliation, or any other information relevant to the topic). It is impossible to collect information on every possible demographic, so the researchers decided what information to collect and what information to present in the research article that they believed was relevant (e.g., sometimes political affiliation may be related to the topic, and sometimes it may not).

There are many, many different types of sampling methods, and this chapter only provides a very basic starting point. The type of sampling method determines the generalizability of the results. To simplify, we will focus on two overarching sampling methods: a **convenience sample** and a **simple random sample**. Most persuasion research studies use a convenience sample. With a convenience sample, the researchers gather their participants from a group of people who are easy to contact or reach (e.g., from an undergraduate course, an online posting to a survey link, a clinic closeby). It is important to note that with a convenience sample, the results of the study cannot be generalized to the broader population. For example, a sample of 500 women who live in Alaska who were recruited from an online database is a convenience sample. The results of this study *can only technically be applied to those 500 women included in the research study*. Persuasion researchers often try to generalize the results to other people with the same characteristics (e.g., women in Alaska); however, they absolutely cannot say that their conclusions apply to all people in Alaska, all women in the United States, or any larger population. Even when generalizing the results to other people with the same characteristics, it is important to look at whether the sample represents the population with respect to different racial and cultural groups, sexual orientations, gender identities, and so on.

A random sample is a subset of individuals chosen from a larger set in which all individuals have an equal chance of being selected to be included in the sample. In order to have a simple random sample, the researchers would first need an entire list of everyone in the population they wanted to study. They would then need to randomly select participants from that list, where each person would have the same chance of being selected. For example, if a researcher wanted to study undergraduate students at the University of Alaska Anchorage using a simple random sample, they would first need to create a list of every current undergraduate student. They would then need to randomly select undergraduate students from that list to be part of their sample. A random sample is often very difficult to achieve, as it is difficult (and sometimes impossible) to find a list of all the people in the population of interest. Thus, more often than not, researchers use a convenience sampling method. The results from a study that uses random sampling can, importantly, generalize the results back to the population from which their sample was drawn.

There are also many, many different types of study designs, and, again, this chapter only provides a very basic starting point. The type of study design determines the types of conclusions that can be drawn from the results. To simplify, we will focus on two overarching types of study designs: an **observational design** and an **experimental design**. With an observational design, the researchers measure or survey the participants without trying to affect them. For example, if I hypothesize that exercise

is related to a healthy weight, an observational study design could ask participants to report how often they exercise and how much they weigh. An observational design can make conclusions about whether or not the variables are *related* or *correlated* (in this example, whether exercise and weight are related). An observational design *cannot* make conclusions about causality or whether one variable caused another. Some key words that would indicate that a study has an observational design include “cross sectional,” “case-control,” and “cohort.”

With an experimental design, the researchers manipulate one variable of interest (referred to as the independent variable) and see how that affects another variable (referred to as the dependent variable). For example, if I hypothesize that exercise *causes* a healthy weight, an experimental study design could place participants into two different groups: one that engages in an exercise program and one that does not. After affecting the participants’ exercise in this way, the researchers could then compare the weight of the participants in the exercise program with the weight of the participants who were not. An experimental design *can* make conclusions about whether or not variation in one variable *causes* a change in another variable.

The final thing to look for in the research methods section is the type of measures the researchers used to measure their variables of interest. Some variables can be measured objectively. For example, objective measures could include someone’s weight, the number of hours they exercise per week, and so on. Many variables within persuasion, however, are measured subjectively. In these instances, researchers will ask participants a series of questions designed to understand something not readily observable. For example, subjective measures could include someone’s attitude towards a behavior, their subjective norms, and their intentions to perform the behavior. There are many limitations to self-report measures, both objective and subjective, as they rely upon accurate reporting by the participants themselves.

Karnowski et al., 2018 Example: This article has a section labeled “Method” with subsections for the “Design and Sample” and “Measures.” The article states that the sample included 333 German social media users and provided information about their age, gender, and education level. The article notes that the participants were recruited from Twitter and Facebook pages of a popular German news outlet. This is a convenience sample, so technically the results apply only to those people who participated in the study; however, it may be possible to generalize the results to other German social media users with similar demographics.

The article notes that the data were collected through a German language online survey. The article does not mention an intervention, nor does it appear as if the researchers attempted to affect the participants’ attitudes, subjective norms, or intentions. Therefore, this is an observational design. This means that the authors can make conclusions about correlations, not causations.

The article used subjective measures and asked participants to respond to a series of questions designed to measure their news-sharing attitudes, subjective norms, and intentions. They also used an objective measure and asked participants to report how often they shared the link to a news article on social media in the last week, which was a measure of their actual behavior. Both of these measures are limited as they rely on the participants to self-report.

Results

The results section presents the data analysis techniques and the main findings. You should look specifically to see whether the evidence supported or failed to support the hypotheses and research questions of interest.

Karnowski et al., 2018 Example: The authors note that they used regression analyses to examine H2, H3, and H4. They found support for each of these hypotheses, which in turn finds support for the Theory of Reasoned Action.

Discussion

The discussion section contextualizes the results of the research study within the broader context of the research thus far conducted on the topic and the scientific theory. This will oftentimes include a discussion of the implications of the findings for the scientific theory used, as well as the practical implications of the findings in real-world applications. The discussion section also usually includes a section on the limitations of the research study, as well as directions for future research.

Karnowski et al., 2018 Example: The authors found support for the Theory of Reasoned Action when examining news sharing on social media in a sample of German social media users. The authors further examine the practical implications of their results by discussing potential explanations for their results with respect to news sharing on social media (specifically the dual nature of social media as a means for both information retrieval and social grooming). The authors include a section on the limitations, including their sample and variables they did not measure, including type of news shared and habits/automated behaviors.

Conclusion(s)

The conclusion(s) section will usually contain a brief summary of the main findings and implications of the research study.

Karnowski et al., 2018 Example: The authors conclude that news sharing on social media in Germany in 2015 can be explained using the Theory of Reasoned Action. The authors could be more specific that the results apply specifically to their sample as well.

References

The references section provides and cites all of the sources referenced in the research article. This is a great place to go to find additional reading on the topic and/or scientific theory.

Research Article Section	Questions to Ask
Abstract	What was this research study about?
Introduction	- What problem or issue did this research study address? - What was the goal of this research study?
Literature Review	- What scientific theory was used? - What were the research questions and hypotheses?
Research Methods	- How many participants were included? - What characteristics of the participants were provided? - How was the sample of participants gathered? - How generalizable are the results based on this sample? - What was the design of this research study? - What does this design indicate about the types of conclusions that can be drawn? - What measures were used during the data collection?
Results	- What were the main findings? - What did the evidence indicate with respect to each research question and hypothesis? - Did the evidence support or fail to support the scientific theory?
Discussion	- What are the implications of the findings for the scientific theory studied? - What are the practical implications of the findings?
Conclusion	- What are the main conclusions? - Are the conclusions warranted given the limitations of the study?
References	What citations were used in this research article?

References

Karnowski, V., Leonhard, L., & Kümpel, A. S. (2018). Why users share the news: A theory of reasoned action-based study on the antecedents of news-sharing behavior. *Communication Research Reports*, 35(2), 91-100.

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2: CHANGING BELIEFS, ATTITUDES AND BEHAVIOR

- 2.1: Challenging Stasis
- 2.2: Beliefs
- 2.3: Attitudes
- 2.4: Values
- 2.5: Value Systems
- 2.6: How Are Values Learned?
- 2.7: Elaboration Likelihood Model
- 2.8: Theory of Planned Behavior
- 2.9: Application of the Theory of Planned Behavior
- 2.10: Changing Attitude and Stasis
- 2.11: Resisting Change
- 2.12: Cognitive Dissonance
- 2.13: The Focus of this Chapter

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2.1: Challenging Stasis

A California state educational survey revealed that 75 percent of high school students in California admit that they cheat on tests, and 66% of students say cheating to obtain a desired grade is okay. Years ago, students would have considered cheating a very big deal, but now it appears to be wrong only if they are caught. This change in attitude about cheating has led to a change in "cheating" behavior.

To explain this change of behavior we need to examine some of the current beliefs of the typical student. The campus newspaper at Moorpark Memorial High School conducted a survey to discover why student cheating is so rampant. The results of the poll revealed that the main reasons for cheating are to get good grades and the lack of test preparedness. The pressure to get good grades occurs for several reasons, including parental pressure, lower car insurance rates, and college acceptance. These pressures are cited in an attempt to justify the cheating behavior. When we take a test, we make the decision to cheat or not to cheat. If we feel pressured to do well, or if it is important that we do well, and if we are unprepared due to lack of studying, we might tend to have a positive attitude toward cheating. Therefore, the decision is made to cheat.

In analyzing this increase in student cheating, we start with three very important terms: beliefs, attitudes and behavior. Briefly explained, one's beliefs (knowledge) and values (goods or bads) lead to the development of an attitude (likes or dislikes), which in turn guides or directs one's behavior. And when all these parts become comfortable, we are in our personal stasis or comfort zone.

To best understand the overall process, we need to first look at beliefs, and at subsets of beliefs, known as values, followed by a description how this leads to an attitude. Once we understand this foundation for how we act, we can look at various persuasion strategies that are used to alter beliefs and attitudes. We can learn not only how to use these approaches to change others, but we can examine how others use these methods to persuade us.

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2.2: Beliefs

Beliefs represent all the bits of information we collect about people, events, and things in our life. They are cognitions that we have discriminated and selected from all those we have been exposed to, relevant to any subject in our environment.

Beliefs are measured using a true-false continuum and a probability scale. There are some beliefs you feel are absolutely true or false; probably true or false; or are not sure about. All of us possess beliefs about a college education. They may include that a college education takes time, is a lot of work, makes our parents happy, and will allow us to make more money in the future, and so on.

Some beliefs are stronger than others or as we say, have more salience. That is, some information about the environment is more important to us than other information, such as, how you are doing in a class as opposed to how another class member is doing.

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2.3: Attitudes

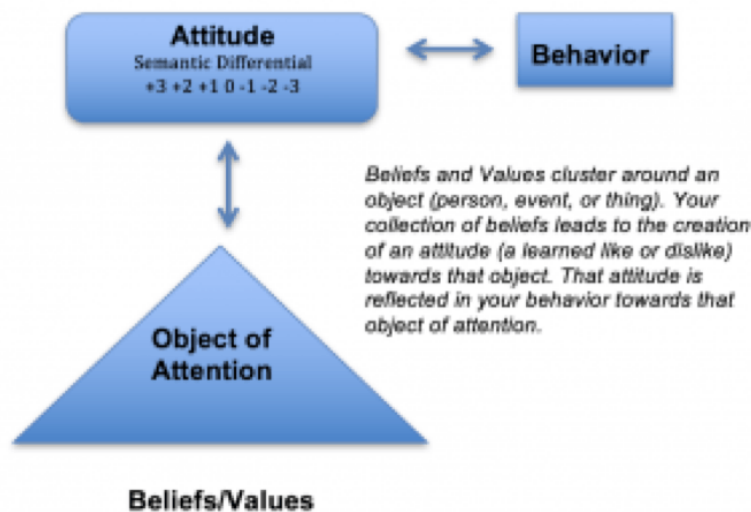
Attitudes are our likes and dislikes. The clustering of beliefs around a person, place or thing, causes us to like or dislike that person, place or thing. When more positive than negative beliefs are clustered around an object, the resulting attitude is favorable. When there are more negative than positive beliefs, the resulting attitude is unfavorable.

An attitude itself cannot be directly observed; only the behavior that follows from the attitude can be observed. Milton Rokeach defines an attitude as, “a learned predisposition to respond favorably or unfavorably towards a person, place, or event.” (Rokeach, 1989)



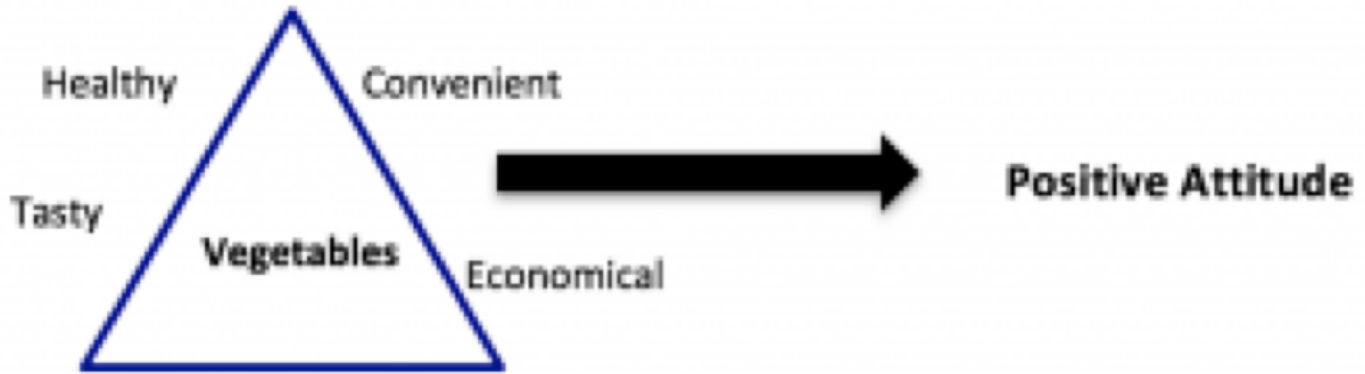
9.6.1: "Roy E. Disney" (CC BY-SA 3.0; Towpilot via Wikimedia Commons)

“When your values are clear to you, making decisions becomes easier.” --Roy E. Disney¹



9.6.2: "Attitude Diagram" (CC BY 3.0; J. Marteney)

Take vegetables. You have several beliefs clustered around the object, vegetables. You believe that vegetables are good for your health, some taste good, some, like carrots, are convenient to eat and vegetables are economical. Based on all these beliefs you have a positive attitude towards vegetables.



9.6.3: "Beliefs to Attitude" (CC BY 3.0; J. Marteney)

Given that you have a positive attitude towards vegetables, your behavior should be to eat them. This balance between your beliefs and attitudes, and your attitude and behavior is a form of Stasis. You are comfortable.

Attitudes guide our behavior. If you have developed a positive attitude about getting a college degree, you are more likely to attend classes regularly and get good grades. If you have developed a negative attitude toward getting a college degree, you are more likely to cut school regularly and get poor grades. If you have a positive attitude towards vegetables, your behavior will probably include eating more vegetables.

Attitudes have a measurable direction. We can place attitudes on a continuum with highly favorable at one end, and highly unfavorable at the other end. Pollsters measure not just if you like a product or not, but how much you like a product.

Attitudes are learned. We have attitudes on just about everything we know. These attitudes are learned. People are not born liberal or conservative, baseball or basketball fans. Do you share the same attitudes of your family?

Attitudes have importance or salience. We simply feel stronger about some of our attitudes than about others. We may feel somewhat that a college education will make us better and more informed citizens, but we have a stronger belief that in obtaining that education we will be much better off financially. Some subjects are closer, more important, or more relevant to us than others. Some subjects are distant, less important, or less relevant to us than others. The more personalized the attitude, the more salience it will possess. Attitudes emerge from the clustering of beliefs and values we learn from others with whom we live and associate. Because they are learned, they can be unlearned and changed, although change most often will be resisted.

One important question emerges. Once we have an attitude, can it be altered? Are there attitudes that can never change? Many of our attitudes begin to form when we are young and continue to develop through adulthood. Once attitudes have had years to form, they are more resistant to change. Attitudes are a fact of life and play a vital role in how we make decisions.

Reference

1. "When Values are Clear, Decisions are Easy." *ProAdvisor Coach*, <https://proadvisorcoach.com/when-values-are-clear-decisions-are-easy/>. Accessed 6 November 2019.

Motivation

You can read article after article on the different motivational theories. The focus of most is that motivation refers to forces that give us incentive to actually do something. When you wake up in the morning something stimulates you to get out of bed and get started with the day.

Motivation can come from factors outside of us. In the morning, it might be an alarm clock or a person "suggesting" we get out of bed. We call this external stimulus, extrinsic motivation. Or, you might wake up and decide on your own that you need to get started. We call this internal stimulus, intrinsic motivation.

Motivation can be positive or negative, tangible or intangible, subtle or obvious. Motivation is concerned with the process by which behavior is energized and directed. That is, what gets people excited? Although there are many approaches to motivation

that critical thinkers can use to move, drive, induce, provoke, arouse, stimulate, lure, coax, influence, compel, tempt, prod, spur, push, and otherwise get someone else to accept their stand on a claim. We will look at one, Maslow's Need Theory.

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2.4: Values

A special subset or type of beliefs is known as values. Values are:

- **Enduring**, or long lasting concepts of the nature of good as opposed to brief ideas. Resistant to change.
- **Salient**, important beliefs, inflexible beliefs about the worth given to people, events, things and philosophy in one's life.

Values are enduring. Values stand the test of time, because they are tied to our basic human needs and because they are learned very early in life. Many of the values you possess are likely to be shared by other members of your family and community and have been passed down from one generation to another. They are the common bond that unites cultures and social systems and are seen as necessary for the continuation and survival of the culture and social system. Values are also enduring because no acceptable alternatives have been found for those values. What acceptable alternatives are there to values like freedom, or equality, or honesty, or being forgiving, or having self- respect, or being loved?

Values are salient and lack flexibility. Values are generally regarded as absolutes. Values have a tendency to take on the appearance of being certain, with little room for flexibility. Since values categorize things as good or bad, right or wrong, superior or inferior, there are rarely shades of gray. In this country, freedom of speech is valued. This, as with most values, seems to be an all-or-nothing situation, for it is difficult to establish partial freedom of speech, as the courts have attempted to do with the question of pornography. Once adopted, people will fight for, even die for, their values. This is especially valid for nationalistic and religious values.

The Beliefs of a Snake Handling Preacher

A Kentucky pastor who starred in a reality show about snake-handling in church has died -- of a snakebite. Jamie Coots died Saturday evening after refusing to be treated, Middlesboro police said.

On "Snake Salvation," the ardent Pentecostal believer said that he believed that a passage in the Bible suggests poisonous snakebites will not harm believers as long as they are anointed by God. The practice is illegal in most states, but still goes on, primarily in the rural South. Coots was a third-generation "serpent handler" and aspired to one day pass the practice and his church, Full Gospel Tabernacle in Jesus Name, on to his adult son, Little Cody.

"Even after losing half of his finger to a snake bite and seeing others die from bites during services," Coots "still believes he must take up serpents and follow the Holiness faith," the website says.

Because of their strength, it becomes very difficult to change values. Instead, if you are attempting to convince someone to accept a proposal, you need to demonstrate how that proposal fits in with his or her values. An astute political candidate who is running for office will try to convince you that he or she stands for your values, instead of attempting to convince you to accept his or her values which may be different. We often make the mistake of attempting to convince someone that our proposal fits in with what his or her values "should" or "should not be."

As Myers and Myers write in their book, Dynamics of Human Communication,

*"Values indicate to those who share them what is desirable or undesirable, good or bad, moral or immoral, and therefore what one should stand for. They provide people with a guidance system which is supposed to enable them to choose the 'right' alternative when several courses of action are possible."*¹Myers, 1992)

Two Categories of Values

Psychologist Milton Rokeach has done extensive work with values. In his works, he describes the two basic types of values that people possess: **Terminal** values and **Instrumental** values.²

Terminal values are the major goals in one's life. They represent lifelong desired end states. **Instrumental** values are short-term ways of living our day-to-day life. They are the "goods and bads" we follow each day.

INSTRUMENTAL VALUES	TERMINAL VALUES
AMBITIOUS (hard-working, aspiring)	A COMFORTABLE LIFE (a prosperous life)
BROAD-MINDED (open-minded)	AN EXCITING LIFE (a stimulating, active life)
CAPABLE (competent, effective)	ACCOMPLISHMENT (lasting contribution)
CHEERFUL (lighthearted, joyful)	A WORLD AT PEACE (free of war and conflict)
CLEAN (neat, tidy)	A WORLD OF BEAUTY (beauty of nature and the arts)
COURAGEOUS (standing up for your own beliefs)	EQUALITY (brotherhood, equal opportunity for all)
FORGIVING (willing to pardon others)	FAMILY SECURITY (taking care of loved ones)
HELPFUL (working for the welfare of others)	FREEDOM (independence, free choice)
HONEST (sincere, truthful)	SELF-RESPECT (self-esteem)
IMAGINATIVE (daring, creative)	HAPPINESS (contentedness)
INDEPENDENT (self-reliant, self-sufficient)	INNER HARMONY (freedom from inner conflict)
INTELLECTUAL (intelligent, reflective)	MATURE LOVE (sexual and spiritual intimacy)
LOGICAL (consistent, rational)	SECURITY (protection from attack)
LOVING (affectionate, tender, sexual)	LEISURE (an enjoyable, leisurely life)
OBEDIENT (loyal, dutiful, respectful)	SOCIAL RECOGNITION (respect, admiration)
POLITE (courteous, well-mannered)	TRUE FRIENDSHIP (close companionship)
RESPONSIBLE (dependable, reliable)	WISDOM (a mature understanding of life)
SELF-CONTROLLED (restrained, self-disciplined)	SALVATION (saved, eternal life)

Remember, values differ from general beliefs in two important ways: **Values are enduring** and thus very resistant to change, and **values are inflexible**. (Rokeach, 1989)

Reference

1. Myers, Gail E. and Michele Toleda Myers. *Dynamics of Human Communication: A Laboratory Approach*. New York: McGraw-Hill, 1992.
2. Rokeach, Milton. *Beliefs, Attitudes and Values: A Theory of Organization and Change*. San Francisco: Jossey-Bass, 1989.

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2.5: Value Systems

Value systems are an organized collection of individual values, such as honesty, kindness, and equality. These values are prioritized with the most important values on top, and the least important on the bottom. Values are usually embodied in a set of moral and/or religious systems found in all cultures and societies. We may feel that all of our values are important, but when two or more values clash, we have to decide which value is most important to us. This becomes a value system, which guides our decision-making.

To give you an idea how a value system works, I present to you the Gene Autry's Cowboy Code. Gene Autry was a famous Hollywood "singing cowboy" of the 30's, 40's and 50's. He was also the owner of the Angels professional baseball team, when he passed away. He was a hero to many, many children who wanted to be a cowboy just like him. Over the years Gene Autry had developed a philosophy of life that he decided to share with these young admirers. This system of values, like any value system, would guide the actions of his young cowboy fans.



9.4.1: "Gene Autry" (Public Domain; Seattle Packing Company-Bar-S Brand via [Wikimedia Commons](#))

Gene Autry's Cowboy Code

- The Cowboy must never shoot first, hit a smaller man, or take unfair advantage.
- He must never go back on his word, or a trust confided in him.
- He must always tell the truth.
- He must be gentle with children, the elderly, and animals.
- He must not advocate or possess racially or religiously intolerant ideas.
- He must help people in distress.
- He must be a good worker.
- He must keep himself clean in thought, speech, action, and personal habits.
- He must respect women, parents, and his nation's laws.
- The Cowboy is a patriot.¹

You can find other cowboy codes from Roy Rogers to the Lone Ranger at a website called "Cowboy Codes of the West."² You can also find online "life codes" from "Chivalry" to the Japanese warriors "Bushido Code." All these codes list values that guide decision-making.



9.4.2: "Core Values" (CC BY-SA 3.0; Nick Youngson via Picserver.org)

Reference

1. Autry, Gene. "Gene Autry's Cowboy Code." *GeneAutry.com*, 29 Sept. 2017, https://www.geneautry.com/geneautry/geneautry_cowboycode-code.html. Accessed 6 November 2019.
2. "Cowboy Codes of the West." *The Wild West*, 18 August 2009, thewildwest.org/cowboy-codesofthewest/. Accessed 6 November 2019.

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2.6: How Are Values Learned?

The process of learning values and organizing them into a defined value system takes place through a learning process. The book, *Values Clarification: A Handbook of Practical Strategies for Teachers and Students*, describes four methods of learning our values.¹

Moralizing is the method by which values are transmitted in a direct manner from a parent or parent-like figure to the child or childlike figure. It is the quickest, and simplest method, where one person just tells the other which value(s) to uphold. Often this method is the “don’t do as I do, but do as I say” approach.

Modeling says that by watching the actions of the parental model, the child will learn which values are correct. In this method, the parent-like figure holds him or her up as a model of what is acceptable as good or bad, right or wrong. A young boy may determine how to treat his girlfriend by how his father treats his mother. This is the “don’t do as I say, do as I do” approach.

Experimenting states that each individual must find his or her own appropriate value system, for no two people necessarily have one system. The process of discovering one’s values is one of trial and error, experience and experimenting, and sorting through the options available. Life’s experiences will teach one what is good and bad, right or wrong.

Clarification teaches the consequences of accepting or denying a particular value. For example, instead of Moralizing that the value of always telling the truth is important, the Clarification process discovers the positive and negative aspects of always telling the “truth.” The person then can make the choice to accept or reject the value. Instead of teaching a person which values to accept or reject, this approach describes a method one can utilize to discover one’s values.

The 8 Rules George Washington Carver Lived By



9.5.1: "George Washington Carver" (Public Domain; Arthur Rothstein via [Wikimedia Commons](#))

- Be clean both inside and out
- Neither look up to the rich nor down to the poor
- Lose, if need be, without squealing
- Win without bragging
- Always be considerate of women, children and older people
- Be too brave to lie
- Be too generous to cheat
- Take your share of the world & let others take theirs

The acceptance or rejection of new beliefs is affected by our value system. Beliefs that are consistent with or correspond to our value system are more readily accepted than those which contradict our value system. If you have accepted the value that getting a good college education is very important you will have stronger adherence to future beliefs which reinforce that position. If a person tells you that they believe college to be a waste of time, you will initially reject that belief merely because it contradicts a value you hold.

Reference

1. Simon, Sidney B, and Leland W. Howe, Howard Kirschenbaum. *Values Clarification: A Handbook of Practical Strategies for Teachers and Students*. New York: Warner Books, 1978.
2. Ysrayl, Yecheilyah. "George Washington Carver's 8 Cardinal Virtues." *The PBS Blog*, 1 March 2016, <https://thepbsblog.com/2016/03/01/george-washington-carvers-8-cardinal-virtues/>. Accessed 6 November 2019.

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2.7: Elaboration Likelihood Model

The Maslow Targeting approach to persuasion is an attempt to focus on the specific needs of the audience. The Elaboration Likelihood Model describes two routes for this targeting.

Two "Routes" to Persuasion

The work of Petty and Cacioppo¹ suggest that a person has two routes to persuasion:

Central Route: Where the receiver of the persuasive message is actively involved in the process by analyzing and really considering the arguments and ideas of the message. Here the person looks to the validity and accuracy of an argument to make a decision.

Peripheral Route: Where persuasion takes place on cognitions other than the inherent strength of the argument. They may agree with the argument, because they like the source of the argument, as they may be thought of as an expert, or the listener may just feel comfortable with their looks. Celebrities endorsing products or services are appealing to the Peripheral Route. When an argument is complicated and the listener lacks either the ability or motivation to analyze it, he or she will look for a Peripheral Route to make their decision.

There is a difference in the routes that each listener selects. Research indicates that attitudes which are changed through the central route to persuasion will have different effects from attitudes changed via the peripheral route.

Individuals who change their attitude using the Central Route are more actively involved in the persuasion process than those who choose the Peripheral Route. The result then is that these new attitudes will be stronger and less resistant to change in the future.

Petty and Cacioppo explain that:

*"Attitude changes that result mostly from processing issue-relevant arguments (central route) will show greater temporal persistence, greater prediction of behavior, and greater resistance to counter persuasion than attitude changes that result mostly from peripheral cues"*²

If you want to make an attitude change that is more significant in influencing the behavior of that person, more resistant to change, and will actually last longer, you want them to make their decision using the Central Route.

But as you can guess, we cannot know which route our audience will be taking. This research at least lets us know that we need to make clear, well-organized arguments or else our audience will look for Peripheral cues to make their decision.³

Reference

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2.8: Theory of Planned Behavior

Mary J. Ryan & Amber K. Worthington

Persuaders are oftentimes most interested in persuading others to adopt voluntary actions. An individual's intentions to voluntarily behave in a particular way are most immediately determined by their intentions to do so. For example, getting someone to meditate will, at a bare minimum, require them to intend to meditate. One key issue within persuasion is therefore to determine what influences behavioral intentions. The Theory of Reasoned Action, and its extension the Theory of Planned Behavior, are commonly used theories of persuasion that explain what variables predict behavioral intentions.

The Theory of Reasoned Action (Ajzen & Fishbein, 1980) posits that behavior is directly determined by an individual's behavioral intentions. In other words, as an individual's intentions to perform a behavior increase, they are more likely to actually perform the behavior. Behavioral intentions are oftentimes assessed with a questionnaire. An example is shown here:

I intend to meditate everyday.
Strongly Disagree _____ Strongly Agree

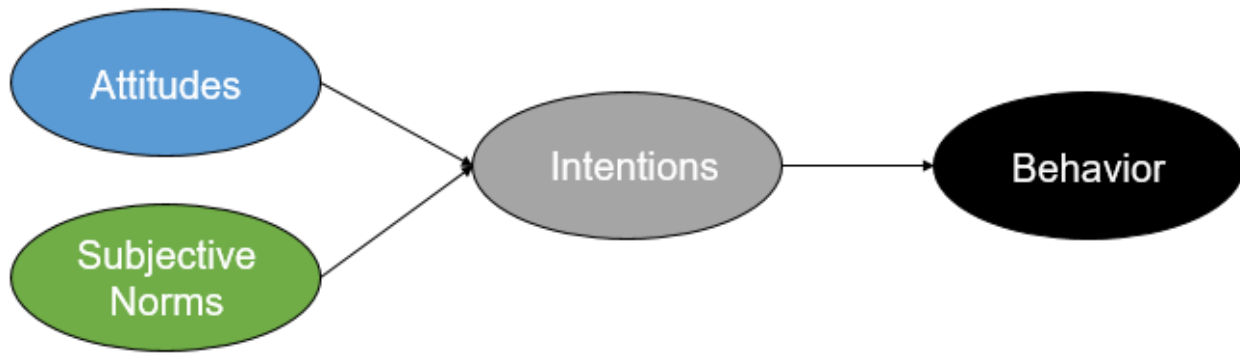
The Theory of Reasoned Action posits that intentions are directly predicted by (1) an individual's attitude towards the behavior and (2) subjective norms. An attitude is defined as an individual's evaluation of a given behavior. Someone might have a positive, negative, or neutral attitude about a given behavior. As an individual's attitude becomes more positive, their intentions to perform a behavior will increase. Attitudes are oftentimes assessed with a questionnaire. An example is shown here:

Meditating everyday is:	
Bad _____ Good	_____
Harmful _____ Beneficial	_____
Unimportant _____ Important	_____

Subjective norms are defined as an individual's beliefs about the importance others place on them performing a given behavior. In other words, it is the degree to which an individual perceives that other people want them to engage in the behavior. As an individual's subjective norms increase, their intentions to perform a behavior will increase. Subjective norms are oftentimes assessed with a questionnaire. An example is shown here:

Most people who are important to me think I should meditate everyday.
Strongly Disagree _____ Strongly Agree

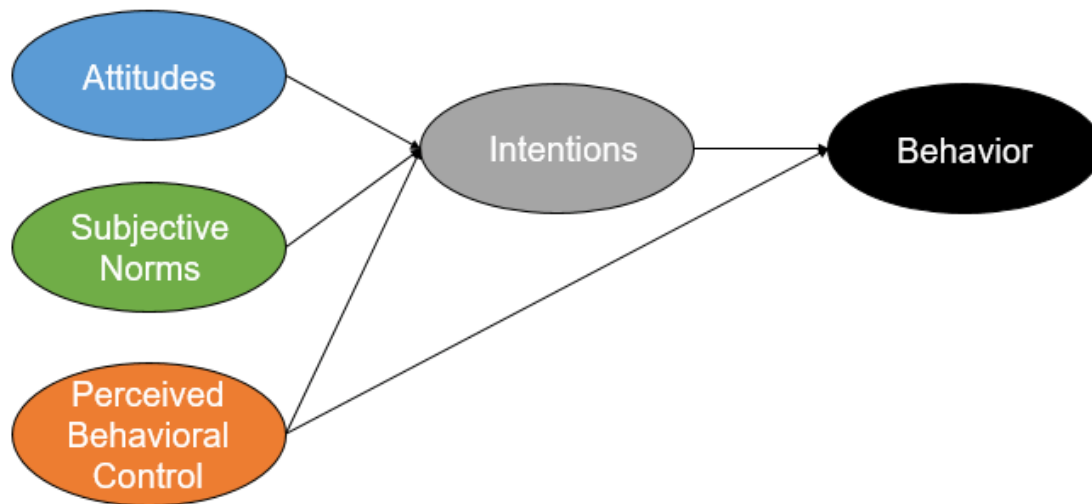
The Theory of Reasoned Action is depicted below:



The Theory of Planned Behavior (Ajzen, 1988, 1991) extends the Theory of Reasoned Action by including perceived behavioral control. The Theory of Planned Behavior posits that a behavior is directly determined by an individual's intentions and perceived behavioral control. Perceived behavioral control, also referred to as self-efficacy, encompasses the extent to which an individual believes they have control over performing that behavior. Intentions, in turn, are directly predicted by (1) an individual's attitude towards the behavior, (2) subjective norms, and (3) perceived behavioral control. Perceived behavioral control is oftentimes assessed with a questionnaire. An example is shown here:

Meditating everyday is easy.	
Strongly Disagree	_____ Strongly Agree

The Theory of Planned Behavior is depicted below:



How are the predictors weighted in the Theory of Planned Behavior?

Attitudes, subjective norms, and perceived behavioral control do not always contribute equally to predicting intentions. Sometimes, an individual's intentions may be determined largely by attitudes, and subjective norms may have little or no influence. Other times, an individual's intentions may be determined largely by subjective norms, and attitudes may have little or no influence. For example, college students' intentions to meditate may largely be driven by their attitudes that meditating everyday is good, beneficial, and important; whether or not other people think they should meditate may not influence their

intentions as strongly. The only way to determine the relative importance of (or weighting) of attitudes, subjective norms, and perceived behavioral control on intentions is to measure these variables across a group of study participants and run a statistical analysis.

What influences the relationship between intentions and behavior?

The Theory of Planned Behavior posits that intentions lead to behavior; however, intentions do not always guarantee behavior. For example, someone might intend to meditate everyday but not follow through. There are several factors that influence the strength of the relationship between intentions and behavior.

First, the Theory of Planned Behavior underscores a principle of specificity. This means that in order to best predict behavior, the attitudes, subjective norms, and perceived behavioral control beliefs must relate to specific intentions and a subsequent specific behavior. These frameworks note that any given behavior includes an action, target, context and time period. For example, a goal might be “to meditate for 20 minutes before bed each day in the upcoming month.” In this example, “meditating” is the action, “20 minutes” is the target, “before bed each day” is the context, and “in the upcoming month” is the time period. As the specificity of the behavior increases, intentions become a better predictor of behavior.

Additionally, the temporal stability of intentions influences the strength of the relationship between intentions and behavior. If an individual's intentions fluctuate over time (e.g., some days I intend to meditate, and other days I do not), then intentions measured at one particular time might not predict subsequent behavior (e.g., Rhodes & Dickau, 2013). As the stability of an individual's intentions increases over time, intentions become a better predictor of behavior.

What additional predictors have been examined in the Theory of Planned Behavior?

The Theory of Planned Behavior focuses on rational reasoning and excludes the role of emotional and subconscious influences (see, e.g., Sniehotta, Pesseau, & Araújo-Soares, 2014). Scholars have argued for the importance of these variables and have therefore suggested that anticipated emotions and past, habitual behaviors should be added to the Theory of Planned Behavior to better predict intentions and subsequent behavior.

People anticipate the emotions they will experience after performing a particular behavior — for example, an individual might anticipate feeling regret, guilt, or pride if they do or do not perform a given behavior. Anticipated emotions can therefore shape and motivate behaviors as people strive to avoid negative feelings and attain positive feelings (Baumeister, Vohs, DeWall, & Zhan 2007; O’Keefe, 2065). Past research has found that anticipated emotions have added to the explanatory power of the Theory of Planned Behavior for predicting, for example, cancer screening (McGilligan, McClenahan, & Adamnson, 2009), vaccination (Gallagher & Povey, 2006), seat belt use (Şimşekoğlu & Lajunen), caregiving behaviors (Tracy & Robins, 2004), bone marrow donation (Lindsey, Yun, & Hill, 2007), and organ donor registration (Wang, 2011).

Specific anticipated emotions that have been studied include anticipated regret, guilt, and pride. For example, one meta-analysis found that anticipated regret added significantly and independently to the prediction of both intentions and prospective behavior over and above Theory of Planned Behavior variables (Sandberg & Conner, 2008). Past research also notes that people will avoid actions that they anticipate will make them feel guilty. Thus anticipated guilt serves as an important predictor of intentions (O’Keefe, 2002). Finally, anticipated pride can impact intentions and behaviors, specifically for behaviors that conform to social standards and prosocial behaviors (Tangney, Stuewig, & Mashek, 2007; Tracey & Robins, 2004).

Past behavior can have a significant influence on future behavior, specifically when the past behavior is habitual or routine (Ouellette & Wood, 1998; Sniehotta, 2014). This habitual behavior is oftentimes automatic instead of fully intentional and thus can influence intentions themselves or directly influence behavior by sidestepping intentions. As the behavior becomes more habitual, the relationship between past behavior and future behavior increases. Past research has found this to be the case for, for example, cancer screening (Norman & Cooper, 2011), riding a bicycle (de Bruijn & Gardner, 2011), eating behaviors (de Bruijn, 2010; de Bruijn, Kroeze, Oenema, & Brug, 2008), exercise (de Bruijn & Rhodes, 2010), and alcohol consumption (Norman & Conner, 2006).

How can the Theory of Planned Behavior be used to create persuasive messages?

The Theory of Planned Behavior specifies that it is possible to change someone's intentions by influencing one or more of the three determinants of intentions (attitudes, subjective norms, and/or perceived behavioral control).

Attitudes

An individual's attitude towards a given behavior could be influenced in a number of different ways. The Theory of Planned Behavior specifies the determinants of attitudes, which are useful to identify specific strategies to do so.

The Theory of Planned Behavior posits that an individual's attitudes towards a given behavior are a joint function of their evaluation of each belief about the behavior and the strength with which each belief is held. The strength of a belief can be assessed with a questionnaire. An example is shown here:

Meditating everyday would reduce my anxiety:	
Unlikely _____ Likely False _____ True	

The evaluation of each belief can be assessed with a questionnaire. An example is shown here:

Reducing my anxiety is:	
Bad _____ Good Harmful _____ Beneficial	

Changing an individual's attitudes could therefore be achieved by changing the evaluation of an existing salient belief. This might involve increasing the salience of an existing negative belief (e.g., "You probably already know that anxiety can be harmful, but you may not realize just how consequential it really can be") or decreasing the salience of an existing positive belief (e.g., "Maybe you think your anxiety helps motivate you to complete your work, but there are other ways to accomplish your tasks").

Changing an individual's attitudes could also be achieved by changing the strength of an existing salient belief. This might involve increasing the belief strength of an existing positive belief (e.g., "You probably already know that meditation can reduce anxiety, but maybe you don't realize just how likely it is to decrease") or decreasing the belief strength of an existing positive belief (e.g., "Anxiety won't actually motivate you to complete your work").

Finally, changing an individual's attitudes could be achieved by adding a new salient belief. This can be accomplished by providing the individual with additional information about the behavior and outcome of interest (e.g., "You might not realize that anxiety can increase your risk of heart disease").

Subjective Norms

An individual's subjective norms about a given behavior could be influenced in a number of different ways. The Theory of Planned Behavior specifies the determinants of subjective norms, which are useful to identify specific strategies to do so.

The Theory of Planned Behavior posits that an individual's subjective norms about a given behavior are a joint function of their evaluation of normative beliefs that they ascribe to important others and their motivation to comply with those others. An individual's normative beliefs can be assessed with a questionnaire. An example is shown here:

My romantic partner thinks I should meditate everyday.	
Strongly Disagree _____ Strongly Agree	

The motivation to comply with those important others can be assessed with a questionnaire. An example is shown here:

Generally, how much do you want to do what your romantic partner thinks you should do?
Not at all _____ Very much

Changing an individual's subjective norms could therefore be accomplished by increasing the salience of a particular referent (e.g., "Have you considered whether your girlfriend thinks it is important for you to decrease your anxiety and meditate everyday?"), changing the normative belief associated with a specific reference (e.g., "You're actually wrong – I talked to your girlfriend, and she thinks you should meditate everyday to decrease your anxiety"), or altering the motivation to comply with a current referent (e.g., "You should really consider what she thinks about this").

Perceived Behavioral Control

An individual's perceived behavioral control for a given behavior could be influenced in a number of different ways. The Theory of Planned Behavior specifies the determinants of perceived behavioral control, which are useful to identify specific strategies to do so.

The Theory of Planned Behavior posits that an individual's perceived behavioral control for a given behavior are a joint function of their assessment of the likelihood or frequency that a specific control factor will occur and the potential for the control factor to impede or facilitate the behavior. An individual's assessment of the likelihood or frequency that a given control factor will occur can be assessed with a questionnaire. An example is shown here:

In my daily schedule, I have free time:
Very rarely _____ Very frequently

The potential for the control factor to impede or facilitate the behavior can be assessed with a questionnaire. An example is shown here:

A lack of free time makes it
Very difficult _____ Very easy
to meditate everyday.

Changing an individual's perceived behavioral control can be accomplished in many ways. The persuader could directly remove the obstacle, create the opportunity for successful performance of the given behavior (e.g., "I've done it before, so I can do it again"), provide examples of others who have successfully performed the behavior (e.g., "If they can do it, I can do it"), or provide verbal encouragement (e.g., "You can do it!"; O'Keefe, 2016). Any of these strategies individually, or concurrently, could influence an individual's assessment of the control factor, thus positively influencing their perceived behavioral control.

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2.9: Application of the Theory of Planned Behavior

Mary J. Ryan & Amber K. Worthington

Loneliness is a widespread and significant problem in the United States (Halpert, 2020), particularly for university students (American College Health Association, 2019). Loneliness in university students is associated with lower social adjustment to university life, lower perceptions of social support, and lower feelings of belonging on campus (Hopmeyer, Troop-Gordon, Medovoy, & Fischer, 2017; Sadoughi & Hesampour, 2016). One way to solve this problem is through volunteering, as volunteering increases community connectedness and belonging and decreases loneliness (Bowe et al., 2020).

Hyde and Knowles (2013) used the Theory of Planned Behavior to examine university students' intentions to volunteer. The study included a convenience sample of 235 university students in Australia. The study used an observational design and asked the participants to self-report on the main predictors in the Theory of Planned Behavior (attitudes, subjective norms, and perceived behavioral control), additional predictors (past behavior and moral obligations), and intentions to volunteer. The findings indicated that 67% of the variance in intentions to volunteer were explained by the predictor variables. Attitudes and perceived behavioral control had the strongest influence on intentions. These results are correlational, not causal, due to the observational nature of the study design. The results cannot be generalized due to the convenience sample. The authors did find theoretical support for the Theory of Planned Behavior.

The Theory of Planned Behavior can be applied to design messages to persuade university students to volunteer, specifically at the University of Alaska Anchorage (UAA) chapter of Hope Worldwide. Hope Worldwide is an international, faith-based organization established in 1991. Its mission statement is to "change lives through the compassion and commitment of dedicated staff and volunteers to deliver sustainable, high-impact, community-based services to the poor and needy" (Hope Worldwide, 2020). Hope Worldwide connects university students to volunteering opportunities in Alaska.

A persuasive message to increase UAA students' intentions to volunteer with Hope Worldwide would require designing a message that influences their attitudes, subjective norms, and/or perceived behavioral control. One way to change a university student's attitudes towards volunteering might be to add a new salient belief by providing the individual with additional information about the behavior and outcome of interest (e.g., "You might not realize that volunteering can reduce your feelings of loneliness"). One way to change a university student's subjective norms about volunteering might be to increase the salience of a particular reference, specifically their friends and peers (see Park & Shin, 2017; e.g., "Have you considered whether other students at UAA think it is important for university students to volunteer to better our community?"). One way to change a university student's perceived behavioral control might be to provide verbal encouragement (e.g., "You can do it!") or remove a perceived barrier (e.g., "Even if you don't have much time to volunteer, any time you can spare is worth it").

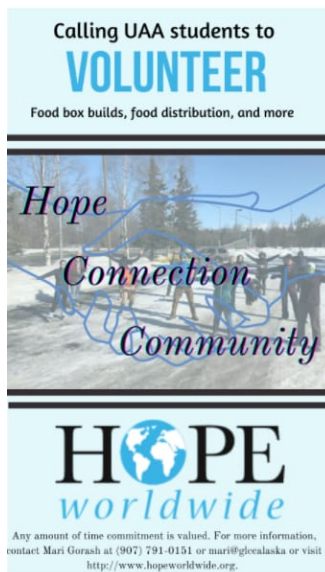
Example by Mary J. Ryan

The poster I created with Canva is designed to address the components of the Theory of Planned Behavior. It would be shared via social media to reach the target audience, UAA students. It could also be printed and distributed on campus.

It affects attitudes with the words "hope," "connection," and "community." These are the benefits of volunteering and add a new salient belief. The hands graphic gives a visual representation of connection and friendship. I also hope that it gives a sense of equality. The helping hand is not reaching down to another, but across. The image beneath shows the group of volunteers that a student would be joining.

Subjective norms are addressed with the invitation "calling UAA students to volunteer." In other words, Hope Worldwide at UAA, a group of students, wants other UAA students to volunteer. This increases the salience of a particular referent (i.e., other students).

Perceived behavioral control is influenced by giving the viewer an action. They can gain hope, connection, and community by volunteering. They can help people by participating in the food box builds and distribution. The contact information is given as a first step. Mari can then help whoever contacts her by sharing the latest opportunities and discussing how the students can and want to help. The main reservation for volunteering is a lack of time (Hyde & Knowles, 2013). By stating that any amount of time commitment is valued, I increased perceived behavioral control.



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2.10: Changing Attitude and Stasis

Critical thinkers need to remember that before anyone can be persuaded to do anything, that person must be pushed off their stasis. As long as a person is comfortable in his attitudes and behavior, he will not change. Only when a person experiences a significant amount of discomfort can an alternative attitude be substituted. This new attitude, once adopted, will allow him or her to get back to a state of comfort or stasis, restoring the balance between his or her beliefs, values, and attitudes.

As long as you are comfortable with your weight, you will never diet. But your doctor, who you really trust, says that you have to lose 35 pounds or be at risk of acquiring Type II Diabetes. This news knocks you off your stasis and to return to comfort, you go on that diet and create a new stasis.

As communication professors Reike and Sillars write:

*"Values and beliefs function in systems. Thus, several values and beliefs are operative in a given argument over a specific attitude. Within value systems people will share values and beliefs but may also disagree on how they are applied in a specific situation. There will also be disagreements on which values are appropriate to a given situation. Changes in attitude rarely result from adding a new value or eliminating an old one. Changes will most often result from redistributing, rescaling, redeploying, and re-standardizing values."*¹(Rieke, 1993)



9.14.1: "Megaphone Announcement Information" (CC0 1.0; 3dman.eu on Needpix.com)

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Final Thoughts

The last few pages have given you suggestions on how to persuade others. But just suppose that the other person's argument is actually better than yours? As strong of an advocate you are for a certain position, when arguing, especially informal and personal arguing, it is important to listen with an open mind. It is great advice to carefully listen to other points of view, first, for not only getting information, but if you listen with an open mind, you might even find out that they just might be right.

By understanding our beliefs, values and needs we can better understand the decisions we make, and why we are comfortable with those decisions.

By understanding the beliefs, values and needs of our audience we can better plan our argumentative and persuasive strategy.

And never be afraid to change your mind. that is how we intellectually grow.

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2.11: Resisting Change

As normal human beings, we want maintain our comfortable beliefs and so we naturally resist change or any challenge to our existing beliefs and attitudes. As a critical thinker, however, we know this leads to dogmatic thinking. So, we are in a constant fight between our natural urge not to change and our skill at critical thinking that tells us to be open to new ideas.

When we attempt to persuade others, we need to present an argument that actually creates a feeling of discomfort in their currently held beliefs. This discomfort leads to a tension. We would like this tension to lead to a change in their minds, but since humans want to be comfortable they strive to resolve the tension they feel without changing their minds. One theory that has looked at this process is the Theory of Cognitive Dissonance.

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2.12: Cognitive Dissonance

As a “normal” human being, we want to maintain our stasis and be comfortable. There are times, however, when we become aware of cognitions that disagree with our held beliefs, causing a feeling of uncertainty, or discomfort. How do we return to our feeling of comfort when we experience cognitions that are contradictory to our beliefs and disrupting our stasis?

A cognition has been understood to be both the process of understanding our environment and the end product of that process, a unit of awareness. Our environment bombards us with more stimuli than we can interpret. The few that we become aware of are known as cognitions. Leon Festinger developed his Theory of Cognitive Dissonance¹ in “A Theory of Cognitive Dissonance” to explain how a person attempts to resolve the discomfort felt when they experience contradictory cognitions.²

Leon Festinger argues that there are a total of three different, possible relationships between cognitions, which he refers to as being thoughts or ideas. Instead of calling the comfort state, stasis, he refers to it as being a state on “consonance.” Dissonance is an “unpleasant motivating state (a feeling) that encourages attitude change to achieve or restore consonance.”³

- Change a cognition
- Add a new cognition
- Change the importance of the cognition

For example, you may like an occasional drink, or two or three. You are comfortable with your drinking. But then you become aware of how alcohol can harm your body from your liver to your heart. Your stasis is now disrupted and you need to resolve this discomfort. According to Festinger, you can do one of three things to return to your comfortable stasis:

Change a cognition This can be accomplished by either altering the new cognition or your old, comfortable cognition. The person could rationalize by saying the source of the disrupting information on alcohol was biased, or unreliable. Or as a last resort, the original cognition that drinking was fine should now be changed.

Add a new cognition This can occur where you read from another source that a glass of red wine a night is actually good for your health

Change the importance of the cognition This can occur when you realize you only drink on weekends so the health effects are really not that big a deal.

Although Dissonance Theory can suggest that a person will engage in one of these three actions, the theory does not predict which one.

If you are attempting to persuade another person, you need to first disrupt their stasis by providing cognitions that create dissonance. A person cannot be persuaded to change to a new stasis until they are made uncomfortable with their current stasis. A couple has been living together for a couple of years and now she wants to get married. He is very comfortable with his stasis of just living together. If she wants to persuade him to get married, she must first make him uncomfortable with their current relationship. Then he will be open to a change in the relationship.

But even when we experience discomfort in our current situation, we will still fight to not change. Researcher Robert Abelson suggests that we resist a challenge to our stasis, by following one of four methods of reducing an inconsistency with our comfortable stasis.

“Inconsistency is not always resolved by bringing the maverick beliefs, attitudes, or values into line. At least four other strategies for reducing inconsistency have been distinguished: denial, bolstering, differentiation, and transcendence.”⁴

- **Deny** one of the dissonant cognitions. Here a person makes the determination the cognition is wrong. “She is the spokesperson for that company, so you can’t believe anything she says.”
- **Bolster** an attitude they want to believe by looking for sources that support beliefs they want to maintain. After becoming aware of a new cognition, a person can now easily find an internet source that agrees with his original belief.
- **Differentiate** one of the cognitions by separating it into different paths, where one of the paths may contain the dissonant idea, but the other path has a more consonant idea. “Sure, she may be telling lies, but she is also trying to save her children’s

feelings.”

- **Transcendence** is the opposite of differentiate and occurs when the dissonant parts are put together and lead to an important whole. “Sure, he is lying on the school form and pretending to live in the proper district, but he really wants to get his daughter into a better school.”

Convincing ourselves that we should maintain our stasis in the face of new information can also be referred to as rationalization. Based on the work theory of belief-dilemma resolution by Robert Abelson⁵ Ware and Linkugel (1973)⁶ used the same four key methods to explain how we excuse ourselves and rationalize that we are not to blame for some action we have taken.

Denial: “I didn't do it.” Denial is the simplest of methods of excusing oneself and avoiding punishment. This is a method of coping with cognitive dissonance felt when our actions are in contradiction with our values. It does, however, require plausibility. You cannot deny something where there were multiple witnesses, although some do try.

Bolstering: “I'm a nice person.” I can't have done it. The word 'bolstering' means propping something up. When defending an attack, particularly when it appears to be personal, then many feel the need to bolster their character and reputation.

Differentiation: Distancing oneself. Show that you are not really connected with what went on. Distance yourself from the event. Indicate that it had nothing to do with you and that you had no knowledge of it.

Transcendence: A higher purpose when faced with an accusation, transcendence is a method of connecting the accused action with a greater meaning, thereby excusing the act as legitimate on a more important stage.... Transcendence is a method of reframing, not so much changing the facts, but changing their meaning by looking at things in new ways.⁷

As you can see from these previous theories, **we are not naturally, open minded critical thinkers.** Our natural state is to create a comfortable stasis and do our best to maintain that comfortable position. Instead of taking in new information and testing it to see if there is enough validity to it to change our minds, our natural tendency is to fight this new information, using a variety of strategies so we can maintain our comfort zone. This has led me to observe that **“People would rather be comfortably wrong than uncomfortably right.”**

Persuasive Strategies

There are, as you might guess, a variety of approaches that describes how we can change the stasis of others and be more aware of how others will try to change us. The first step is to analyze your audience.

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2.13: The Focus of this Chapter

In this chapter I wanted to focus on how understanding the needs, values, beliefs and attitudes of the audience will help you plan an argumentative strategy that will make you more successful. The key ideas we examined were:

- Our beliefs and values lead to our attitudes which guide our behavior.
- We, as humans want to be comfortable and so we strive for stasis, or consistency, between our values, beliefs, attitudes and behavior.
- Only by first disrupting the stasis of our audience, can we persuade them to a new position.
- We can discover what motivates the audience of our argument by understanding their needs.
- Once we understand their needs, which may be different than our needs, we can “target” those needs to make a successful persuasive appeal.

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3: TRUTH VS. "TRUTH"

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3.1: Defining An Argument

An argument is a communication process that attempts to resolve an actual disagreement, confusion, or ignorance about something. Arguments occur all the time and are a staple ingredient of many communication environments. The end goal of an argument should be to reach a conclusion which is sufficiently persuasive to convince someone of a position on a claim.

Some arguments are relatively trivial and easy to resolve. For example, if I argue that I am older than you and if you disagree, then we may argue about the fact. Here, all we may have to do is look at our drivers licenses to resolve the disagreement. Similarly, if I argue that the final exam for a class is on Monday and you argue that I am wrong, because it is on Wednesday, then we can resolve that argument by referring to a mutually acceptable authority on the subject, like the published final exam schedule.

Usually arguments such as these are relatively trivial. Their resolution is easy and quick because there is an authority to establish the facts, and there is general acceptance of that authority as the arbitrator of the dispute. Once that authority rules on the dispute, then the argument is over.

Arguments become more complex when we are not immediately certain about how to resolve them. These arguments usually involve some type of value judgment, where the final outcome is not necessarily factually based. For example, one sports team is better than another, one type of food is tastier than another, should I purchase one type of car or another. For that reason, we have a variety of structured arguments such as; judicial arguments, legislative debates, industrial disputes, divorce mediation, and so on, that have agreed upon processes and rules. When using these structured arguments, we agree to abide by the processes we have set up to resolve the argument, even if the result is not always what we had hoped.

One challenge is that even with the best intentions, miscommunication is likely to happen. Remember, **perfect communication is impossible**. The more significant differences between communicators, the greater the potential miscommunication. Miscommunication may lead to conflict, or aggravate conflict that already exists. This is one of the reasons we strive for constructive arguments.

To engage in effective arguments, we need to have an understanding of how to argue constructively. There is a major difference between constructive argumentation and merely bickering or quarreling with another person or organization. In the public world of work, politics, education, and the media, the primary requirement of an effective argument is that it must be rational, that is, follow the rules of reason.

In today's world, there is an abundance of irrationality. Just take a quick look at Facebook posts and responses to others. We need to be much more skilled in the argumentative process to be able to argue constructively and achieve a conclusion.

The Goals of Argumentative Communication

Jim's wife Suzy is suspicious. She has noticed on the credit card bills charges from a jewelry store and a department store that Jim has told her nothing about. She also notices that he is getting secretive phone calls and that is not like him. And he goes out, telling her he is going to the gym, but he is gone too long for just a workout. Suzy is wondering what is going on, is he is having an affair? She, of course, asks her hairdresser about it and they both share their thoughts.

A couple of days later Jim is getting his hair cut by the same person who cuts Suzy's hair and is asked what he is doing. Jim tells her that he is preparing for a surprise visit from their daughter. He is buying presents for Suzy at his daughter's request. The phone calls were from her, his long workout also included making arrangements for the trip.

Was Suzy's conclusion that Jim is having an affair a reasonable one? That is, is the conclusion consistent with the evidence used to make it? In this case, the answer is yes. All of the evidence can be considered traditional support for someone having an affair. Is Jim's explanation that he is buying his wife presents on behalf of his daughter a reasonable one? That is, is the explanation consistent with the evidence used to make it? In this case, the answer is also yes.

But, who is telling the Truth, Jim or Suzy? To answer this, we need to ask what is **Truth**? And a second important question, "Do we even use the concept of Truth in improving our skill at argumentation? To answer this we turn to Epistemology, the theory of knowledge or branch of philosophy that studies Truth and how knowledge is gained, how much we can know, and what justification there is for what is known.

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3.2: What is Reality

Reality is not what is real. What is commonly called “reality” is created in the mind, based on an environment we observe. We all may share a common environment, like this textbook you are reading, but we all have a different interpretation of what we are experiencing. Some may think this is a great textbook, while others may look at it as a horrible ordeal. Hopefully not too many view the text this way.

When I was younger and tending bar part-time to make ends meet, many of the cocktail waitresses were single parents. To some of them it was quite an ordeal. They would come to work describing how much trouble they had attempting to get things done, while also having to deal with their child. Other waitresses arrived at work describing what a great day they had with their little “partner.” Where one waitress saw her child as a negative handicap, the other saw her relationship with her child as a positive, enjoyable experience. Both situations were virtually identical. The two waitresses had just created different realities.

Reality is not what is “real,” it’s what we think is real. It is our interpretation of an environment. When two people’s realities differ about the same subject or situation, then conflict occurs. For example, if your reality of global warming were that it is a hoax, and my reality is that global warming is real and exacerbated by humans, the clash of these two realities would trigger conflict.



11.2.1: "Paul Watzlawick on tv" (CC BY 2.0; Seniju via flickr)

Psychologist Paul Watzlawick writes,

*“The belief that one’s own view of reality is the only reality is the most dangerous of all delusions. It becomes still more dangerous if it is coupled with the missionary zeal to enlighten the rest of the world, whether the rest of the world wishes to be enlightened or not.”*¹

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3.3: The Critical Thinker's Approach

Ever get tired or frustrated by listening to “experts” who disagree on the same subject. Take for example drinking wine and how it affects our health.

Drinking just a small glass of wine a day can more than double the risk of cancer, a study claims. ...Dominique Maraninchi, INCA's president, said: 'Small daily doses of alcohol are the most harmful. There is no amount, however small, which is good for you.'

---Jenny Hope, *Daily Mail* ¹

Thanks to its alcohol content and non-alcoholic phytochemicals (natural occurring plant compounds), wine has been shown to reduce the risk of heart disease, certain cancers and slow the progression of neurological degenerative disorders like Alzheimer's and Parkinson's Disease.

--Joy Bauer, *TODAY* contributor ²

This is just one example where “experts” lack of agreement can be confusing. This is nothing new. To examine the roots of how we evaluate arguments, we need to make our first stop, Ancient Greece. For the first time, instead of a **God King**, a group of citizens debated to govern themselves. They needed to better understand how to effectively argue and distinguish between and effective an ineffective argument.

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3.4: Plato and Aristotle



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For a quick look back at the key origins of a clear argumentation process we need to travel back to ancient Greece and the influences of Plato and Aristotle. Plato felt that a discussion was the most productive way to solve a conflict. He called these discussions, a dialogue which worked best when conducted by the "*all-knowing, great minds*" of Greece, which he called the Philosopher Kings. Plato appreciated discussions as an unlimited number of positions could be examined and reflected on through the process of question and answer. Plato called this process the **Dialectic Approach**.

Plato's discussions were very focused.

*"Plato's dialectic is a purposeful conversation, a dialogue that addresses ideas and arguments, encourages contradiction and counter-arguments, and stresses analysis and synthesis as the primary means for discovering knowledge. The capacity of the dialectic for self-examination and self-instruction sets it apart from other kinds of discourse."*¹

According to Plato, the dialectic is the art of being able to pose questions and provide answers. They start with a hypothesis, or as we would call it a claim, and through the discussion add knowledge to test if the soundness of the hypothesis.

The Dialectic Approach involved developing an opening thesis or position and an antithesis or opposite position. These positions were fully developed and discussed. The goal of this dialogue was to arrive at synthesis, which Plato said could be considered the **absolute Truth**. Synthesis could be thesis, antithesis, or a new position developed during the dialogue process. To Plato, synthesis equaled the Truth and no further discussion was needed.

Aristotle's approach to argumentation focused more on persuading others. His philosophy of argument is embodied in his **Rhetorical Approach**. Aristotle's book, THE RHETORIC, is generally considered the most important single work in the literature of the Speech discipline. Book I of The Rhetoric opens with this definition: "*Rhetoric is the counterpart of Dialectic.*"² The Rhetorical Approach may be described as a process for discovering all of the available means of "artistic" persuasion on any subject. This is opposed to "inartistic" forms of persuasion like torture or even being threatened with an "F" for not doing your homework.

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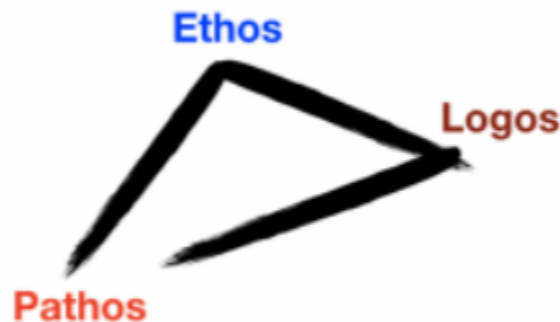
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3.5: The Rhetorical Process

Aristotle believed that through the use of the rhetorical process

- Truth and justice may be guarded against falsehood and wrong.
- Debate may be conducted on subjects in the absence of absolute truth.
- Both sides of a claim may be presented.
- Proof to establish the probability of a position may be developed.



8.3.1: "Logos, Ethos and Pathos" by J. Marteney is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)

These four aspects of the rhetorical process described by Aristotle are still in use today. Aristotle's persuasion involves the use of three elements of proof: **logos**, **pathos**, and **ethos**.

Logos Means logic and is the use of reason to support a decision. Logical appeals essentially present the situation, the alternatives, and the set of probabilities involved in the decision-making process. Such appeals are directed to our mind's reasoning capabilities.

Pathos Means emotion and is the use of emotional and motivational appeals to support a decision. Emotional appeals are directed to the wishes, wants, desires, goals, and needs of the person, whose acceptance is desired. Such appeals are directed to the heart.

Ethos Refers to the use of source credibility to support a conclusion. Aristotle perceived ethos as a powerful proof supplied by the source himself, and through which judgments could be made about his character, wisdom, and goodwill. The argument is accepted due to the character of the person arguing. Aristotle wrote,

*"Persuasion is achieved by the speaker's personal character where the speech is so spoken as to make us think him credible. We believe good men more fully and more readily than others; this is true generally whatever the question is, and absolutely true where exact certainty is impossible and opinions are divided. This kind of persuasion, like the others, should be achieved by what the speaker says, not by what people think of his character before he begins to speak."*¹

Ethos is thus the image of the source held in the mind(s) of the audience. Source credibility can be developed in two ways:

The first type is called **initial ethos**. This ethos is based on the arguer's credentials, status, and reputation, as known to the audience before they hear or read the content of the message. Advertisers have increasingly turned to "positive image makers" to sell their clients' products. The idea is if you like them, you will be favorably disposed toward the product they are endorsing.

The second type is called **derived ethos**. This is the speaker's credibility that is created during the message. You may not know much about the presenter, but as you listen to the argument you find yourself more and more impressed with him or her. Derived ethos is created from both the content of the presentation and the style of the speaker. In a job interview, you want to create a positive derived ethos as you make your "argument" that you should be hired.

A minimal level of positive ethos is necessary for logical and emotional proofs to achieve effectiveness. Low credibility sources cannot use high levels of emotional appeals effectively, because the audience doesn't believe in the source in the first place.

Likewise, lacking a certain minimal ethos, logical proof will be ignored, because the source is not perceived as a person who is trustworthy.

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3.6: Truth



8.5.1: "Truth Sign" by Nick Youngson is licensed under CC BY-SA 3.0

So, what does Epistemology tell us about the concept of Truth? In Epistemological terms, Truth is absolute, the same for everyone, never relative. Truth is the complete accuracy of propositions, statements, sentences, assertions and beliefs.

Truth is a word best avoided entirely in argumentation, except when placed in quotes or with careful qualification. Its colloquial use has so many shades of meaning from, 'it seems to be correct,' to the absolute Truths claimed by religion.

Truth becomes confused with opinion, that is, a statement is True only because the person believes it is True. The idea of allowing such a view is that it rules out the views of anyone else. Truth becomes intensely personal.

To look for the Truth in any argumentative situation is to look for the one and only correct answer. The process of argument usually ends up in frustration, when conflicting Truths are at the center of the argument. This is because the parties involved in the argument both believe that their position is the one and only Truth and that any other position advocated must be a false or untrue one. Thus, the only way an argument over conflicting truths can be resolved is for one of the argumentative parties to give up their untruth and accept the other party's Truth. In this context, all argument must be viewed as a win/lose proposition. The arguer who feels he or she knows the Truth can never be open to new ideas and is therefore dogmatic. They will never intellectually grow.

Consider that once accepted so-called "Truths" have changed: at one time the earth was believed to be flat, at one time it was believed that the Earth was the center of the universe, at one time everyone thought that asbestos was safe and did not cause cancer, and at one time heroin was thought to be a non-addictive alternative for the painkiller morphine. The list of these changed "Truths" is endless and ongoing. Why? Because **personal certainty does not equate to Truth**. Personal certainty is based on information that might be inaccurate or incomplete.

When we say that an argument is **valid** we are referring to its internal consistency. Validity is the strength of our conclusions, inferences or propositions based on the logic of the argument. Critical thinkers need to think in terms of arguing over the validity of opposing viewpoints, as opposed, to arguing over which of the opposing viewpoints is the truthful one.

Only when you make a commitment to validity can you free yourself to accept more than one position as being logical and reasonable. **Effective argument can only take place when people are willing to accept the possibility that their current position on the subject may be wrong.** If a person believes that his or her position is the one and only Truth, no constructive argumentation can take place. At best, some destructive form of communication takes place like, bickering, quarreling or fighting. At worst, violence erupts.

The critical thinker needs to realize that while his or her position is valid, other valid positions may also exist. This understanding allows critical thinkers to engage in the process of argumentation with others, in order to test the validity or reasonableness of their respective arguments. Critical thinkers need to remember that there is no necessary or inherent connection between **Truth** and **validity**.

As Professor of Argumentation James Sawyer writes,

“All of us reach decisions and take actions that are based upon strong probability: strong information or evidence to establish the likelihood that something happened, is happening, or will happen. So many variables exist that to be certain of anything is a very rare situation.”

For example, in trying to explain weather changes, experts looking at the data came up with several valid, reasonable, conclusions: the early effects of global warming, warm Pacific Ocean currents known as El Nino, cold Pacific Ocean currents known as La Nina, increased effects from the weakening of the ozone layer, or just normal weather variability. All of these conclusions are supportable with factual data. They are all valid, and any one of them may be the "True" explanation, or none of them may be the "True" reason.

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3.7: Validity

Validity refers to the internal logic or reasonableness of an argument. Given the data that is used in the argument, is the conclusion that is reached a logical or consistent conclusion? If not there is a fallacy, or misuse of logic, in the argument. An important idea to remember is that even if the argument is totally valid, if the data being used is inaccurate, the conclusion will still be inaccurate. This begins to set up the difference between the concepts of Truth and validity.

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3.8: Truth vs. Validity

So, now let's go back to the Jim and Suzy story. Both of their conclusions are valid, that is, internally consistent with the evidence they used to come up with their conclusions. We would use the process of argumentation to try and determine which conclusion was the most valid. But which position is True? The best answer, from a critical thinker's perspective would be, "we don't know." Why, because, the argumentative process is not capable of determining the ultimate Truth. Critical thinking is focused on validity.

Measuring Validity

Validity is not an all or nothing score. In Chapter Three we looked at Dr. Littleton's Model of the Bead of Truth, where he measured validity along a wire between 0 and 1. Now it is time to look more closely at that measurement scale and define some of the points between the two extremes.

The Continuum of Argumentative Certainty is a measurement of how sure you are on a claim that is being made from totally uncertain to ninety-nine percent convinced. As we have seen, a good critical thinker is never 100% convinced of anything, that way they stay open minded.

The more you move from the left to right, the more likely you are to accept the claim as being correct. The critical thinker starts on the left side. As he or she hears more and more convincing information, they are likely to be moved up towards the right-hand side of the scale. Moving from a low percent certainty to a higher percent certainty, we become more likely to accept the claim being made. We may treat these different levels on this scale in a somewhat vague manner, but science attempts to be much more precise.

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3.9: Differences Between Truth and Validity

Differences Between Truth and Validity

TRUTH	VALIDITY
Truth is the complete accuracy of whatever was, is, or will be, error-proof, beyond doubt, dispute or debate, a final test of right or wrong of people's ideas and beliefs.	Validity is defined as the internal consistency of an argument. That is, is the conclusion reached consistent and reasonable with the information used to reach that conclusion?
On any subject, there can be one and only one Truth. For example, there either is or is not a God. Since these two are mutually exclusive and opposite, only one of these two positions can be True.	On any subject, there can be many valid positions. For example, both positions that there is a God, and there is not a God, can be real and argued as valid or reasonable.
The threshold for Truth is measured as absolute certainty.	The threshold for validity is measured using the entire Continuum of Certainty.
Truth is tied to self-esteem. Thus, resolving arguments related to truth require a win or lose environment. If a single truth exists, there are two communicative problems: (1) we don't know who knows it; and (2) we don't know if it can be accurately communicated to others.	Validity is tied to the information available. The goal in arguing validity is to find out which position in an argument is the most valid one at the time resolution is reached. The most valid position might change as new information becomes available.
Arguing over the Truth promotes dogmatism. Dogmatism discourages constructive argumentation.	Arguing for the most valid position promotes open-mindedness. Open-mindedness encourages constructive argumentation.
Acquiring Truth is not the goal of a course in argumentation and critical thinking.	How to recognize valid positions and finding out which position is the most valid one is the goal of a course in argumentation and critical thinking.

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3.10: Critical Thinking Defined

I have been talking all around critical thinking, it seems that we should finally define critical thinking. As you might guess, there is no, one simple definition of critical thinking. Below are several definitions that will give us a variety of ways of looking at critical thinking.

Authors Goodwin Watson and Edwin Glaser in their 1937 book, *Manual of Directions for Discrimination of Arguments Test*, define critical thinking as,

*"...a persistent effort to examine any belief or form of knowledge in the light of evidence that supports it and the further conclusions to which it tends, as well as the ability to recognize problems, to weigh evidence, to comprehend and use language with accuracy and discrimination, to interpret data, to recognize the existence or nonexistence of logical relationships between propositions, to draw warranted conclusions and generalizations and to test the conclusions by applying them to new situations to which they seem pertinent."*¹

In the book, *Critical Thinking*, B. K. Beyer explains that,

Author W. G. Sumner back in 1940 emphasized that importance of critical thinking and that if we are educated in it, we "cannot be stampeded."

[Critical thinking is] ... the examination and test of propositions of any kind which are offered for acceptance, in order to find out whether they correspond to reality or not. The critical faculty is a product of education and training. It is a mental habit and power. It is a prime condition of human welfare that men and women should be trained in it. It is our only guarantee against delusion, deception, superstition, and misapprehension of ourselves and our earthly circumstances.

*Education is good just so far as it produces well-developed critical faculty . . . A teacher of any subject, who insists on accuracy and a rational control of all processes and methods, and who holds everything open to unlimited verification and revision, is cultivating that method as a habit in the pupils. Men educated in it cannot be stampeded . . . They are slow to believe. They can hold things as possible or probable in all degrees, without certainty and without pain. They can wait for evidence and weigh evidence . . . They can resist appeals to their dearest prejudices. Education in the critical faculty is the only education of which it can be truly said that it makes good citizens. Sumner.*³

The Foundation for Critical Thinking founded by the late Richard Paul, offers the following definition for critical thinking:

*"Critical thinking is that mod of thinking--about any subject, content, or problem -- in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem-solving abilities, as well as a commitment to overcome our native egocentrism and socioicentrism."*⁴

Richard Paul argued that critical thinking involves the willingness to question and challenge our deepest beliefs and prejudices. He felt that critical thinking is a call to think for oneself without prejudice so we may attain a perspective from which to reflect upon human affairs in a more objective way in order to come to an understanding of how we should act.

Authors Moore and Parker in their book *Critical Thinking* write,

*"Critical thinking is the careful, deliberate determination of whether we should accept, reject or suspend judgment about a claim and of the degree of confidence with which we accept or reject it. The ability to think critically is vitally important, in fact, our lives depend on it."*⁵

The wording of the California State University requirement for a course in critical thinking, defines critical thinking as,

Why teach critical thinking? Most of the experts in the critical thinking discipline see students as too often being just passive receptors of information. Through technology, the amount of information available today is massive. This information explosion is likely to continue in the future. Students need a guide to sort through information and not just passively accept it.⁶

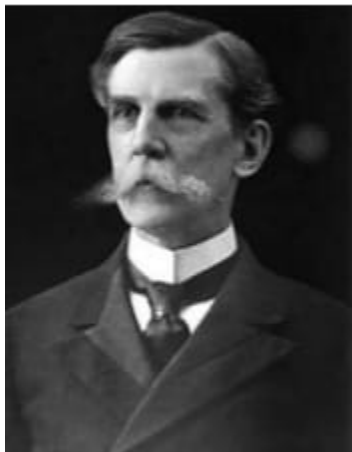
Critical thinking involves questioning. It is important to teach students how to ask good questions, to think critically, in order to continue the advancement of the very fields we are teaching. Richard Paul says, *"Every field stays alive only to the extent that fresh questions are generated and taken seriously."*⁸

Researcher, B. K. Beyer sees the teaching of critical thinking as important to the very state of our nation. He argues that to live successfully in a democracy, people must be able to think critically in order to make sound decisions about personal and civic affairs. If students learn to think critically, then they can use good thinking as the guide by which they live their lives.⁹



8.9.1: "William Bragg" by Unkown is in the [Public Domain](#), [CC0](#)

One way of realizing the goals of critical thinking is by learning the skills of argumentation and by applying those skills to everyday decision-making and conflict situations in our life. The key to being in charge of our life is the ability to make effective decisions. To be effective critical decision makers, we need to be able to analyze and evaluate the information we receive in order to determine the best course of action to take.



8.9.2: "Oliver Wendell Holmes" by Unkown is in the [Public Domain](#), [CC0](#)

"The main part of intellectual education is not the acquisition of facts, but learning how to make facts live." --Oliver Wendell Holmes¹¹

As Patterson and Zarefsky conclude,

"The view of argumentation as a critical device depends on certain assumptions. The premises that actions should be reasonable, that decisions should be justified through critical inquiry and persuasive explanation of ideas, and that a clash of ideas helps arrive at the probable truth are fundamental to such a view. Argumentation allows people to resolve differences, permits opposing views to be considered before decisions are made, and enhances the quality of social

decisions.”¹²(Patterson, 1983)

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3.11: Critical Thinking Skills

We are not born with natural critical thinking abilities. **Critical thinking is a skill that can be developed.** The good news is that we all have the ability to improve our critical thinking skills. We can become more effective decision makers and improve our self-confidence. Below are some of those Critical Thinking Skills that can be developed and enhanced:

Critical thinkers are intellectually curious. This skill implies that the critical thinker is never totally satisfied with what they know. He or she seeks answers to various kinds of questions and problems. The critical thinker is concerned with investigating the causes and seeking explanations of events; asking why, how, who, what, when, and where.

Critical thinkers are open-minded. An open-minded person is one who is confident enough in his/her abilities to accept new and contradictory ideas, which challenge his/her current beliefs. This is opposed to being “tolerant” where the dogmatic person may politely listen to other arguments, but their minds will not be changed.

The open-minded person is one who is not only willing to listen to new ideas, but will alter an already adopted position if the new data dictates. The open-minded person is willing to consider a wide variety of positions and beliefs as possibly being valid. Open-minded people are flexible. They are willing to change their beliefs and methods of inquiry, if they are faced with a more valid argument. Open-minded people show a willingness to admit they may be wrong and that other ideas they did not accept may be correct. Critical thinkers do not just want to prove they are correct; they are open-minded enough to change their mind.

Critical thinkers avoid “Red Herrings.” Critical thinkers follow a line of reasoning consistently to a particular conclusion. They avoid irrelevancies, called “red herrings,” that stray from the issue being argued. When Jim and his wife Suzy argue, and Jim feels he is losing, he looks at Suzy and says, “You argue pretty well for a short person.” He is hoping to draw her off the argument and send her fishing for the “red herring,” her being short. If she takes the bait the original argument fades away. Critical thinkers won’t go after “red herrings.”

Critical thinkers are aware of their own biases. All humans are biased, some more than others. Some know that they have biases, some are not aware of their biases. We all have biases that we are not aware of and the critical thinker strives to learn them, so he or she can be more in charge of their thinking. It may be too much of a challenge to eliminate the different biases we have. Instead a critical thinker needs to be aware of the bias and how it will affect the thinking process. Thinking about thinking is referred to as metacognition. A critical thinker looks at how he or she thinks and makes decisions in order to improve the process.

“The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function.”

----F. Scott Fitzgerald¹



Critical thinkers learn to handle confusion. People will do almost anything to avoid the mental pain that comes with lingering confusion. We bypass it, avoid it, and even try to pass it off to someone else. In this haste to avoid confusion we often make quick decisions based on limited data or overworked stereotypes. The critical thinker allows him or herself to be confused as they work through the argument towards a conclusion.

Critical thinkers are able to control and use their emotions. Notice this does not say, *“Eliminate emotions.”* We gather all sorts of valuable data through our emotions, that we can use in the decision-making process. We just have to be careful not to let emotions dominate our critical thinking and argumentation. Nothing will destroy the critical thinking process faster than misplaced or misdirected anger, fear, or frustration.

Critical thinkers are sensitive and empathetic to the needs of others. Critical thinkers need to pay particular attention to the needs of their target audience. The needs, concerns, and desires of your audience may be different than yours. The critical thinker is more effective if he or she can understand those concerns. They may not agree with them, but at least they understand them. The target audience may be the person trying to convince you of their argument or the person you are trying to convince with your argument. Persuasion usually takes place when an advocate is able to meet the needs of his or her target audience. In fact, your needs may be unimportant as it pertains to moving a target audience towards adherence to your point of view.

Critical thinkers can distinguish between a conclusion that might be “true” and one that they would like to be “true.” Notice the use of “truth” with a lower case “t.” This “truth” refers to just what a person believes, not the ultimate correct position that would be indicated by “Truth.” A conclusion that might be true, is based on calculating the probability of its outcome, to see if it has a reasonable chance of becoming a reality. The second type, a conclusion that you would like to be true, is based more on your wishing, wanting, and desiring that it become a reality. The first can be put to the tests of critical reasoning, but the second cannot, and, therefore, is of little value in critical thinking. You may believe your child to be a great person, but the evidence might suggest otherwise.

Critical thinkers know when to admit to not knowing something. An essential prerequisite to understanding is humility; to be able to admit when you don’t know an answer to a situation. Although we want to protect our egos by believing we know everything, learning comes from questioning, not from knowing all the answers. When we can admit that we don’t know, we are more likely to ask questions that will enable us to learn. By giving ourselves permission to admit we don’t know everything, we can overcome the fear that our lack of knowledge will be discovered. The energy expended trying to cover up what we don’t know diminishes our ability to learn. If we are always trying to disguise our lack of knowledge of a subject, we will never fully understand what it is we don’t know about it. Feel free to say, “I don’t know.”

Critical Thinkers are independent Thinkers. They have the confidence to state their opinions and point of view to others who might disagree. They use the skills of critical thinking to support their positions and make their arguments.

Critical thinkers seek a “dialogical” approach to the process of argument. “Dialogical” thinkers seriously seek points of view other than their own. The ability to think “dialogically” would include the abilities to: analyze, synthesize, compare and contrast, explain, evaluate, justify, recognize valid and invalid conclusions, identify or anticipate or pose problems, look for alternatives, apply logical principles, and solve conventional or novel problems. These are many of the skills of critically thinkers.

Stephen Brookfield in his book, *Challenging Adults to Explore Alternative Ways of Thinking*, writes,

*“Critical thinking is only possible when people probe their habitual ways of thinking, for their underlying assumptions, those taken-for-granted values, common-sense ideas, and stereotypical notions about human nature that underlie our actions.”*²

We are looking at the process of argumentation and the type of person who can be most effective in an argumentative situation. You as a critical thinker will be both involved in an argument and an observer of an argument. We can improve our abilities to do both.

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3.12: The Focus of This Chapter

In this chapter I wanted to focus on the history and goal of critical thinking. Key thoughts from this chapter included:

- A Historical foundation to critical thinking and arguing. Critical thinking is not a new concept. We have been exploring how we think and how we can improve our thinking for over 2,500 years.
- The goal of an argument is validity instead of Truth. We all want to know the “Truth.” But arguing from the position of Truth tends to lead to dogmatism and hinders individual growth and actual conflict resolution.
- There are many definitions and skills of a critical thinker. Being a critical thinker is not to just criticize others, but instead to be open-minded enough to evaluate arguments.
- Critical thinking is not a natural, inherent skill. We are not born critical thinkers. Critical thinking is a skill that we all can develop and improve.

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4: AUDIENCE ANALYSIS

- 4.1: Prelude to Audience Analysis
- 4.2: Targeting Strategy
- 4.3: Targeting by Using the Needs Theory in Persuasion
- 4.4: Why Conduct an Audience Analysis?
- 4.5: Three Types of Audience Analysis
- 4.6: Conducting an Audience Analysis
- 4.7: Using Existing Data About Your Audience
- 4.8: Chapter Exercises

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4.1: Prelude to Audience Analysis



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One of the consequences of the First Amendment to the Constitution, which protects our right to speak freely, is that we focus so much on what we want to say that we often overlook the question of who our target audience is. Does your audience care what you as a speaker think? Can they see how your speech applies to their lives and interests? The act of public speaking is a shared activity that involves interaction between speaker and audience. In order for your speech to get a fair hearing, you need to create a relationship with your listeners. Scholars Sprague et al. explain, “Speakers do not give speeches to audiences; they jointly create meaning with audiences.”^[1] The success of your speech rests in large part on how your audience receives and understands it.

Think of a time when you heard a speech that sounded “canned” or that fell flat because the audience didn’t “get it.” Chances are that this happened because the speaker neglected to consider that public speaking is an audience-centered activity. Worse, lack of consideration for one’s audience can result in the embarrassment of alienating listeners by telling a joke they don’t appreciate, or using language they find offensive. The best way to reduce the risk of such situations is to conduct an audience analysis as you prepare your speech.

Audience analysis is the process of gathering information about the people in your audience so that you can understand their needs, expectations, beliefs, values, attitudes, and likely opinions. In this chapter, we will first examine some reasons why audience analysis is important. We will then describe three different types of audience analysis and some techniques to use in conducting audience analysis. Finally, we will explain how you can use your audience analysis not only during the creation of your speech but also while you are delivering it.

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4.2: Targeting Strategy

To persuade someone or some group, we want to relate our argument to the need level of our audience. We want to demonstrate that our position or argument will help them satisfy their need level.

Politicians are experts at this strategy. If a politician believes that his audience is worried about national security, that their security need is unmet, he or she will argue for increase for defense. This way if the person votes for them, then their need level of security will be met.

Targeting involves two steps:

- First, clearly identify which need level your audience is on, or at what need level the audience is most vulnerable.
- Second, create a line of reasoning that will appeal directly to that need.

Remember that no two audiences are necessarily on the same level at the same time, and that one type of reasoning will work with one audience and not with another. If your appeal is targeted to one level, and your audience is on another level, the appeal will fail.

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4.3: Targeting by Using the Needs Theory in Persuasion

Targeting is a motivational theory which rests on the concept that all humans are motivated by certain common needs. Targeting concludes that audience acceptance of a position is more likely to occur when the position you want them to take meets one of their needs. An insurance commercial is a classic example where a person's need for Safety can be met with the insurance product being advertised.

Targeting is focusing on the appropriate "need level" of your audience without necessarily telling them or asking them to acknowledge your needs.

"If you want to motivate others to cooperate with you—at home, in the office, or in a social setting—the best way is to try to see that their needs are met first," says Dr. Marvin Glock of Cornell University.



9.11.1: "Abraham Maslow" (Fair Use; Unknown via [Wikipedia](#))

Abraham Maslow developed a theory of personality that has been very influential in many fields of study from business to psychology to communication. The theory may seem simplistic at first, but the more we examine it, the more we can see our own actions following the pattern, or hierarchy he suggests.

Maslow was a humanistic psychologist who believed that the behaviors of human beings were guided by external influences. These influences were either external stimuli and reinforcements or of unconscious instinctual impulses. A "healthy person" looks to achieve a high stage of consciousness and wisdom.

Maslow believed that all humans shared a hierarchy of five levels of basic needs. At the base of this pyramid are a person's basic needs. These basic needs must be met before a person can move up to the next level of needs. Until a need at a particular level is met, the person does not feel the need for the next level. For example, you need to meet your safety need before you can fulfill your love, affection or belongingness need. As a person achieves each level of need they move up to the next level of needs until they reach the highest level of needs, "*Self-Actualization*." ¹

Maslow's theory can be applied to your own life and your own goals. If you begin to realize that all humans share these same motivations, it becomes clear that all humans have something in common. Maslow's basic needs are as follows:

Physiological Needs: These are biological needs. They consist of needs for oxygen, food, water, and a relatively constant body temperature. They are the strongest needs, because if a person is deprived of these needs, the person will die.

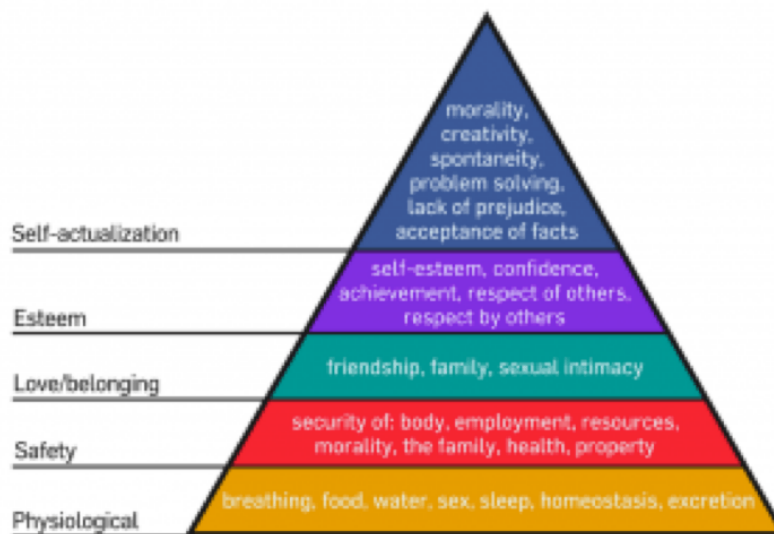
Safety Needs: When all physiological needs are satisfied, and are no longer controlling thoughts and behaviors, the needs for security can become active. We have the need to feel safe and secure. To some it may be to own a gun, while for others, just locking their doors is enough. Being a member of a union or even a gang can make a person feel safe and secure. Even a loveless

marriage allows for some degree of safety, which makes it difficult for people to end the relationship.

Needs of Love, Affection and Belongingness: When the needs for safety and for physiological well-being are satisfied, the next level of needs for love, affection and belongingness emerges. We want to be loved or at least appreciated. Once our physical and safety needs are met we look for ways to meet our need to be loved.

Needs for Esteem: When the first three levels of needs are satisfied the need for esteem emerges. Here we want not just to be liked, but also to be respected. This need involves both personal self-esteem and for the esteem a person obtains from others. We want to be respected for who we are and/or what we do. When this need level is satisfied, we are self-confident. When this need level is not satisfied, we experience feelings of inferiority, helplessness, and worthlessness.

Needs for Self-Actualization: When all of the previous need levels are satisfied, the need for self-actualization emerges. Self-actualization is the need to reach one's potential. What is it you can be? This level is often associated with being creative in order to achieve your potential. At this level, we are less concerned with what other people think about us, but what we think about ourselves. Have we written a paper to our standards, or merely the standards of others? At this level, instead of relying on others to judge us, we judge ourselves using our standards.



9.11.2: "Maslow's Hierarchy of Needs" (CC BY-SA 3.0; Factoryjoe via Wikimedia Commons, derivative from the original work)

Maslow writes,

*"Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for. A musician must make music; an artist must paint, a poet must write, if he is to be happy. What a man can be, he must be. This need we may call self-actualization."*²

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4.4: Why Conduct an Audience Analysis?

Learning Outcomes

- Explain the value of acknowledging your audience in the speech-making process.
- Identify strategies for selecting a worthwhile and relevant topic.
- Apply methods for adapting a speech to meet audience needs and expectations.
- Describe how credibility influences a speaker's effectiveness and audience perception.

Acknowledge the Audience

A 3D-rendered figure holds a large magnifying glass, closely examining a group of five smaller figures standing together. Each smaller figure strikes a different pose, suggesting diversity or varied behavior. The background is a solid tan color, and the scene symbolizes the concept of analyzing or identifying a target audience, emphasizing observation, segmentation, and understanding group dynamics.

Target Audience

Picture yourself in front of the audience, about to deliver your speech. This is the moment when your relationship with your audience begins, and the quality of this relationship will influence how receptive they will be to your ideas, or at least how willing they'll be to listen to what you have to say. One of the best ways to initiate this relationship is by finding a way to acknowledge your audience. This can be as simple as establishing eye contact and thanking them for coming to hear your presentation. If they've braved bad weather, are missing a world-class sports event, or are putting up with an inconvenience such as a stuffy conference room, tell them how much you appreciate their presence in spite of the circumstances. This can go a long way toward getting them "on board" with your message.

For a political candidate who is traveling from town to town giving what may be perceived as the same campaign speech time and time again, a statement like "It's great to be here in Springfield, and I want to thank the West Valley League of Women Voters and our hosts, the Downtown Senior Center, for the opportunity to be with you today" lets the audience know that the candidate has at least taken the trouble to tailor the speech to the present audience. Stephanie Coopman and James Lull tell us that Microsoft chairman Bill Gates often adapts to his audiences by thanking them for their participation in the computer industry or for their preparation to participate in an electronic world. The authors say, "Even those brief acknowledgments let audience members know that Gates had prepared his speech with them in mind."^[2] We will cover audience acknowledgment further in [Chapter 10](#).

Choose a Worthwhile Topic

Your selection of a topic should reflect your regard for the audience. There is no universal list of good or bad topics, but you have an ethical responsibility to select a topic that will be worth listening to. As a student, you are probably sensitive to how unpleasant it would be to listen to a speech on a highly complex or technical topic that you found impossible to understand. However, have you considered that audiences do not want to waste their time or attention listening to a speech that is too simple? Many students find themselves tempted to choose an easy topic, or a topic they already know a great deal about. This is an understandable temptation; if you are like most students, you have many commitments and the demands on your time are considerable. Many experts encourage students to begin with something they already know. However, our experience tells us that students often do this simply to reduce their workload. For example, if the purpose of your speech is to inform or persuade students in your public speaking class, a topic such as fitness, drunk driving, the Greek system (campus fraternities and sororities), or credit card responsibility may be easy for you to address, but your speech is unlikely to go very far toward informing your audience, and in all likelihood, it will not be persuading them either. Instead, your audience members and your professor will quickly recognize that you were thinking of your own needs rather than those of your audience.

To avoid this trap, it behooves you to seek a topic that will be novel and interesting both for you and for your audience. It will also be important to do some credible research in order to ensure that even the most informed audience members will learn something from you. There are many topics that could provide a refreshing departure from your usual academic studies.

Topics such as the Bermuda Triangle, biopiracy, the environmental niche of sharks, the green lifestyle, and the historic Oneida Community all provide interesting views of human and natural phenomena not usually provided in public education. Such topics might be more likely to hold the interest of your classroom audience than topics they've heard about time and time again.

You should be aware that your audience will not have the same set of knowledge that you do. For instance, if you are speaking about biopiracy, you should probably define it and give a clear example. If your speech is on the green lifestyle, it would be important to frame it as a realistic choice, not a goal so remote as to be hopeless. In each case, you should use audience analysis to consider how your audience will respond to you, your topic, and your message.

Clarity

Nothing is more lamentable than a rhetorical actor who endeavors to make grandiose the impressions of others through the utilization of an elephantine albeit nonsensical argot—or nothing is worse than a speaker who tries to impress the audience with a giant vocabulary that no one understands. In the first portion of the preceding sentence, we used as many polysyllabic words as we could find. Unfortunately, most people will just find the sentence wordy and the meaning will pass right over their heads. As such, we as public speakers must ensure that we are clear in what we say.

Make sure that you state your topic clearly at the outset, using words that your audience will understand. Letting them know what to expect from your speech shows consideration for them as listeners and lets them know that you value their time and attention.

Throughout your speech, define your terms clearly and carefully in order to avoid misleading or alarming people by mistake. Be careful not to use jargon or “insider” language that will exclude listeners who aren't “in the know.” If you approach audience analysis in haste, you might find yourself presenting a speech with no clear message. You might avoid making any statements outright from fear of offending. It is much better to know to whom you're speaking and to present a clear, decisive message that lets listeners know what you think.

Controversial Topics are Important and Risky

Some of the most interesting topics are controversial. They are controversial topics because people have deeply felt values and beliefs on different sides of those topics. For instance, before you choose nuclear energy as your topic, investigate the many voices speaking out both in favor and against increasing its use. Many people perceive nuclear energy as a clean, reliable, and much-needed source of energy. Others say that even the mining of uranium is harmful to the environment, that we lack satisfactory solutions for storing nuclear waste, and that nuclear power plants are vulnerable to errors and attacks. Another group might view the issue economically, believing that industry needs nuclear energy. Engineers might believe that if the national grid could be modernized, we would have enough energy, and that we should strive to use and waste less energy until modernization is feasible. Some might feel deep concern about our reliance on foreign oil. Others might view nuclear energy as more tried-and-true than other alternatives. The topic is extremely controversial, and yet it is interesting and very important.

You shouldn't avoid controversy altogether, but you should choose your topic carefully. Moreover, how you treat your audience is just as important as how you treat your topic. If your audience has widely diverse views, take the time to acknowledge the concerns they have. Treat them as intelligent people, even if you don't trust the completeness or the accuracy of their beliefs about your topic.

Adapt Your Speech to Audience Needs

When preparing a speech for a classroom audience consisting of other students and your professor, you may feel that you know their interests and expectations fairly well. However, we learn public speaking in order to be able to address other audiences where we can do some good. In some cases, your audience might consist of young children who are not ready to accept the fact that a whale is not a fish or that the moon is always round even though it sometimes appears to be a crescent or a half circle. In other cases, your audience might include retirees living on fixed incomes and who therefore might not agree that raising local taxes is a vital “investment in the future.”

Even in an audience that appears to be homogeneous—composed of people who are very similar to one another—different listeners will understand the same ideas in different ways. Every member of every audience has his or her own frame of reference—the unique set of perspectives, experience, knowledge, and values belonging to every individual. An audience member who has been in a car accident caused by a drunk driver might not appreciate a lighthearted joke about barhopping. Similarly,

stressing the importance of graduate school might be discouraging to audience members who don't know whether they can even afford to stay in college to complete an undergraduate degree.

These examples illustrate why audience analysis—the process of learning all you reasonably can about your audience—is so centrally important. Audience analysis includes consideration of demographic information, such as the gender, age range, marital status, race, and ethnicity of the people in your audience. Another, perhaps less obvious, demographic factor is socioeconomic status, which refers to a combination of characteristics including income, wealth, level of education, and occupational prestige. Each of these dimensions gives you some information about which kinds of topics, and which aspects of various topics, will be well received.

Suppose you are preparing to give an informative speech about early childhood health care. If your audience is a group of couples who have each recently had a new baby and who live in an affluent suburb, you can expect that they will be young adults with high socioeconomic status; they will likely be eager to know about the very best available health care for their children, whether they are healthy or have various medical problems. In contrast, if your audience is a group of nurses, they may differ in age, but will be similar in education and occupational prestige. They will already know quite a lot about the topic, so you will want to find an aspect that may be new for them, such as community health care resources for families with limited financial resources or for referring children with special needs. As another example, if you are addressing a city council committee that is considering whether to fund a children's health care initiative, your audience is likely to have very mixed demographics.

Audience analysis also takes into account what market researchers call psychographic information, which is more personal and more difficult to predict than demographics. Psychographic information involves the beliefs, attitudes, and values that your audience members embrace. Respecting your audience means that you avoid offending, excluding, or trivializing the beliefs and values they hold. Returning to the topic of early childhood health care, you can expect new parents to be passionate about wanting the best for their child. The psychographics of a group of nurses would revolve around their professional competence and the need to provide “standard of care” for their patients. In a city council committee meeting, the topic of early childhood health care may be a highly personal and emotional issue for some of your listeners, while for others it may be strictly a matter of dollars and cents.

Consider Audience Diversity

Diversity is a key dimension of audience membership and, therefore, of audience analysis. While the term “diversity” is often used to refer to racial and ethnic minorities, it is important to realize that audiences can be diverse in many other ways as well. Being mindful of diversity means being respectful of all people and striving to avoid racism, ethnocentrism, sexism, ageism, elitism, and other assumptions. An interesting “ism” that is not often mentioned is chronocentrism, or the assumption that people today are superior to people who lived in earlier eras.^[3]

Sociologists John R. Logan and Wenquan Zhang analyzed racial and ethnic diversity in US cities and observed a pattern that rewrites the traditional “rules” of neighborhood change.^[4] Whereas in our grandparents' day a racially mixed neighborhood was one with African American and white residents, in recent decades, many more people from a variety of Asian and Latin American countries have immigrated to the United States. As a result, many cities have neighborhoods that are richly diverse with Asian, Hispanic, and African American cultural influences as well as those of white European Americans. Each cultural group consists of people from many communities and occupations. Each cultural group came to the United States for different reasons and came from different communities and occupations within their original cultures. Even though it can be easy to assume that people from a culture are exactly like each other, we undermine our credibility when we create our message as though members of these cultures are carbon copies of each other.

One of the author's classes included two students from China. During a discussion of cultural similarity and difference, one remarked, “I thought we would have the same tastes in food because we are both from China, but she likes different spices and cooking techniques than I do.”

While race, ethnicity, and culture may be relatively visible aspects of diversity, there are many other aspects that are less obvious, so your audience is often more diverse than you might initially think. Suppose you are going to give a talk on pool safety to residents of a very affluent suburban community—will all your audience members be wealthy? No. There might be some who are unemployed, some who are behind on their mortgage payments, some who live in rented rooms, not to mention some who work as babysitters or housekeepers. Furthermore, if your listeners have some characteristic in common, it doesn't mean that they all think alike. For instance, if your audience consists of people who are members of military families, don't assume that they all have identical beliefs about national security. If there are many business students in your audience, don't assume they all agree about

the relative importance of ethics and profits. Instead, recognize that a range of opinion exists.

This is where the frame of reference we mentioned earlier becomes an important concept. People have a wide variety of reasons for making the choices they make and for doing the things they do. For instance, a business student, while knowing that profitability is important, might have a strong interest in green lifestyles, low energy use, and alternative energy sources, areas of economic development that might require a great deal of investment before profits are realized. In fact, some business students may want to be involved in a paradigm shift away from “business as usual.”

These examples illustrate how important it is to use audience analysis to avoid stereotyping—taking for granted that people with a certain characteristic in common have the same likes, dislikes, values, and beliefs. All members of our audiences deserve to have the same sensitivity and the same respect extended to them as unique individuals. Respecting diversity is not merely a responsibility within public speaking; it should be a responsibility we strive to embrace in all our human interactions.

Avoid Offending Your Audience

It might seem obvious that speakers should use audience analysis to avoid making offensive remarks, but even very experienced speakers sometimes forget this basic rule. If you were an Anglo-American elected official addressing a Latino audience, would you make a joke about a Mexican American person’s name sounding similar to the name of a popular brand of tequila? In fact, a state governor did just that in June 2011. Not surprisingly, news organizations covering the event reported that the joke fell flat.^[5] People are members of groups they didn’t choose and can’t change. We didn’t choose our race, ethnicity, sex, gender identity, age, sexual orientation, intellectual potential, or appearance. We already know that jokes aimed at people because of their membership in these groups are not just politically incorrect but also ethically wrong.

It is not only insensitive humor that can offend an audience. Speakers also need to be aware of language and nonverbal behaviors that state or imply a negative message about people based on their various membership groups. Examples include language that suggests that all scientists are men, that all relationships are heterosexual, or that all ethnic minorities are unpatriotic. By the same token, we should avoid embedding assumptions about people in our messages. Even the most subtle suggestion may not go unnoticed. For example, if, in your speech, you assume that elderly people are frail and expensively medicated, you may offend people whose elder loved ones do not conform in any way to your assumptions.

Scholars Samovar and McDaniel tell us that ethical language choices require four guidelines:

1. Be accurate; present the facts accurately.
2. Be aware of the emotional impact; make sure that you don’t manipulate feelings.
3. Avoid hateful words; refrain from language that disparages or belittles people.
4. Be sensitive to the audience; know how audience members prefer to be identified (e.g., Native American instead of Indian, women instead of girls, African American instead of black, disabled instead of crippled).^[6]

If you alienate your audience, they will stop listening. They will refuse to accept your message, no matter how true or important it is. They might even become hostile. If you fail to recognize the complexity of your audience members and if you treat them as stereotypes, they will resent your assumptions and doubt your credibility.

Ethical Speaking is Sincere Speaking

Ethos is the term Aristotle used to refer to what we now call credibility: the perception that the speaker is honest, knowledgeable, and rightly motivated. Your ethos, or credibility, must be established as you build rapport with your listeners. Have you put forth the effort to learn who they are and what you can offer to them in your speech? Do you respect them as individual human beings? Do you respect them enough to serve their needs and interests? Is your topic relevant and appropriate for them? Is your approach honest and sensitive to their preexisting beliefs? Your ability to answer these questions in a constructive way must be based on the best demographic and psychographic information you can use to learn about your listeners.

The audience needs to know they can trust the speaker’s motivations, intentions, and knowledge. They must believe that the speaker has no hidden motives, will not manipulate or trick them, and has their best interests at heart.

In order to convey regard and respect for the audience, you must be sincere. You must examine the motives behind your topic choice, the true purpose of your speech, and your willingness to do the work of making sure the content of the speech is true and represents reality. This can be difficult for students who face time constraints and multiple demands on their efforts. However,

the attitude you assume for this task represents, in part, the kind of professional, citizen, parent, and human being you want to be. Even if you've given this issue little thought up to now, you can examine your motives and the integrity of your research and message construction. Ethically, you should.

Key Takeaways

- Audience analysis should be conducted so you can acknowledge your audience and their beliefs, knowledge, and attitudes.
- Audience analysis should guide your choice of a topic so that you select a topic that is relevant and useful to them. Controversial topics can be excellent topics, but be sure to consider your audience when selecting your topic and deciding how to approach it.
- Audience analysis requires that you adapt to the needs of your audience; this includes considering cultural diversity, making your message clear, avoiding offensive remarks, and speaking with sincerity.

Exercises

Type your exercises here.

- Brainstorm a list of topics for an informative or persuasive speech. By yourself or with a partner, identify the kinds of information you need about your audience in order to make ethical decisions about how you approach the speech.
- Make a list of values or opinions you have that might not conform to popular views. Why might these be important for a speaker to know before attempting to inform or persuade you?
- Pretend you have been asked to give a speech about environmental conservation in the United States.
- What audience beliefs, attitudes, values, concerns, and other variables should you consider?

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4.5: Three Types of Audience Analysis

Learning Outcomes

- Analyze demographic information to tailor speech content.
- Interpret psychographic information to connect with an audience.
- Assess situational information to adapt speech delivery.

While audience analysis does not guarantee against errors in judgment, it will help you make good choices in topic, language, style of presentation, and other aspects of your speech. The more you know about your audience, the better you can serve their interests and needs. There are certainly limits to what we can learn through information collection, and we need to acknowledge that before making assumptions, but knowing how to gather and use information through audience analysis is an essential skill for successful speakers. In this section, we're going to look at three types of audience analysis: demographic, psychographic, and situational.

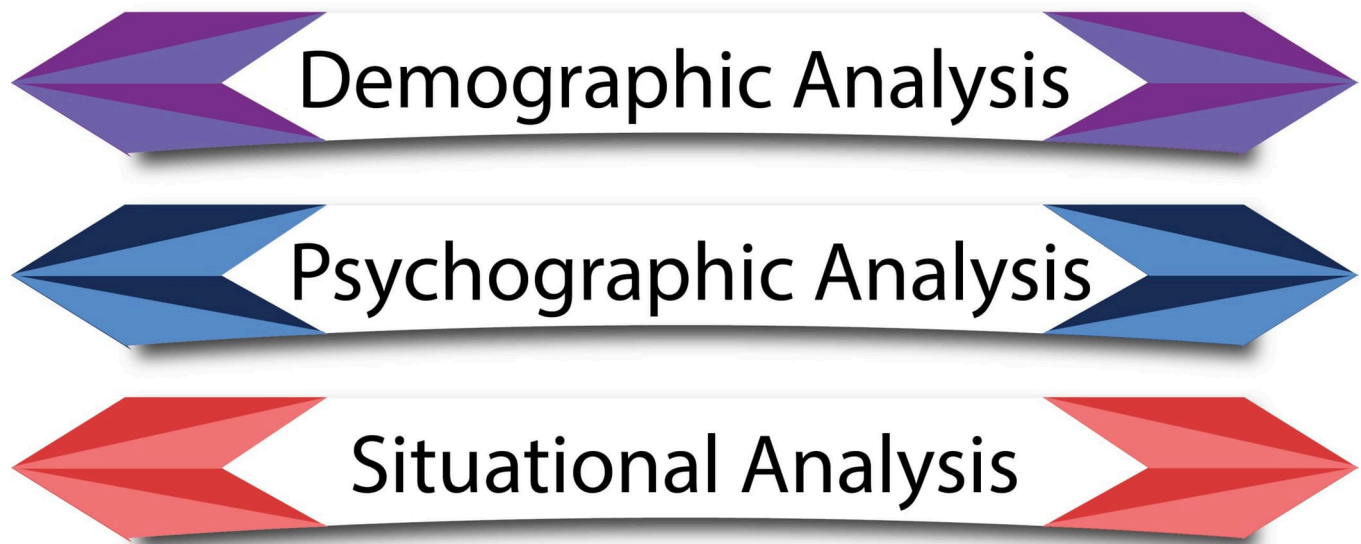


Figure 5.1 Three Types of Audience Analysis

Demographic Analysis

As indicated earlier, demographic information includes factors such as gender, age range, marital status, race and ethnicity, and socioeconomic status. In your public speaking class, you probably already know how many students are male and female, their approximate ages, and so forth. But how can you assess the demographics of an audience ahead of time if you have had no previous contact with them? In many cases, you can ask the person or organization that has invited you to speak; it's likely that they can tell you a lot about the demographics of the people who are expected to come to hear you.

Whatever method you use to gather demographics, exercise respect from the outset. For instance, if you are collecting information about whether audience members have ever been divorced, be aware that not everyone will want to answer your questions. You can't require them to do so, and you may not make assumptions about their reluctance to discuss the topic. You must allow them their privacy.

Age

There are certain things you can learn about an audience based on age. For instance, if your audience members are first-year college students, you can assume that they have grown up in the post-9/11 era and have limited memory of what life was like before the “war on terror.” If your audience includes people in their forties and fifties, it is likely they remember a time when people feared they would contract the AIDS virus from shaking hands with a person who had AIDS or using a public restroom. People who are in their sixties today came of age during the 1960s, the era of the Vietnam War and a time of social confrontation and experimentation. They also have frames of reference that contribute to the way they think, although it may not be easy to predict which side of the issues they support.

Gender

Gender can define human experience. Clearly, most women have had a different cultural experience from that of men within the same culture. Some women have found themselves excluded from certain careers. Some men have found themselves blamed for the limitations imposed on women. In books such as *You Just Don’t Understand* and *Talking from 9 to 5*, linguist Deborah Tannen has written extensively on differences between men’s and women’s communication styles. Tannen explains, “This is not to say that all women and all men, or all boys and girls, behave any one way. Many factors influence our styles, including regional and ethnic backgrounds, family experience and individual personality. But gender is a key factor, and understanding its influence can help clarify what happens when we talk.”^[7]

Marriage tends to impose additional roles on both men and women and divorce even more so, especially if there are children. Even if your audience consists of young adults who have not yet made occupational or marital commitments, they are still aware that gender and the choices they make about issues such as careers and relationships will influence their experience as adults.

Culture

In past generations, Americans often used the metaphor of a “melting pot” to symbolize the assimilation of immigrants from various countries and cultures into a unified, harmonious “American people.” Today, we are aware of the limitations in that metaphor, and have largely replaced it with a multiculturalist view that describes the American fabric as a “patchwork” or a “mosaic.” We know that people who immigrate do not abandon their cultures of origin in order to conform to a standard American identity. In fact, cultural continuity is now viewed as a healthy source of identity.

We also know that subcultures and cocultures exist within and alongside larger cultural groups. For example, while we are aware that Native American people do not all embrace the same values, beliefs, and customs as mainstream white Americans, we also know that members of the Navajo nation have different values, beliefs, and customs from those of members of the Sioux or the Seneca. We know that African American people in urban centers like Detroit and Boston do not share the same cultural experiences as those living in rural Mississippi. Similarly, white Americans in San Francisco may be culturally rooted in the narrative of distant ancestors from Scotland, Italy, or Sweden or in the experience of having emigrated much more recently from Australia, Croatia, or Poland.

Not all cultural membership is visibly obvious. For example, people in German American and Italian American families have widely different sets of values and practices, yet others may not be able to differentiate members of these groups. Differences are what make each group interesting and are important sources of knowledge, perspectives, and creativity.

Religion

There is wide variability in religion as well. The Pew Forum on Religion and Public Life found in a nationwide survey that 84 percent of Americans identify with at least one of a dozen major religions, including Christianity, Judaism, Buddhism, Islam, Hinduism, and others. Within Christianity alone, there are half a dozen categories including Roman Catholic, Mormon, Jehovah’s Witness, Orthodox (Greek and Russian), and a variety of Protestant denominations. Another 6 percent said they were unaffiliated but religious, meaning that only one American in ten is atheist, agnostic, or “nothing in particular.”^[8]

Even within a given denomination, a great deal of diversity can be found. For instance, among Roman Catholics alone, there are people who are devoutly religious, people who self-identify as Catholic but do not attend mass or engage in other religious practices, and others who faithfully make confession and attend mass but who openly question Papal doctrine on various issues. Catholicism among immigrants from the Caribbean and Brazil is often blended with indigenous religion or with religion imported

from the west coast of Africa. It is very different from Catholicism in the Vatican.

The dimensions of diversity in the religion demographic are almost endless, and they are not limited by denomination. Imagine conducting an audience analysis of people belonging to an individual congregation rather than a denomination: even there, you will most likely find a multitude of variations that involve how one was brought up, adoption of a faith system as an adult, how strictly one observes religious practices, and so on.

Yet, even with these multiple facets, religion is still a meaningful demographic lens. It can be an indicator of probable patterns in family relationships, family size, and moral attitudes.

Group Membership

In your classroom audience alone, there will be students from a variety of academic majors. Every major has its own set of values, goals, principles, and codes of ethics. A political science student preparing for law school might seem to have little in common with a student of music therapy, for instance. In addition, there are other group memberships that influence how audience members understand the world. Fraternities and sororities, sports teams, campus organizations, political parties, volunteerism, and cultural communities all provide people with ways of understanding the world as it is and as we think it should be.

Because public speaking audiences are very often members of one group or another, group membership is a useful and often easy to access facet of audience analysis. The more you know about the associations of your audience members, the better prepared you will be to tailor your speech to their interests, expectations, and needs.

Education

Education is expensive, and people pursue education for many reasons. Some people seek to become educated, while others seek to earn professional credentials. Both are important motivations. If you know the education levels attained by members of your audience, you might not know their motivations, but you will know to what extent they could somehow afford the money for an education, afford the time to get an education, and survive educational demands successfully.

The kind of education is also important. For instance, an airplane mechanic undergoes a very different kind of education and training from that of an accountant or a software engineer. This means that not only the attained level of education but also the particular field is important in your understanding of your audience.

Occupation

People choose occupations for reasons of motivation and interest, but their occupations also influence their perceptions and their interests. There are many misconceptions about most occupations. For instance, many people believe that teachers work an eight-hour day and have summers off. When you ask teachers, however, you might be surprised to find out that they take work home with them for evenings and weekends, and during the summer, they may teach summer school as well as taking courses in order to keep up with new developments in their fields. But even if you don't know those things, you would still know that teachers have had rigorous generalized and specialized qualifying education, that they have a complex set of responsibilities in the classroom and the institution, and that, to some extent, they have chosen a relatively low-paying occupation over such fields as law, advertising, media, fine and performing arts, or medicine. If your audience includes doctors and nurses, you know that you are speaking to people with differing but important philosophies of health and illness. Learning about those occupational realities is important in avoiding wrong assumptions and stereotypes. We insist that you not assume that nurses are merely doctors "lite." Their skills, concerns, and responsibilities are almost entirely different, and both are crucially necessary to effective health care.

Psychographic Analysis

Earlier, we mentioned psychographic information, which includes such things as values, opinions, attitudes, and beliefs. Authors Grice and Skinner present a model in which values are the basis for beliefs, attitudes, and behaviors.^[9] Values are the foundation of their pyramid model. They say, "A value expresses a judgment of what is desirable and undesirable, right and wrong, or good and evil. Values are usually stated in the form of a word or phrase. For example, most of us probably share the values of equality, freedom, honesty, fairness, justice, good health, and family. These values compose the principles or standards we use to judge and develop our beliefs, attitudes, and behaviors."

It is important to recognize that, while demographic information as discussed in Section 2 is fairly straightforward and verifiable, psychographic information is much less clear-cut. Two different people who both say they believe in equal educational opportunity may have very different interpretations of what “equal opportunity” means. People who say they don’t buy junk food may have very different standards for what specific kinds of foods are considered “junk food.”

We also acknowledge that people inherit some values from their family upbringing, cultural influences, and life experiences. The extent to which someone values family loyalty and obedience to parents, thrift, humility, and work may be determined by these influences more than by individual choice.

Psychographic analysis can reveal preexisting notions that limit your audience’s frame of reference. By knowing about such notions ahead of time, you can address them in your speech. Audiences are likely to have two basic kinds of preexisting notions: those about the topic and those about the speaker.

Preexisting Notions About Your Topic

Many things are a great deal more complex than we realize. Media stereotypes often contribute to our oversimplifications. For instance, one of your authors, teaching public speaking in the past decade, was surprised to hear a student claim that “the hippies meant well, but they did it wrong.” Aside from the question of the “it” that was done wrong, there was a question about how little the student actually knew about the diverse hippy cultures and their aspirations. The student seemed unaware that some of “the hippies” were the forebears of such things as organic bakeries, natural food co-ops, urban gardens, recycling, alternative energy, wellness, and other arguably positive developments.

It’s important to know your audience in order to make a rational judgment about how their views of your topic might be shaped. In speaking to an audience that might have differing definitions, you should take care to define your terms in a clear, honest way.

At the opposite end from oversimplification is the level of sophistication your audience might embody. Your audience analysis should include factors that reveal it. Suppose you are speaking about trends in civil rights in the United States. You cannot pretend that the advancement of civil rights is virtually complete nor can you claim that no progress has been made. It is likely that in a college classroom, the audience will know that although much progress has been made, there are still pockets of prejudice, discrimination, and violence. When you speak to an audience that is cognitively complex, your strategy must be different from one you would use for an audience that is less educated in the topic. With a cognitively complex audience, you must acknowledge the overall complexity while stating that your focus will be on only one dimension. With an audience that’s uninformed about your topic, that strategy in a persuasive speech could confuse them; they might well prefer a black-and-white message with no gray areas. You must decide whether it is ethical to represent your topic this way.

When you prepare to do your audience analysis, include questions that reveal how much your audience already knows about your topic. Try to ascertain the existence of stereotyped, oversimplified, or prejudiced attitudes about it. This could make a difference in your choice of topic or in your approach to the audience and topic.

Preexisting Notions About You

People form opinions readily. For instance, we know that students form impressions of teachers the moment they walk into our classrooms on the first day. You get an immediate impression of our age, competence, and attitude simply from our appearance and nonverbal behavior. In addition, many have heard other students say what they think of us.

The same is almost certainly true of you. But it’s not always easy to get others to be honest about their impressions of you. They’re likely to tell you what they think you want to hear. Sometimes, however, you do know what others think. They might think of you as a jock, a suit-wearing conservative, a nature lover, and so on. Based on these impressions, your audience might expect a boring speech, a shallow speech, a sermon, and so on. However, your concern should still be serving your audience’s needs and interests, not debunking their opinions of you or managing your image. In order to help them be receptive, you address their interests directly, and make sure they get an interesting, ethical speech.

Situational Analysis

The next type of analysis is called the situational audience analysis because it focuses on characteristics related to the specific speaking situation. The situational audience analysis can be divided into two main questions:

How many people came to hear my speech and why are they here? What events, concerns, and needs motivated them to come? What is their interest level, and what else might be competing for their attention?

What is the physical environment of the speaking situation? What is the size of the audience, layout of the room, existence of a podium or a microphone, and availability of digital media for visual aids? Are there any distractions, such as traffic noise?

Audience Size

In a typical class, your audience is likely to consist of twenty to thirty listeners. This audience size gives you the latitude to be relatively informal within the bounds of good judgment. It isn't too difficult to let each audience member feel as though you're speaking to him or her. However, you would not become so informal that you allow your carefully prepared speech to lapse into shallow entertainment. With larger audiences, it's more difficult to reach out to each listener, and your speech will tend to be more formal, staying more strictly within its careful outline. You will have to work harder to prepare visual and audio material that reaches the people sitting at the back of the room, including possibly using amplification.

Occasion

There are many occasions for speeches. Awards ceremonies, conventions and conferences, holidays, and other celebrations are some examples. However, there are also less joyful reasons for a speech, such as funerals, disasters, and the delivery of bad news. As always, there are likely to be mixed reactions. For instance, award ceremonies are good for community and institutional morale, but we wouldn't be surprised to find at least a little resentment from listeners who feel deserving but were overlooked. Likewise, for a speech announcing bad news, it is likely that at least a few listeners will be glad the bad news wasn't even worse. If your speech is to deliver bad news, it's important to be honest but also to avoid traumatizing your audience. For instance, if you are a condominium board member speaking to a residents' meeting after the building was damaged by a hurricane, you will need to provide accurate data about the extent of the damage and the anticipated cost and time required for repairs. At the same time, it would be needlessly upsetting to launch into a graphic description of injuries suffered by people, animals, and property in neighboring areas not connected to your condominium complex.

Some of the most successful speeches benefit from situational analysis to identify audience concerns related to the occasion. For example, when the President of the United States gives the annual State of the Union address, the occasion calls for commenting on the condition of the nation and outlining the legislative agenda for the coming year. The speech could be a formality that would interest only "policy wonks," or with the use of good situational audience analysis, it could be a popular event, reinforcing the connection between the president and the American people. [The American Presidency Project](#) has a database with all of the Presidential State of the Union Addresses. Look at the history of State of the Union Addresses. You'll often find that the speeches are tailored to the political, social, and economic situations facing the United States at those times.

Voluntariness of Audience

A voluntary audience gathers because they want to hear the speech, attend the event, or participate in an event. A classroom audience, in contrast, is likely to be a captive audience. Captive audiences are required to be present or feel obligated to do so. Given the limited choices perceived, a captive audience might give only grudging attention. Even when there's an element of choice, the likely consequences of nonattendance will keep audience members from leaving. The audience's relative perception of choice increases the importance of holding their interest.

Whether or not the audience members chose to be present, you want them to be interested in what you have to say. Almost any audience will be interested in a topic that pertains directly to them. However, your audience might also be receptive to topics that are indirectly or potentially pertinent to their lives. This means that if you choose a topic such as advances in the treatment of spinal cord injury or advances in green technology, you should do your best to show how these topics are potentially relevant to their lives or careers.

However, there are some topics that appeal to audience curiosity even when it seems there's little chance of direct pertinence. For instance, topics such as Blackbeard the pirate or ceremonial tattoos among the Maori might pique the interests of various audiences. Depending on the instructions you get from your instructor, you can consider building an interesting message about something outside the daily foci of our attention.

Physical Setting

The physical setting can make or break even the best speeches, so it is important to exercise as much control as you can over it. In your classroom, conditions might not be ideal, but at least the setting is familiar. Still, you know your classroom from the perspective of an audience member, not a speaker standing in the front—which is why you should seek out any opportunity to rehearse your speech during a minute when the room is empty. If you will be giving your presentation somewhere else, it is a good idea to visit the venue ahead of time if at all possible and make note of any factors that will affect how you present your speech. In any case, be sure to arrive well in advance of your speaking time so that you will have time to check that the microphone works, to test out any visual aids, and to request any needed adjustments in lighting, room ventilation, or other factors to eliminate distractions and make your audience more comfortable.

Key Takeaways

- Demographic audience analysis focuses on group memberships of audience members.
- Another element of audience is psychographic information, which focuses on audience attitudes, beliefs, and values.
- Situational analysis of the occasion, physical setting, and other factors are also critical to effective audience analysis.

Exercises

- List the voluntary (political party, campus organization, etc.) and involuntary (age, race, sex, etc.) groups to which you belong. After each group, write a sentence or phrase about how that group influences your experience as a student.
- Visit [zillow.com](https://www.zillow.com) and report on the demographic information found for several different towns or zip codes. How would this information be useful in preparing an audience analysis?
- In a short paragraph, define the term “fairness.” Compare your definition with someone else’s definition. What factors do you think contributed to differences in definition?
- With a partner, identify an instance when you observed a speaker give a poor speech due to failing to analyze the situation. What steps could the speaker have taken to more effectively analyze the situation?

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4.6: Conducting an Audience Analysis

Learning Outcomes

- Use several tools for gathering audience information.
- Create effective tools for gathering audience information.

Now that we have described what audience analysis is and why it is important, let's examine some details of how to conduct it. Exactly how can you learn about the people who will make up your audience?

Direct Observation

One way to learn about people is to observe them. By observing nonverbal patterns of behavior, you can learn a great deal as long as you are careful how you interpret the behaviors. For instance, do people greet each other with a handshake, a hug, a smile, or a nod? Do members of opposite sexes make physical contact? Does the setting suggest more conservative behavior? By listening in on conversations, you can find out the issues that concern people. Are people in the campus center talking about political unrest in the Middle East? About concerns over future Pell Grant funding? We suggest that you consider the ethical dimensions of eavesdropping, however. Are you simply overhearing an open conversation, or are you prying into a highly personal or private discussion?

Interviews and Surveys



Image by [Tungilik](#) on Wikimedia

Because your demographic analysis will be limited to your most likely audience, your most accurate way to learn about them is to seek personal information through interviews and surveys. An interview is a one-on-one exchange in which you ask questions of a respondent, whereas a survey is a set of questions administered to several—or, preferably, many—respondents. Interviews may be conducted face-to-face, by phone, or by written means, such as texting. They allow more in-depth discussion than surveys, and they are also more time consuming to conduct. Surveys are also sometimes conducted face-to-face or by phone, but online surveys are increasingly common. You may collect and tabulate survey results manually, or set up an automated online survey through the free or subscription portals of sites like Survey Monkey and Qualtrics. Using an online survey provides the advantage of keeping responses anonymous, which may increase your audience members' willingness to participate and to answer personal questions. Surveys are an efficient way to collect information quickly; however, in contrast to interviews, they don't allow for follow-

up questions to help you understand why your respondent gave a certain answer.

When you use interviews and surveys, there are several important things to keep in mind:

- Make sure your interview and survey questions are directly related to your speech topic. Do not use interviews to delve into private areas of people's lives. For instance, if your speech is about the debate between creationism and evolution, limit your questions to their opinions about that topic; do not meander into their beliefs about sexual behavior or their personal religious practices.
- Create and use a standard set of questions. If you "ad lib" your questions so that they are phrased differently for different interviewees, you will be comparing "apples and oranges" when you compare the responses you've obtained.
- Keep interviews and surveys short, or you could alienate your audience long before your speech is even outlined. Tell them the purpose of the interview or survey and make sure they understand that their participation is voluntary.
- Don't rely on just a few respondents to inform you about your entire audience. In all likelihood, you have a cognitively diverse audience. In order to accurately identify trends, you will likely need to interview or survey at least ten to twenty people.

In addition, when you conduct interviews and surveys, keep in mind that people are sometimes less than honest in describing their beliefs, attitudes, and behavior. This widely recognized weakness of interviews and survey research is known as socially desirable responding: the tendency to give responses that are considered socially acceptable. Marketing professor Ashok Lalwani divides socially desirable responding into two types: (1) impression management, or intentionally portraying oneself in a favorable light and (2) self-deceptive enhancement, or exaggerating one's good qualities, often unconsciously.^[10]

You can reduce the effects of socially desirable responding by choosing your questions carefully. As marketing consultant Terry Vavra advises, "one should never ask what one can't logically expect respondents to honestly reveal."^[11] For example, if you want to know audience members' attitudes about body piercing, you are likely to get more honest answers by asking "Do you think body piercing is attractive?" rather than "How many piercings do you have and where on your body are they located?"

Focus Groups

A close-up photo of a desk setup with a yellow notepad on a clipboard that has the words "focus groups" written in blue text. Surrounding the notepad are a silver keyboard, a blue pen, eyeglasses, a blue highlighter, and a blue calculator. The image visually represents planning or organizing a focus group session, often used in research or marketing to gather qualitative data.

Image by [Nick Youngson](#) on Pix4free

A focus group is a small group of people who give you feedback about their perceptions. As with interviews and surveys, in a focus group you should use a limited list of carefully prepared questions designed to get at the information you need to understand their beliefs, attitudes, and values specifically related to your topic.

If you conduct a focus group, part of your task will be striking a balance between allowing the discussion to flow freely according to what group members have to say and keeping the group focused on the questions. It's also your job to guide the group in maintaining responsible and respectful behavior toward each other.

In evaluating focus group feedback, do your best to be receptive to what people had to say, whether or not it conforms to what you expected. Your purpose in conducting the group was to understand group members' beliefs, attitudes, and values about your topic, not to confirm your assumptions.

Using Existing Data About Your Audience

Occasionally, existing information will be available about your audience. For instance, if you have a student audience, it might not be difficult to find out what their academic majors are. You might also be able to find out their degree of investment in their educations; for instance, you could reasonably assume that the seniors in the audience have been successful students who have invested at least three years pursuing a higher education. Sophomores have at least survived their first year but may not have matched the seniors in demonstrating strong values toward education and the work ethic necessary to earn a degree.

In another kind of an audience, you might be able to learn other significant facts. For instance, are they veterans? Are they retired teachers? Are they members of a voluntary civic organization such as the Lions Club or Mothers Against Drunk Driving (MADD)? This kind of information should help you respond to their concerns and interests.

In other cases, you may be able to use demographics collected by public and private organizations. Demographic analysis is done by the [U.S. Census Bureau](#) through the [American Community Survey](#), which is conducted every year, and through other specialized demographic surveys. The Census Bureau analysis generally captures information about people in all the regions of the United States, but you can drill down in Census data to see results by state, age group, gender, race, and other factors.

Demographic information about narrower segments of the United States, down to the level of individual zip codes, is available through private organizations such as The Nielsen Company (www.nielsen.com/), Sperling's Best Places (www.bestplaces.net/), and Point2Homes (www.point2homes.com/). Sales and marketing professionals use this data, and you may find it useful for your audience analysis as well.

Key Takeaways

- Several options exist for learning about your audience, including direct observation, interviews, surveys, focus groups, and using existing research about your audience.
- In order to create effective tools for audience analysis, interview and survey questions must be clear and to the point, focus groups must be facilitated carefully, and you must be aware of multiple interpretations of direct observations or existing research about your audience.

Exercises

- Write a coherent set of four clear questions about a given issue, such as campus library services, campus computer centers, or the process of course registration. Make your questions concrete and specific in order to address the information you seek. Do not allow opportunities for your respondent to change the subject. Test out your questions on a classmate.
- Write a set of six questions about public speaking anxiety to be answered on a Likert-type scale (strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree).
- Create a seven-question set designed to discover your audience's attitudes about your speech topic. Have a partner evaluate your questions for clarity, respect for audience privacy, and relevance to your topic.

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4.7: Using Existing Data About Your Audience

Occasionally, existing information will be available about your audience. For instance, if you have a student audience, it might not be difficult to find out what their academic majors are. You might also be able to find out their degree of investment in their educations; for instance, you could reasonably assume that the seniors in the audience have been successful students who have invested at least three years pursuing a higher education. Sophomores have at least survived their first year but may not have matched the seniors in demonstrating strong values toward education and the work ethic necessary to earn a degree.

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Exercises

- Write a coherent set of four clear questions about a given issue, such as campus library services, campus computer centers, or the process of course registration. Make your questions concrete and specific in order to address the information you seek. Do not allow opportunities for your respondent to change the subject. Test out your questions on a classmate.
- Write a set of six questions about public speaking anxiety to be answered on a Likert-type scale (strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree).
- Create a seven-question set designed to discover your audience's attitudes about your speech topic. Have a partner evaluate your questions for clarity, respect for audience privacy, and relevance to your topic.

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4.8: Chapter Exercises

Speaking Ethically

You've got to be kidding me, Fatima thought to herself as she received the e-mail from her boss. She reread the e-mail hoping that something would change on the screen: "Fatima, I need you to prepare a presentation on what our company has done in the past year for Mrs. Jorgensen. She's old, keep it simple. Leave out any of the complex material because it will probably just bore her anyways.—John."

Fatima joined R & R Consulting right after Anthony Jorgensen, the founder and CEO, had passed away. While Penelope Jorgensen inherited the major stake in the firm and was still listed as the firm's CEO, the day-to-day running of operations was given to John Preston, the chief operating officer.

Fatima stared at her screen and wondered to what extent she should follow John's advice and "keep it simple." She'd only met Mrs. Jorgensen twice, but she'd always seemed to be pretty knowledgeable about the inner workings of the firm. Sure Mrs. Jorgensen wasn't an expert in the field, but should she be treated like a helpless little old lady? Not only is that sexist, it's completely ageist! On the other hand, John's words may have been chosen poorly, but maybe all Mrs. Jorgensen really wanted was a quick snapshot of what's going on here?

1. Fatima sat in silence for a few minutes, opened up PowerPoint, and just stared at her monitor trying to figure out the best way to proceed.
2. Do you think John's e-mail to Fatima expressed unethical audience analysis? Why or why not?
3. How do you think Fatima should proceed?

End Of Chapter Assessment

1. George wants to persuade his audience to purchase more locally produced foods. He decides he needs to know how his audience members already feel about this topic and whether they know about locally produced options. George's audience analysis focuses on gathering
 - a. demographic information
 - b. psychographic information
 - c. situational information
 - d. statistical information
 - e. religious information
2. Freya wants to give her classroom an informative speech on the dangers of drunk driving. You suggest that this might not be a good topic because the audience of college students probably
 - a. will not understand the topic
 - b. will not be interested in drinking
 - c. are not culturally diverse
 - d. do not believe in drinking because of their religious background
 - e. already know a lot about the topic
3. Yukhi will be giving a speech at the local Elks Lodge in a few weeks and wants to know more about her audience. She decides to attend one of the group's meetings so she gets a sense of what the group does and who its members are. Yukhi is engaging in which method of audience analysis?
 - a. interviews
 - b. focus group
 - c. survey
 - d. experiment
 - e. direct observation
4. Penelope is going to be speaking in front of her daughter's Parent-Teacher Association. When thinking about her audience, she realizes that most of the people in her audience are the same sex, socioeconomic bracket, religious background, ethnicity, and age. What type of audience is Penelope speaking to?
 - a. heterogeneous audience
 - b. homogenous audience

- c. captive audience
 - d. volunteer audience
 - e. referenced audience
5. Jerry has been asked to speak about financial literacy to a group of business professionals. To ascertain his audience's understanding of finances, he puts together a series of questions and posts them on a website where his audience members can complete the questionnaire. What tool is Jerry using to complete his audience analysis?
- a. focus group
 - b. interview
 - c. direct observation
 - d. ethnographic analysis
 - e. survey

Answer Key

- 1. b
- 2. e
- 3. e
- 4. b
- 5. e

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5: WHERE ARGUMENTS CONFLICT

- 5.1: Responding to an Argument
- 5.2: Skepticism
- 5.3: Fight or Flight?
- 5.4: Ways to Disagree
- 5.5: Two Sides to an Argument
- 5.6: Toulmin Approach to Argument
- 5.7: Counter Argument Strategies
- 5.8: No Absolute Certainties
- 5.9: Arguing from the Con-Side
- 5.10: Using Toulmin To Develop Con Strategies
- 5.11: Creating A Counter Argument
- 5.12: Con side Case Alternatives
- 5.13: The Focus of This Chapter

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- [3: Clash](#) by Jim Marteney is licensed [CC BY-NC 4.0](#).

5.1: Responding to an Argument

Your long time romantic partner comes to you and says, “*You don’t love me anymore.*” You just stand there. Stunned. Too startled to speak. Hearing you not say anything your partner turns around walks away saying, “*That’s what I thought.*”

What just happened? By you not answering, your partner assumed you agreed with the statement. Your failure to engage in an argument implied that you had nothing to contradict the statement. Your failure to clash led to the belief that you agreed with the statement, thus no argument.

If you do disagree with someone’s statement, you need to learn how to clash with him or her.



3.1.1: “Portrait of Sir Thomas More” (Public Domain; [Hans Holbein the Younger](#) via [Wikimedia Commons](#))

If we look at this interaction through the lenses of this text, your partner is considered the pro-side, because they have made the claim that you don’t love them. They have presented their argument which in this case is just the statement of the claim “*You don’t love me.*” You, the con-side, must now respond or else the pro-side’s position is upheld automatically. Why?

“Silence means consent”

The maxim is Qui tacet consentiret: the maxim of the law is “Silence gives consent”.

– *Sir Thomas Moore*

There is a famous maxim that states, “*Silence means consent.*” That is if the pro-side makes an argument and the con-side says nothing, the implication is that the con-side agrees with the pro-side. There is no controversy, thus no argument.

I was writing a letter that was going out to all the members of an organization to which I belong. I sent out a final draft to the nine committee members for one last check. I heard from three of them. I did not hear from the other six members so I reasonably assumed that they had no objections.

Now I agree that in a social situation, silence could mean that the person is merely tired of arguing. They still may not agree, but they no longer want to spend the time or energy fighting. In a structured argument, however, it is important for those who disagree to fulfill their responsibility and respond to the initial argument. If not, then the argument is over.

Clash occurs when there is a disagreement. In an argument, responding to the pro-side is referred to as clash. When the pro-side presents their argument and the con-side says nothing, there is no clash. Only when the con-side makes their argument against the pro-side then clash occurs and we have a genuine argument.

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5.2: Skepticism

Our first step involves being skeptical of new ideas and arguments. When someone tells you something or you read it over the internet or see it on television, are you more likely to believe it or disbelieve it? As long as it does not clash with previous beliefs we hold, science suggests that we are more likely to accept new information. In fact, in order to understand a new concept our minds must first accept the concept to even understand what it means.

In a landmark 1991 paper, Harvard psychologist Dan Gilbert proposed that we process information in two steps. First, we accept information as true, and then we interrogate whether it may actually be false. In other words, we let the Trojan horse past the gate before we check to see if it's full of Greek soldiers. "Humans," wrote Gilbert, are "very credulous creatures who find it very easy to believe and very difficult to doubt."

*Cognitive Science Offers Tools To Rebuff Climate Deniers*¹

As Dan Gilbert argues, understanding a new idea requires two steps.

- Accept that the new information is accurate to understand the new ideas.
- Once the ideas are understood, then test them to see if they are accurate.

Silence Does Not Always Mean Consent, Especially in Romance

Silence means consent is not an actual legal term and should not actually be relied on for all situations. This is especially accurate when "romance" is involved. More and more social situations, however, demand that if romantic advances are being made by an individual, that person must receive an affirmation of those advances before the romance is continued. Silence here does not mean consent.

But as you might imagine, once we accept the accuracy of a concept it becomes a challenge to then reject it. Since we are naturally prone to accept new information, our human nature is not to be initially skeptical. Being skeptical is a skill we must develop.

Our skepticism skill is challenged even more when we are presented with many "lies." Again, **Jeremy Deaton** writes:

- Human brains are built to ward off singular untruths, but we struggle against an army. When faced with an onslaught of lies, our defenses falter, letting alternative facts slip past the barricade. There are several reasons why this is the case. Here are three:
 - It takes energy to scrutinize a lie.
 - It takes more energy to scrutinize it when we hear that lie again and again.
 - We don't like to scrutinize a lie that supports our worldview.²

There is a misconception over what it means to be skeptical and I am guessing that now is a good time to clearly define what it means to be skeptical. **Michael Shermer** is the publisher of Skeptic magazine and is frequently asked what it means to be a skeptic. He answers this question by saying,

As the publisher of Skeptic magazine, I am often asked what I mean by skepticism, and if I'm skeptical of everything or if I actually believe anything. Skepticism is not a position that you stake out ahead of time and stick to no matter what.

...science and skepticism are synonymous, and in both cases, it's okay to change your mind if the evidence changes. It all comes down to this question: What are the facts in support or against a particular claim?

There is also a popular notion that skeptics are closed-minded. Some even call us cynics. In principle, skeptics are neither closed-minded nor cynical. We are curious but cautious.³

This passage by Shermer points out **four key thoughts about skeptics**:

- No position is staked out ahead of time. This allows for you to examine the argument with an open mind and then decide whether you accept it or reject it.
- Skepticism follows the procedure of scientific inquiry looking to see if the evidence provided in the argument adequately supports the claim.
- It is okay to change your mind. You may have one position, but after listening to a new argument, with new and additional evidence you can now make a better decision and actually changing your mind is a good thing.
- Skeptics are not cynics. Instead Skeptics are curious, but are cautious and resist leaping to a comfortable conclusion.

An additional and often used method of learning a concept is to look at the origin of a word. For those of you who want to impress your friends, the term for this is *etymology*. The *Basics of Philosophy* website has a nice, brief examination of the term skeptic.

*The term is derived from the Greek verb "skeptomai" (which means "to look carefully, to reflect"), and the early Greek Skeptics were known as the Skeptikoi. In everyday usage, Skepticism refers to an attitude of doubt or incredulity, either in general or toward a particular object, or to any doubting or questioning attitude or state of mind. It is effectively the opposite of dogmatism, the idea that established beliefs are not to be disputed, doubted or diverged from.*⁴ (Maston, 2008)

I like the idea that this passage clearly states that being a skeptic is the opposite of being dogmatic.

Jamie Hale describes the difference between being cynical and being a skeptic.

*"Cynics are distrustful of any advice or information that they do not agree with themselves. Cynics do not accept any claim that challenges their belief system. While skeptics are open-minded and try to eliminate personal biases, cynics hold negative views and are not open to evidence that refutes their beliefs. Cynicism often leads to dogmatism."*⁵

He continues by stating that dogmatism "opposes independent thinking and reason." If we want to be successful critical thinkers we need to become much more skeptical and less cynical.

In his TEDTalk Michael Shermer explains the relationship between the process of skepticism and science.



3.2.1: "Photo of Michael Shermer" (CC BY 3.0; Loxton via Wikimedia Commons)

Skeptics question the validity of a particular claim by calling for evidence to prove or disprove it. In other words, skeptics are from Missouri -- the "Show Me" state. When we skeptics hear a fantastic claim, we say, "That's interesting, show me the evidence for it."⁶

A key goal here is to encourage you to be more skeptical. Instead of blindly accepting or rejecting claims made by others, take the time to demand proof. Make the person or organization prove the claim they are making. And remember, you need to be open minded when listening to the argument.

Over three centuries ago the French philosopher and skeptic René Descartes, after one of the most thorough skeptical purges in

intellectual history, concluded that he knew one thing for certain: “Cogito ergo sum” — “I think therefore I am.”

By a similar analysis, to be human is to think. Therefore, to paraphrase Descartes: *Sum Ergo Cogito —I Am Therefore I Think* ⁷

An effective critical thinker who is successful in arguing is a person who is more skeptical of the messages they receive. This advice is not just for those who wish to be argumentative. This advice is for every citizen.

“What we all need, as citizens, is to develop more skill in applying our skepticism. We need to spot false narratives, and also turn aside those who would replace them with pure fiction. Either we get this right or we cease to be free citizens.” ⁸

The problem we all experience is that it is not natural to be skeptical. Our natural state is to either flee a conflict or stand and argue. This can be explained by how our brains are structured.

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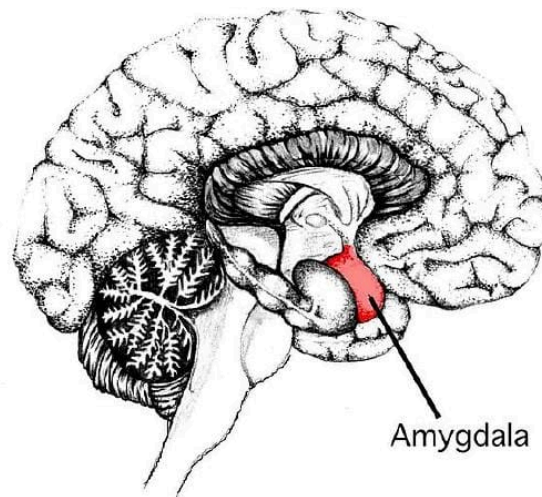
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5.3: Fight or Flight?

All of your information from your senses goes first to a part of the brain called the Thalamus. We call the thalamus the “flight control center” of the brain. It takes in all of your senses, your hearing, sight, touch and decides how to route the messages it is receiving. One route takes the messages to the cerebral cortex, where our skill in decision-making allows us to contemplate alternatives and make a decision. But if the thalamus is triggered by more intense perceptions, the message goes straight to the Amygdala for action.



3.3.1: “Amygdala” (Public Domain; [Sgerstenberg](#) via [Wikimedia Commons](#))

We all have an emotional brain that resides in the limbic system, located on top of the brain stem and buried under the cortex. When faced with the stress of an argument, your first reaction is a physical one that begins in an almond sized organ towards the bottom of your brain, called the amygdala. This organ actually keeps a record of your past dangerous experiences and strives to protect you from future harm. As soon as this organ perceives danger, it sends a distress signal to the hypothalamus.

You are taking a nice stroll outdoors when suddenly a snake slithers up on the path in front of you. Emotions are triggered. Oh no, this snake might strike and kill me. Do I stay and defend myself, or flee? You are experiencing, *Fight or Flight*.

This just doesn’t happen out in the wilderness. It can also happen at work. Your boss is looking for you to assign you a major project. Emotions are triggered, “Oh no I can’t do this,” or “My boss is trying to kill me.” Immediately you think, “I am going to stay and tell him that I can’t do this.” Or “Where can I hide?” This is Fight or Flight.

When the thalamus becomes aware of an emotionally charged perception, the amygdala is sent that perception. Snake! Or Project! Your amygdala has access to your memory and quickly relates the current situation to one of those past memories so it can immediately act. Only later will it look to the logical part of the brain for alternative reactions.

The amygdala swings into action. Immediately:

- Past memories of similar situations are examined
- Adrenaline is pumped into the body which prompts quicker physical reaction
- A surge of energy is experienced
- Stress hormones are activated
- Your pain threshold gets higher

These processes are so intense it may take you 20 minutes before you can get these emotions under control and allow the more logical part of the brain to take over and help with the decisions. This, by the way, explains road rage and why we should wait until the next day to respond to an email that has angered us.

While in this condition, you lose the ability for in depth thinking. The amygdala does not want you to look curiously at the snake and wonder, “*What type is it?*” No, it recognizes potential danger and is preparing you for survival. If you have ever had a stressful situation and then asked yourself afterwards, “*What was I thinking?*” The answer is, you weren’t. The brain was preparing you for your “fight or flight” mode and not allowing you to really think. There is no time to think. This is also an explanation for why we often think of something very witty to say to someone, after they have left.

If the situation is so emotionally charged, like a snake or project, then the emotions may totally take over your thoughts and reactions, creating a condition called “*emotional hijack*.” A way of expressing emotional hijacking is road rage. The impact of the perception is so strong that the emotions take over. Logic does not enter into it. Think about the time your partner did something that finally was the proverbial “last straw” or someone you may be supervising made the same mistake for the tenth time. Did you make an outburst that you now wish had been handled in a different way? All of this happens, before the rational part of our brain, the cerebrum, is asked for guidance.

Now, if we can get the amygdala under a bit of control, our cerebrum is notified of the danger and we now have a chance to think of alternative actions. Instead of just responding with the first reaction that occurs from our memory, we now have the opportunity for more in depth thinking.

A very useful formula to remember is **E + R = O**.

- “**E**” stands for Event and refers to some action that has happened to you.
- “**R**” stands for either Reaction or Response. Reaction is our quick, unthinking answer to an action while a Response is more of a thought our answer where we look at alternatives and select the best one for us in that situation.
- “**O**” stands for Outcome.

We can't always control the Event that happen to us, but we can create more desirable Outcomes if we Respond to a situation instead of just Reacting to it.

I find it very interesting that your brain gets you ready to either fight a perceived danger or flee from a perceived danger. Even before you are totally aware of the threat, you are in that state of fight or flight. Do you flee or stay and fight? I am hoping that this text will give you the skills to stay and fight in arguments and not flee from them. There are certainly a variety of ways to disagree with someone.

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5.4: Ways to Disagree

When we arrive at a point where we disagree with the claim being made, we find that there are several ways we can respond. In his essay, *How to Disagree*, Paul Graham describes a hierarchy of seven ways a person can respond to an argument. Here is his list starting with the most basic way people react to a disagreement and working up to a more academic method of arguing.

- **Name Calling** – Totally ignoring an argument and instead just calling the person issuing the argument an unwelcomed name. You probably did this as a small child to your siblings or playmates.
 - Example: *"You're just crazy."*
- **Ad Hominem** – Attacking specific aspects of the source of the argument without referencing any aspect of the actual argument.
 - Example: *"You don't have a college degree, what do you know?"*
- **Responding to Tone** – Attacking the tone of the argument, instead of and of the actual content of the argument.
 - Example: *"Wow, your tone is way over the top, don't you think?"*
- **Contradiction** – Disagreeing by just stating an opposing side, with virtually no actual evidence to support this presented argument.
 - *"No I didn't"* or *"You're wrong, basketball is a better sport than football."*
- **Counterargument** – Contradicting the initial argument, but also backing it up with reasoning and evidence. This is an actual argument and what the author, Graham, considers the first form of a convincing disagreement.
 - *"No, the death penalty does not deter crime. In Ohio when they initiated the death penalty, crime actually increased."*
- **Refutation** – Here instead of making a unique counter argument, a mistake in the initial argument is found, and an explanation of that mistake along with evidence and reasoning is presented. Here no new argument is made; we are just finding the weakness in the initial argument.
- **Refuting the Central Point** – Explicitly refuting the main point of the initial argument. Instead of refuting some of the supporting parts of an argument, here we focus on the key, central point of the initial argument.¹

Reference

1. Graham, Paul. "How to Disagree." *PaulGraham.com*, <http://www.paulgraham.com/disagree.html>. Accessed 30 October 2019.

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5.5: Two Sides to an Argument

There are two sides to every argument. The two sides are called the pro-side and the con-side. The pro-side will speak in favor of the topic of the argument or what we call the claim being made, while the con-side will be speaking against the claim being made in the argument. There is no third position of an argument like, “*I don’t know.*” You are either for or against the claim. When you clash against an argument you are taking the con side of the argument.

A discussion is different. In a discussion, you can have a variety of different opinions on a topic. But when you get to the point of deciding on a particular answer, you have an argument. To better understand this, we need to look at the structure of the argument. And to do that we need to go back 2500 years to the Greek foundation for argumentation.

Enthymemes and Syllogisms

We often argue in what the Greeks referred to as an *enthymeme*. There are two parts to this type of argument, an observation that leads to a conclusion. Examples of an enthymeme could include:

- Ernie is going to be a violent person because he plays violent video games.
- If Terri exercises often she will be healthy.
- Vote for John Doe, he won’t raise taxes.
- Bill Gates is brilliant because he started Microsoft.

This list of arguments contains an implicit assumption. For example: “*Ernie is going to be a violent person because he plays violent video games*” implies that “*people who play violent video games become violent people.*” These general assumptions are left out in many, many arguments. The person making the argument assumes that you will just accept the general assumption. The Greeks decided to add this assumption as the third part of their argumentative analysis.

To expand the argument the Greeks used a format called the **syllogism**. This format is a form of deductive reasoning that starts with two initial propositions that lead to a conclusion. The initial proposition is the assumption implied in the enthymeme.

All professors are brilliant.

Jim Marteney is a professor.

Jim Marteney is brilliant.

First note that the name of any professor could be placed here.

As accurate as we might like the conclusion to be in this argument, what if we found one college professor that was not brilliant? This Greek style of argumentation was an all or nothing approach. The argument was either 100% valid, or 0% valid. Classical Greek argumentation would suggest the entire argument is invalid and we could never make any conclusions.

But, in critical thinking we would argue that if there is just one example of a professor who is not brilliant there is still a high degree of validity, or probability, that the conclusion is still accurate. The argument may still be valid enough to reach the threshold of the target audience to accept the claim. In critical thinking, we make decisions when an argument reaches our threshold. The threshold does not have to be absolute 100%. Even in a court case that threshold is “Beyond a Reasonable Doubt” and not “Beyond any Doubt” which is less than 100% certainty.

This realization was the basis for Dr. Toulmin’s approach to analyzing arguments.

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5.6: Toulmin Approach to Argument

In order to determine the most effective strategy to respond to a case, the con-side of an argument needs to analyze the argument to discover the strengths and weaknesses of the pro-side. The Toulmin Model gives us an effective tool to successfully clash with the pro-side.

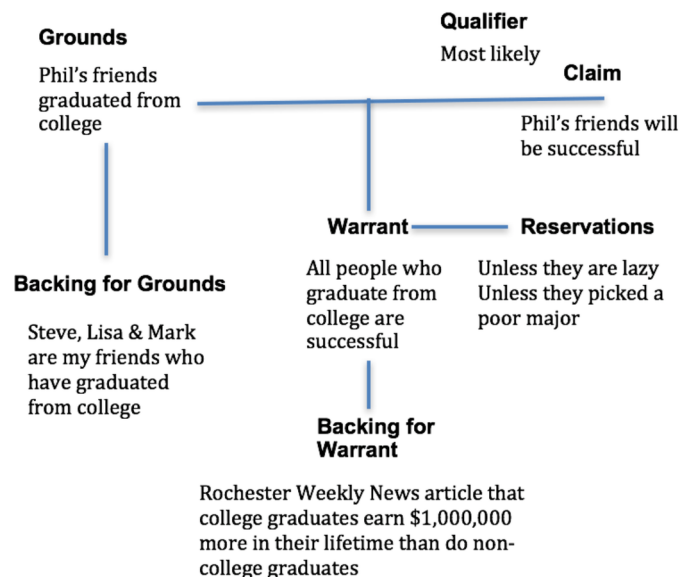
Stephen Toulmin was one of the modern-day leaders of rhetorical theory. He looked at the classical structure of arguments, and found a problem. The conclusions of the classical approaches to arguing needed to be absolute. That is, the conclusions of a correctly structured argument were either absolutely, 100% valid (true) or absolutely 0% invalid (untrue). There were no grey areas.

In his work on logic and argument, *The Uses of Argument* (Toulmin, 2008), Toulmin defines six parts that make up an argument:

- Claim
- Grounds
- Warrant
- Backing
- Reservations (rebuttals)
- Qualifier

In this approach he breaks down an argument into its component parts to demonstrate the degree of confidence you should have in the argument. Analyzing the argument allows the con-side to determine the strengths and weaknesses of the argument, so a counter argument can be effectively delivered.

Here is a simple argument that is diagrammed using the Toulmin approach.



3.6.1: "Sample Toulmin Model" (CC BY 4.0; J. Marteney)

- **Claim:** This is the main point or thesis of the argument. This is what the pro-side is attempting to convince you of or trying to prove. If the claim is not directly stated, just ask, "What is the pro-side trying to prove?" In the sample argument, the conclusion, the claim you are attempting to prove is that "Phil's friends will lead successful lives."
- **Grounds:** Here is the starting point of your argument that leads to your Claim. This is what you have observed, read or what you believe to exist. In this sample argument, the grounds are that "Phil has several friends who have graduated from college."
- **Warrants:** This is the overall logical underpinning of the argument. A general rule that can apply to more than one Grounds. The Warrant can be a universal law of nature, legal principle or statute, rule of thumb, mathematical formula, or just a logical idea that appeals to the person making the argument. Warrants usually begin with words like; all, every, any, anytime, whenever, or are if-then, either-or, statements. The Warrant is a general rule that has no exceptions. Those come later

- Warrants are important because they provide the underlying reasons linking the claim and the grounds. You can infer the warrants by asking, "What's causing the advocate to say the things he/she does?" or "Where's the advocate coming from?" In our example argument, the warrant is that "All people who graduate from college are successful." No exceptions.
- **Backing:** Backing is the specific data, which is used to justify and support the grounds and warrant. In Toulmin's original work, he only includes Backing for the Warrant. I am adding Backing to also look at the quality of the original Grounds of the argument. Critical thinkers realize that there must be backing for their statements or they are merely assertions. When clashing with an argument, we need to look at the quality of evidence that supports the initial grounds.
 - In our diagrammed argument, the Backing for the Grounds are the names of the specific friends who graduated from college. The Backing for the warrant comes from an LA Times article that college graduates earn \$1,000,000 more in their working lifetime than non-college graduates do. I like to separate the Backing from the Grounds and Backing for the Warrant as they are two different areas that can affect the strength of the argument. Toulmin makes no such distinction.
- **Reservations and Rebuttals:** They are the "unlesses" to the Warrant. Reservations do not change the wording of the warrant. Reservations do not change the "universality" of the Warrant. But Reservations are exceptions to the warrant. These exceptions weaken the validity of the conclusion because the Grounds may just be one of these exceptions, thus meaning that the Claim is invalid. In our example, your uncle has a Reservation to the Warrant. He states that people who get a college degree will succeed, unless they are lazy. The "unless they are lazy" is the Reservation to the Warrant.
 - Note that a Reservation does not refer to a rejection of the Warrant. In this example "Unless they did not graduate" would not be a Reservation because it implies that the Warrant did not happen. Instead a Reservation is a statement that suggests that even though the Warrant took place, the Claim may not occur.
- **Qualifiers:** Suggest the degree of validity of the argument. If there is no Qualifier, then the argument is 100% valid. But if a Qualifier exists then the conclusion is less than absolute. With a qualifier, the argument is about probability and possibility, not about certainty. You cannot use superlatives like all, every, absolutely or never, none, and no one. Instead you need to qualify (tone down) your claim with expressions like; most likely, many, probably, some or rarely, few, possibly, etc.
 - In our sample argument, it is argued that Phil's friends will "most likely" be successful. The "most likely" is the Qualifier.

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5.7: Counter Argument Strategies

If you are arguing against this claim:

- You might want to add additional Reservations.
 1. Unless there is an economic downturn
 2. Unless they have health issues
- You might want to challenge the backing for the Warrant
 1. You could suggest that earning \$1,000.000 over a lifetime would not automatically make you successful.
 2. You could argue that there was a problem with the analysis conducted by the Rochester Weekly News

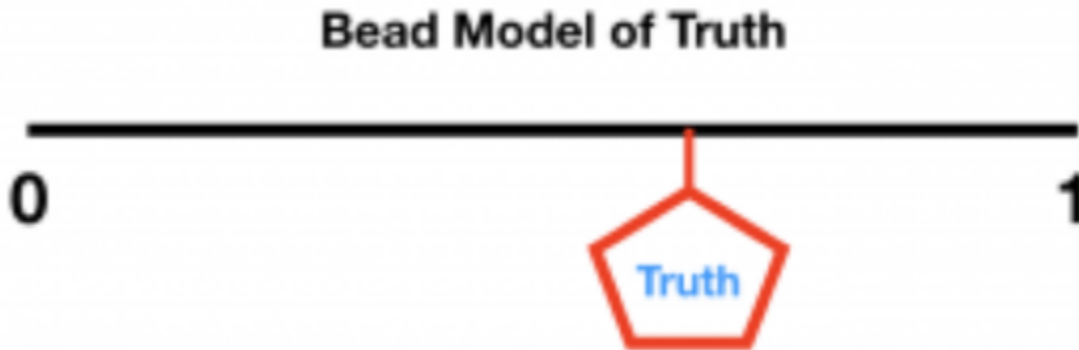
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5.8: No Absolute Certainties

In argumentation, we don't deal with absolute certainty of a claim. The skeptic and scientist both have the attitude that there are no absolute certainties. In other words, there are doubts on each claim that is argued. One scientist, **R. A. Lyttleton**, has described this process as the "Bead Model of Truth." It is important to note here that Lyttleton does not use the word "Truth" as the absolute "Truth" but instead uses the word "Truth" to represent the validity of a claim.¹

To understand his model Dr. Lyttleton imagines a bead on a horizontal wire. The bead can move left or right on that wire. On the far-left side of the wire is the number which corresponds to total disbelief. On the far-right hand side of the wire is the number 1 which is related to a position of total belief or where you would believe the claim with absolute certainty.



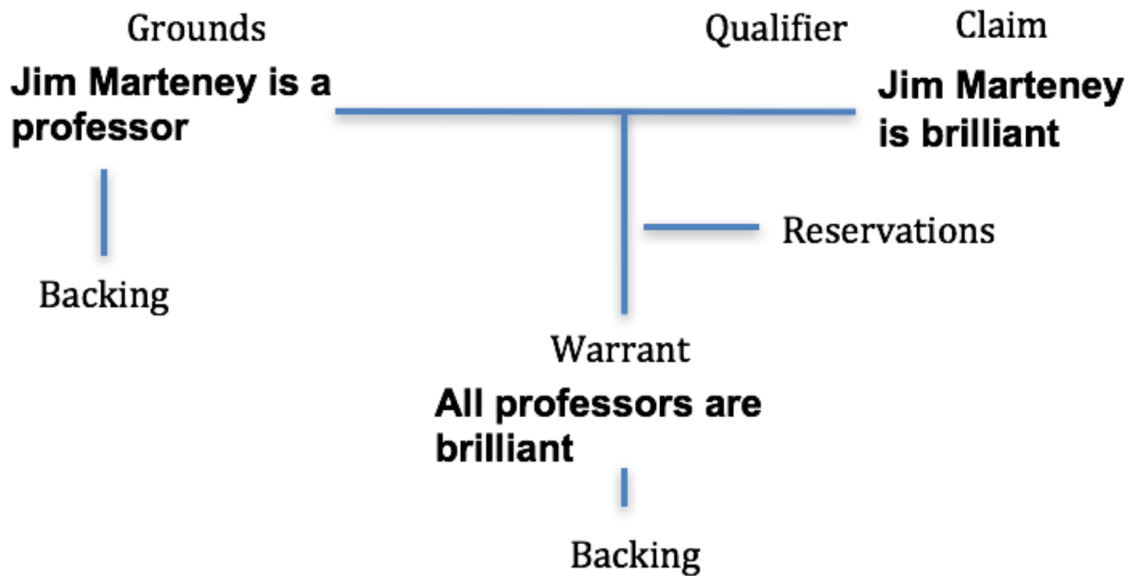
3.8.1: "Bead Model of Truth" (CC BY 4.0; J. Marteney)

Dr. Lyttleton would argue that the bead should never reach the far left or right end. As additional evidence is presented the belief is true the closer the bead moves to the number 1. The more unlikely the belief is to be accepted the closer the bead moves to 0.

According to **Toulmin**,

"Any claim is presented with certain strengths or weakness, conditions, and/or limitations. We possess a familiar set of colloquial adverbs and adverbial phrases that are customarily used to mark these qualifications. Such adverbs are: presumably, in all probability, so far as the evidence goes, all things being equal, for all that we can tell, very likely, very possibly, maybe, apparently, plausibly, almost certainly, so it seems, etc. All of these phrases can be directly inserted into the claim being advanced, and as a result, would modify the claim indicating what sort of reliance the supporting evidence entitles us to place on the claim." ²

Let's go back to the "**Jim Marteney is brilliant**" syllogism. Below is how Dr. Toulmin would analyze the argument. Now you can ask questions about the parts of the argument that are blank, the backing, reservations and qualifier.



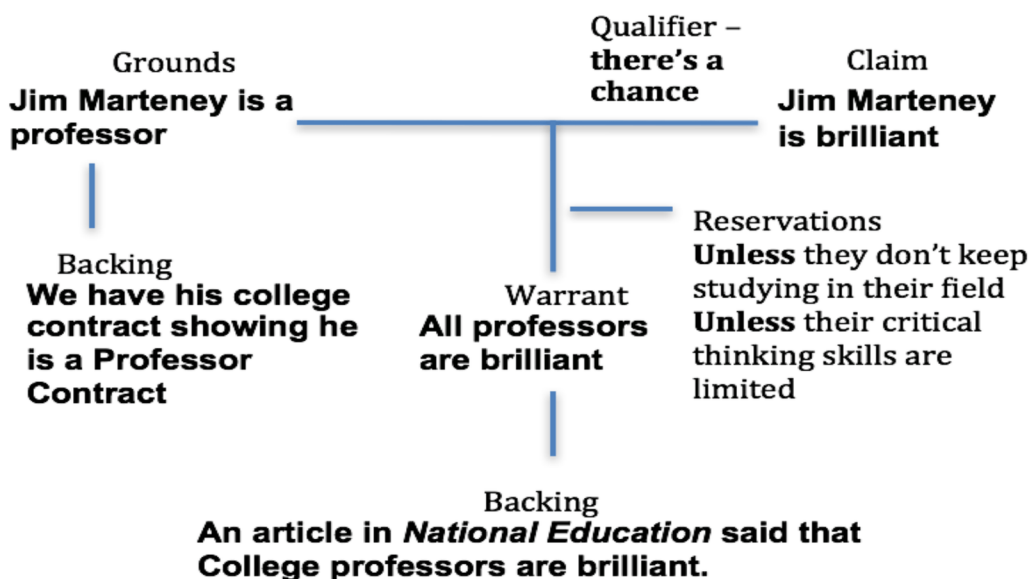
3.8.2: "Second Sample Toulmin Model" (CC BY 4.0; J. Marteney)

The argument as presented is 100% valid because there are no Reservations leading to a Qualifier. There is also no Backing presented for the Grounds and Warrant, so at this point they are just assertions.

- Now you begin your analysis by asking questions, or as we will be calling them, Issues. What is the Backing for the idea that all professors are brilliant? Poor backing would create doubt with the Warrant and its ability to be an absolute, general rule.
- Are there any professors who are not brilliant? If so, that could be part of the Reservation? This is where you show your skepticism.

The answers to these questions could damage the argument. If there are Reservations there is a Qualifier. The more reservations, the weaker the Qualifier becomes the Claim becomes less valid. If there are no exceptions the Qualifier is 100% and you would be 100% certain that the Claim is correct. But with a couple of Reservations your Qualifier could be reduced to maybe 80% sure. Now, does that reach your threshold? There is still a degree of validity, but it may not be enough for you to accept the claim.

Examining the quality of the backing of the Grounds and Warrant might lead us to question the accuracy of those statements. With questionable backing the accuracy of the argument is challenged. The weaker the accuracy the less valid is the Claim. This is what a completed Toulmin might look like.



3.8.3: "Third sample Toulmin Model" (CC BY 4.0; J. Marteney)

With this completed Toulmin analysis of the argument we can immediately see two weaknesses in the argument.

- The publication, *National Education* which supports the Warrant that “All professors are brilliant,” might be prejudiced in favor of professors. This weakens the accuracy of the warrant.
- Since there are two Reservations to the Warrant, the Claim cannot be 100% valid. There then has to be a Qualifier that suggests a lower level of validity.

Notice that the Qualifier is now, "There's a chance." This would lead me to reject the Claim that Jim Marteney is brilliant.

This is what defense attorneys attempt to do in a courtroom. They don't have to prove that their client is innocent. They have to attack the prosecution case to reduce the validity of the Claim that their client is guilty. They want the Qualifier to reflect a low number by questioning the backing and adding more and more examples to the Reservations. If in a criminal case they can reduce the validity to below reasonable doubt, the jury should find their client “not guilty.” Notice they don't say the accused is “innocent.” They can only say that the prosecution did not have a valid enough case for them to find the accused guilty.

Stephen Toulmin developed this model for analyzing the kind of argument you read and hear every day--in newspapers and on television, at work, in classrooms, and in conversation. The Toulmin Model is not meant to judge the success or failure of an attempt to prove an argument; instead it helps break an argument down to its most basic pieces. The Toulmin Model helps to show how tightly constructed arguments are, and how each part of an argument relates to the overall validity or reasonableness of that argument.

Reference

1. Hale, Jamie. "Limitations of Science." *PsychCentral*, <https://psychcentral.com/blog/the-limitations-of-science/>. Accessed 30 October 2019.
2. Toulmin, Stephen E. *The Uses of Argument*. New York: Cambridge University Press, 2008

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5.9: Arguing from the Con-Side

The con-side is the side rejecting the acceptance of the persuasive goal. They are arguing against the Claim by maintaining that we should stay with the status quo, or current system. Assume the Claim being argued is:

- **Resolved: The State of California should eliminate capital punishment.**

The goal of the con-side is to demonstrate the weaknesses or problems with the change from the status quo to this new policy, and why we should maintain the current capital punishment position. The con-side can win an argument if they just demonstrate there are not enough reasons to change to a new system.

Maintaining the current system is a powerful position. Tradition always suggests that because we have had a certain policy or outlook for so long that there has been some degree of success. So why take the chance and change? Remember, stasis is powerful. We are naturally comfortable with existing ways of doing things and so we argue to continue them. This is one reason why political incumbents have an advantage in an election to be re-elected to office.

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5.10: Using Toulmin To Develop Con Strategies

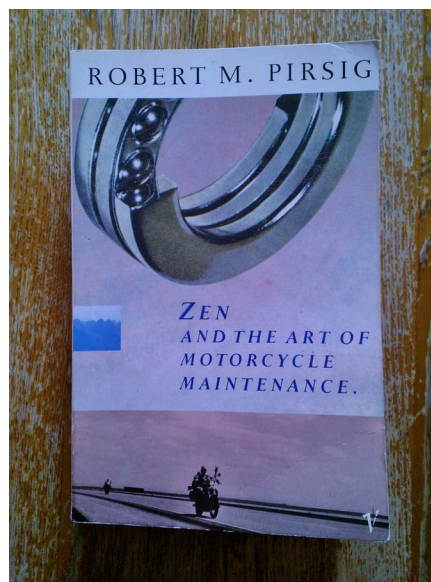
After analyzing an argument using the Toulmin approach you can begin arguing against that argument. There are two overall con-side strategies when clashing with the pro- side.

Reducing the significance of the problem or potential advantage. The only reason we ever change from something we have been doing is that there is a significant reason to change. This reason may be that there is a problem that is getting worse and worse, or that there may be an advantage out there if we make the change. Currently more than one state legislature is arguing that all social welfare recipients should be tested for drugs before they are allowed to receive welfare payments. The con-side could argue that the problem is not significant to warrant the change in policy and that the status quo should be maintained.

The Scientific Method

The real purpose of the scientific method is to make sure nature hasn't misled you into thinking you know something you actually don't know."

--R.Pirsig Zen and the Art of Motorcycle Maintenance



3.10.1: "Zen and the Art of Motorcycle Maintenance by Robert M Persig" (CC BY-NC-SA 2.0; Tony Roberts via flickr)

This goal then is to weaken the impact of the contentions and thereby the certainty of the Claim is lessened. Those involved grow more skeptical of the Claim. The hope of the con-side is that the certainty of the Claim will fall below the threshold needed to accept the Claim. At this point, the Claim will be rejected and the con-side will win the argument.

The pro-side solution will not solve the problem they intend to solve. The con-side argues that the Claim argued by the pro-side will not work, or in some cases may make the problem even worse. Clashing against the argument that the state should drug test welfare recipients, the con-side may say that the test is not accurate and makes too many mistakes or false positives. They may also talk about how many ways there are to cheat the test. If the con-side can demonstrate that that the pro-side solution cannot work, then the Claim should be rejected.

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5.11: Creating A Counter Argument

Once we have determined the strengths and weaknesses in the argument by effectively using the Toulmin Model, we can create our counter argument and begin our clash.

In the Toulmin analysis that concluded that Phil's friend will be successful, two possible counter arguments reveal themselves. One argument can focus on the backing for the Warrant, while another looks at the Reservations.

The Backing for the Warrant "that all who graduate from college will be successful" is from the Rochester Weekly. The con-side might question the quality of that source. How did they determine that conclusion? If the con-side can demonstrate a problem with the Warrant, the entire argument is invalid.

A second con-side argument might be with the reservations. The more significant the reservation that exists, the more of a chance that the instances described in the grounds might apply to those reservations. Maybe Phil's friends are lazy or picked a poor major. There might be additional reservations like they live in an economically depressed area with few employment chances. The more Reservations to an argument, the less valid is the Claim.

Note

An argument is not merely denying the claim. Just denying the claim is what we might call "squabbling" or "bickering." It is not an argument. For clash to be effective you need to explain **why the claim should be denied**.

Note 2

The con-side does not have to create a counter argument. If they can find problems with the pro-side's case, they can weaken the validity of the argument to the point where it rests below the Threshold needed to win approval. And thus, the con-side wins the argument.

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5.12: Con side Case Alternatives

To accomplish the two, overall con-side strategies the con side can select one of the following alternatives.

Straight Refutation

In straight refutation, the con-side directly refutes, point-by-point, the arguments brought up by the pro-side. In using this approach, the con-side argues for keeping the status quo in place. The status quo is the current fact, value or policy that is being challenged by the pro-side. The con-side argues against any of the pro-side case approaches by:

- Refuting the problem and/or solution
- Denying all advantages from a change in the status quo
- Arguing against the alternative(s) being presented

If the pro-side stated that there were two reasons why we need to test welfare recipients for drugs:

- Many recipients of welfare are using drugs.
- Testing will find out who the drug users are.

The con-side using straight refutation would say, "The people promoting the claim state that many recipients of welfare are using drugs, but I argue that there are not that many recipients of welfare that are using drugs." and "They also say that their tests will find out who the drug users are, but I will argue that the testing that is proposed will not give us an accurate picture of who is actually using drugs. The con-side will still need to use evidence to prove their contentions or else they are just assertions and not real arguments.

Defense of the status quo with just minor repairs

This approach is that the status quo is generally doing an effective job. If there is a problem, it can be dealt with by making a minor change or repair in the status quo. There is no need to make a major change or an overhaul of the system like the claim suggests.

An example of minor repairs occurs when, a couple needs a larger house to accommodate their growing family. Instead of purchasing a new home, they adopt the minor repair approach and add-on to their existing home. Another example is when people avoid the cost of buying a new car by getting their old one repaired.

How to Win An Argument Every Time

Forbes Magazine, April 23, 2015

<https://www.forbes.com/sites/travisbradberry/2015/04/23/how-successful-people-master-conflict/#d79024e788fd>

When someone takes an opposing view on a topic you care deeply about, the natural human response is "defense." Our brains are hard-wired to assess for threats, but when we let feelings of being threatened hijack our behavior, things never end well. In a crucial conversation, getting defensive is a surefire path to failure.

How to beat this? Get curious.

A great way to inoculate yourself against defensiveness is to develop a healthy doubt about your own certainty. Then, enter the conversation with intense curiosity about the other person's world. Give yourself a detective's task of discovering why a reasonable, rational and decent person would think the way he or she does. As former Secretary of State Dean Rusk said, "The best way to persuade others is with your ears, by listening." When others feel deeply understood, they become far more open to hearing you.

Counter proposal

In this approach, the con-side admits that the overall goals of the pro-side's case are good, but the way the pro-side had offered to reach them is not a good approach. In this alternative, the con-side presents what they feel is a better alternative. The con side admits that the pro-side has shown a weakness in the present system, which cannot be denied or refuted. The con side, however, does not agree with the way the pro side wants to remedy the weakness, and offers a better plan of attack.

You and that special someone have been living together for a period of time and are having trouble with the relationship. You suggest that it would be best if you broke off the relationship. The other person agrees that the relationship has problems, but suggests a trial separation would be a better solution. Since both of you agree that the status quo has problems, the argument comes down to which alternative will ultimately gain target audience approval.

Hopefully, after this chapter your confidence is growing and you are more willing to "Clash" with those making arguments with which you disagree.

In the next few chapters we will be looking closely at parts of the Toulmin Model. There is an entire chapter on the Claim, Backing (Evidence), and use of Warrants (Reasoning).

"I don't mind arguing with myself. It's when I lose that it bothers me."

-- Richard Powers

"Anytime four New Yorkers get into a cab together without arguing, a bank robbery has just taken place."

-- Johnny Carson

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5.13: The Focus of This Chapter

In this chapter, we examined the skill of “Clashing” when we are faced with an argument that we disagree with. This final chapter looked at the process by focusing on:

- **The importance of “Clashing” as “Silence means consent”** or at least suggests consent.
- **We have different levels of clashing** from “name calling” to “refutation.”
- **The first step in effective refutation is to examine the argument being presented.**
- **By using the Toulmin Model we can find weaknesses in arguments** that occur in the argument including the backing and/or the inclusion of reservations.
- **The more reservations that exist in the argument, the more significant the qualifier**, which lowers the validity of the argument on the “Continuum of Certainty.” This could reduce the validity level to below your “Threshold” of acceptance.
- **There are three traditional approaches used to refute an argument**; Straight Refutation, Defense of the Status Quo with Minor Repairs, and a Counterproposal.



3.13.1: "Edmund Burke" (Public Domain; [Joshua Reynolds](#) via [Wikimedia Commons](#))

"The only thing necessary for the triumph of evil is for good men to do nothing."

– Edmond Burke

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6: DECISION MAKING - JUDGING AN ARGUMENT

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6.1: Thinking about Conflict

When you hear the word conflict, do you have a positive or negative reaction? Are you someone who thinks conflict should be avoided at all costs? While conflict may be uncomfortable and challenging, it doesn't have to be negative. Think about the social and political changes that came about from the conflict of the civil rights movement during the 1960s. There is no doubt that this conflict was painful and even deadly for some civil rights activists, but the conflict resulted in the elimination of many discriminatory practices and helped create a more egalitarian social system in the United States. Let's look at two distinct orientations to conflict as well as options for how to respond to conflict in our interpersonal relationships.



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Conflict as Destructive

When we shy away from conflict in our interpersonal relationships, we may do so because we conceptualize it as destructive to our relationships. Many of our beliefs and attitudes are not always well grounded and lead to destructive behaviors. Augsburger outlined four assumptions of viewing conflict as destructive:

- Conflict is a destructive disturbance of peace.
- The social system should not be adjusted to meet the needs of members; rather, members should adapt to the established values.
- Confrontations are destructive and ineffective.
- Disputants should be punished.

When we view conflict this way, we believe that it is a threat to the established order of the relationship. Think about sports as an analogy of how we view conflict as destructive. In the US, we like sports that have winners and losers. Sports and games where a tie is an option often seem confusing to us. How can neither team win or lose? When we apply this to our relationships, it's understandable why we would be resistant to engaging in conflict. I don't want to lose, and I don't want to see my relational partner lose. So an option is to avoid conflict so that neither person has to face that result.

Conflict as Productive

In contrast to seeing conflict as destructive, also possible, even healthy, is to view conflict as a productive natural outgrowth and component of human relationships. Augsburger described four assumptions of viewing conflict as productive:

- Conflict is a normal, useful process.

- All issues are subject to change through negotiation.
- Direct confrontation and conciliation are valued.
- Conflict is a necessary renegotiation of an implied contract—a redistribution of opportunity, release of tensions, and renewal of relationships.

From this perspective, conflict provides an opportunity for strengthening relationships, not harming them. Conflict is a chance for relational partners to find ways to meet the needs of one another, even when these needs conflict. Think back to our discussion of dialectical tensions. While you may not explicitly argue with your relational partners about these tensions, the fact that you are negotiating them points to your ability to use conflict in productive ways for the relationship as a whole and the needs of the individuals in the relationship.

Types of Conflict

Understanding the different ways of valuing conflict is a first step toward engaging in productive conflict interactions. Likewise, knowing the various types of conflict that occur in interpersonal relationships also helps us to identify appropriate strategies for managing certain types of conflict. Cole states that there are five types of conflict in interpersonal relationships: affective, conflict of interest, value, cognitive, and goal-oriented.

Affective Conflict: This type of conflict arises when we have incompatible feelings with another person. For example, if a couple has been dating for a while, one of the partners may want to marry as a sign of love, while the other decides they want to see other people. What do they do? The differences in feelings for one another are the source of affective conflict.

Conflict of Interest: This might happen when people disagree about a plan of action or what to do in a given circumstance. For example, Julie, a Christian Scientist, does not believe in seeking medical intervention but believes that prayer can cure illness. Jeff, a Catholic, does believe in seeking conventional medical attention as treatment for illness. What happens when Julie and Jeff decide to have children? Do they honor Jeff's beliefs and take the kids to the doctor when they are ill or respect and practice Julie's religion? This is a conflict of interest.

Value Conflict: A difference in ideologies or values between relational partners is called value conflict. In the example of Julie and Jeff, a conflict of interest about what to do concerning their children's medical needs results from differing religious values. Many people engage in conflict about religion and politics. Remember the old adage "Never talk about religion and politics with your family."

Cognitive Conflict: This happens when there is a difference in thought process, interpretation of events, and perceptions. Marsha and Victoria, a long-term couple, are both invited to a party. Victoria declines because she has a big presentation at work the next morning and wants to be well-rested. At the party, their mutual friends Michael and Lisa notice Marsha spending the entire evening with Karen. Lisa suspects Marsha may be flirting and cheating on Victoria, but Michael disagrees and says Marsha and Karen are just close friends catching up. Michael and Lisa are observing the same interaction but have a disagreement about what it means. This is an example of cognitive conflict.

Goal Conflict: The final category occurs when people disagree about a final outcome. Jesse and Maria are getting ready to buy their first house. Maria wants something that has long-term investment potential, while Jesse wants a house to suit their needs for a few years and then plans to move into a larger house. Maria has long-term goals for the house purchase, and Jesse is thinking in more immediate terms. These two have two different goals in regards to purchasing a home.

Strategies for Managing Conflict

When we ask our students what they want to do when they experience conflict, most of the time they say, "Resolve it." While this is understandable, also important to understand is that conflict is ongoing in all relationships, and our approach to conflict should be to manage it instead of always trying to resolve it.

One way to understand options for managing conflict is by knowing five major strategies for managing conflict in relationships. While most of us probably favor one strategy over another, we all have multiple options for managing conflict in our relationships. Having a variety of options available gives us flexibility in our interactions with others. Five strategies for managing interpersonal conflict include dominating, integrating, compromising, obliging, and avoiding (Rahim; Rahim and Magner; Thomas and Kilmann). One way to think about these strategies, and your decision to select one over another, is to think about whose needs will be met in the conflict situation. You can conceptualize this idea according to the degree of concern for the self and the degree of concern

for others.

When people select the dominating strategy, or win-lose approach, they exhibit high concern for the self and low concern for the other person. The goal here is to win the conflict. This approach is often characterized by loud, forceful, and interrupting communication. Again, this is analogous to sports. Too often, we avoid conflict because we believe the only other alternative is to try to dominate the other person. In relationships where we care about others, it's no wonder this strategy can seem unappealing.

The obliging style shows a moderate degree of concern for self and others and a high degree of concern for the relationship itself. In this approach, the individuals are less important than the relationship as a whole. Here, a person may minimize the differences or a specific issue in order to emphasize the commonalities. The comment "The fact that we disagree about politics isn't a big deal, since we share the same ethical and moral beliefs" exemplifies an obliging style.

The compromising style is evident when both parties are willing to give up something in order to gain something else. When environmental activist Julia Butterfly Hill agreed to end her two-year-long tree sit in Luna as a protest against the logging practices of Pacific Lumber Company (PALCO) and pay them \$50,000 in exchange for their promise to protect Luna and not cut within a 20-foot buffer zone, she and PALCO reached a compromise. If one of the parties feels the compromise is unequal, they may be less likely to stick to it long term. When conflict is unavoidable, many times people will opt for compromise. One of the problems with compromise is that neither party fully gets their needs met. If you want Mexican food and your friend wants pizza, you might agree to compromise and go someplace that serves Mexican pizza. While this may seem like a good idea, you may have really been craving a burrito and your friend may have really been craving a pepperoni pizza. In this case, while the compromise brought together two food genres, neither person got their desire met.

When one avoids a conflict, they may suppress feelings of frustration or walk away from a situation. While this is often regarded as expressing a low concern for self and others because problems are not dealt with, the opposite may be true in some contexts. Take, for example, a heated argument between Ginny and Pat. Pat is about to make a hurtful remark out of frustration. Instead, she decides that she needs to avoid this argument right now until she and Ginny can come back and discuss things in a calmer fashion. In this case, temporarily avoiding the conflict can be beneficial. However, conflict avoidance over the long term generally has negative consequences for a relationship because neither person is willing to participate in the conflict management process.

Finally, integrating demonstrates a high level of concern for both self and others. Using this strategy, individuals agree to share information, feelings, and creativity to try to reach a mutually acceptable solution that meets both of their needs. In our food example above, one strategy would be for both people to get the food they want, then take it on a picnic in the park.

This way, both people are getting their needs met fully and in a way that extends beyond original notions of win-lose approaches for managing the conflict. The downside to this strategy is that it is very time-consuming and requires high levels of trust.

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6.2: Confirming and Disconfirming Climates

Positive and negative climates can be understood along three dimensions—recognition, acknowledgment, and endorsement. We experience confirming climates when we receive messages that demonstrate our value and worth from those with whom we have a relationship. Conversely, we experience disconfirming climates when we receive messages that suggest we are devalued and unimportant. Obviously, most of us like to be in confirming climates because they foster emotional safety as well as personal and relational growth. However, it is likely that your relationships fall somewhere between the two extremes. Let's look at three types of messages that create confirming and disconfirming climates.

Recognition messages: These messages either confirm or deny another person's existence. For example, if a friend enters your home and you smile, hug him, and say, "I'm so glad to see you," you are confirming that friend's existence. If you say "Good morning" to a colleague and they ignore you by walking out of the room without saying anything, they are creating a disconfirming climate by not recognizing you as a unique individual.

Acknowledgment messages go beyond recognizing another's existence by confirming what they say or how they feel. Nodding our head while listening or laughing appropriately at a funny story are nonverbal acknowledgment messages. When a friend tells you about a really bad day at work and you respond with "Yeah, that does sound hard, do you want to go somewhere quiet and talk?" you are acknowledging and responding to that friend's feelings. In contrast, if you were to respond to your friend's frustrations with a comment like "That's nothing. Listen to what happened to me today," you would be ignoring the experience and presenting yours as more important.

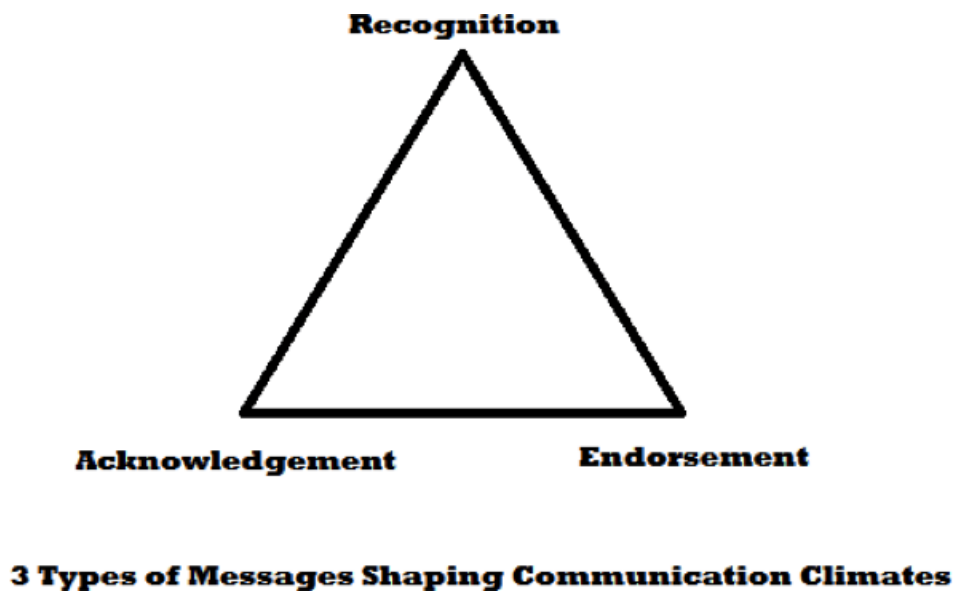


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Endorsement messages: These messages go one step further by recognizing a person's feelings as valid. Suppose a friend comes to you upset after a fight with their girlfriend. If you respond with "Yeah, I can see why you would be upset," you are endorsing their right to feel upset. However, if you said, "Get over it. At least you have a girlfriend," you would be sending messages that deny their right to feel frustrated in that moment. While it is difficult to see people we care about in emotional pain, people are responsible for their own emotions. When we let people own their emotions and do not tell them how to feel, we are creating supportive climates that provide a safe environment for them to work through their problems.

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6.3: There Are No Ties in an Argument

On the evening of September 25, 2016, Jose Martinez, a 24-year-old professional pitcher for the Florida Marlins had an argument with his girlfriend and decided to go out for a late-night boating trip with his friends, Eddy Rivero and Emilio Macias. He invited some of his teammates who were present to join him, but they turned him down, urging him not to go because they felt it was too dangerous to be on the water late at night.

Outfielder Marcell Ozuna told him, *"Don't go out."*

But Jose was not to be deterred, he had made his decision. Eddy Rivero, the pilot of the 32-foot fishing boat, told everyone not to worry, *"Trust me it's not my time yet."*

At 3 a.m. the fishing boat crashed and all three men were killed. A pitcher with a promising career was dead, because of a decision he had made.

On September 12, 2008 48-year-old Metro Train engineer Robert Sanchez makes the decision to guide his commuter train and text at the same time. During the first three hours of his morning split shift he sends 45 text messages. With 222 people on board, Mr. Sanchez guides the train out of the Chatsworth station just outside of Los Angeles. After traveling only 1.25 miles he collides head on with a Union Pacific freight train, after failing to obey a stop sign that would have allowed the freight train to pass. Engineer Sanchez sends the last of his text messages just 22 seconds before the collision with the freight train. He never applies his breaks.

Robert Sanchez died in the crash along with 26 passengers. This was the deadliest crash in the history of the Los Angeles Metrolink. His decision to text distracted him from his ability to guide his train and the deadly accident occurred.

Every day, we make many personal decisions. Just think, the first thing you did this morning was make a decision. The alarm went off and you reach over to turn it off. Actually, you probably reached out, groped, and finally found the snooze button and ended up delaying your very first decision of the day. In about seven minutes, however, you begin making other decisions. "Should I get up or should I stay in bed?" "If I get up, what will I wear?" "What shall I eat?" "Do I have time to eat?" Your first argument of the day is with yourself. You begin to gather information, and after some sort of investigation, you make a decision.

You will be making decisions, such as selecting a career goal, an appropriate major, purchasing a car, investing money, and perhaps choosing a mate. All these decisions can be made better if critical thinking skills are learned and understood. Being a good decision-maker involves good preparation, sound reasoning, and, at times, some luck.

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6.4: Human Nature and Decision-Making

The world we face now is much more complex than just a few years ago. Within our world of communication, we encounter decision after decision. In the "old days" the 70's and 80's deciding on a telephone was easy. We went to a store and picked out the phone we liked and connected it to the hard line in our home. Now we have all sorts of smart phones with a variety of services with numerous packages of options. And this is just one example of how our world is becoming increasingly complicated.

We are experiencing what many experts consider the **Age of Information**. We have access to information as we never had before, and we can more easily obtain whatever information we need to make the best possible decisions. Modern electronics gives us instant access to this information. With a computer, and an Internet connection, we can access the Internet with its vast resources. The web pages there include everything from the synopses of stories in the world's leading newspapers, to stock market reports, to a complete analysis of pending bills in Congress, to an explanation of wines, etc.

The same information that helps us master our environment can also lead to confusion about the many choices available to us within that same environment. From the information presented to us, we must be able to determine what is useful and what is useless.

As Richard Wurman writes in his book, *Information Anxiety*,

*"Information is power, a world currency upon which fortunes are made and lost. And we are in a frenzy to acquire it, firm in the belief that more information means more power. But just the opposite is proving to be the case. The glut has begun to obscure the radical distinctions between data and information, between facts and knowledge, between what we need to know and what we think we should know."*¹ (Wurman, 2000)

Perhaps 200 years ago we could have ignored much of the information in the environment, because people were more self-sufficient. If someone needed a place to live they could homestead a few acres. A new house could be built from the cleared lumber, while food could be found on the land nearby. Most primary needs could be obtained without the help of others. The homesteader didn't need to know what was happening on the other side of the mountain, much less the other side of the world. Times have changed.

To obtain a place to live people must first have some money. If they are not independently wealthy or do not have a rich relative, they need to save for it. What type of savings account should be used? There are options from money market accounts to Treasury Bills to thousands of mutual funds. After you have been able to save enough for your down payment, which type of financing will you use? Creative financing, which has added flexibility to the purchase of a home, has presented the buyer with additional options.

Humans are decision-making creatures. From the time we make a decision to get up in the morning, until the time we make a decision to go to bed at night, we are making one decision after another. As a decision-maker, we need to be aware of how we make decisions, what external factors influence our decision-making process, and how we go about evaluating how effective our decisions are. We can start by examining the two ways humans make decisions: **involuntary decision-making** and **voluntary decision-making**.

Reference

1. Richard Saul Wurman, *Information Anxiety* (Indianapolis: Prentice Hall, 2000)

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6.5: Involuntary Decision-Making

Think of Involuntary Decision-Making as a quick, non-thinking reaction to a situation. Suppose you want to sell your used car, and you place an ad in the newspaper, but for several weeks nothing happens. What would you do? Well, one person faced this problem. He could have lowered the price, but that might not have worked. Being a student of human nature, he hit upon a solution. He advertised his late-model car for five hundred dollars more than he had been asking, and then offered a five-hundred-dollar rebate. He sold the car within a week. The buyer responded in an involuntary fashion seeing a five-hundred-dollar rebate.

Social psychologist Robert B. Cialdini received a phone call from a confused friend. Robert's friend owned an Indian jewelry store in Arizona. In her store, she had some turquoise jewelry that wasn't being sold, even during the peak of the tourist season. She had done everything she could think of; including placing it in a more central display and having the sales staff make a special effort to push the jewelry. Still, the jewelry did not sell. Finally, just before leaving on a buying trip, she made one last effort. She left a note with her head saleswoman which said, "*Everything in this display case, price x 1/2.*" A few days later she returned to discover that all the turquoise jewelry had been sold. But the jewelry had not been sold for 1/2 price. The saleswoman misread the note and had doubled the price! The jewelry sold with no problem.¹

In both of these examples, people allowed their habitual nature to make the decisions for them instead of making a conscious decision. The people bypassed the active thinking stage and just responded to the situation. In the first situation, the key was the rebate. In the second instance, people purchased the jewelry at twice the price originally charged. Seeing the expensive price, people assumed it was valuable, because we assume that the more expensive the item, the more valuable it must be.

Involuntary decision-making is a learned pattern of acting, thinking or feeling. Involuntary decision-making is decision making made out of habit, reflex, or repetition. We are not born with these patterns; we learn them over time. Involuntary decision making acts to conserve our higher mental functions for more challenging and demanding tasks. But then we just react to a stimulus; this is sometimes referred to as a "knee-jerk" response. Like when a doctor taps you on the knee and your leg kicks out without you making any conscious effort.

Psychologist B. F. Skinner describes the process of acquiring habits as operant conditioning. Skinner says that if our actions produce a reward, we tend to repeat those actions. If, instead, the actions produce an undesirable effect, we tend to avoid repeating them. We tell a joke and people laugh. We feel good about it, and we tell another joke. They laugh again. We now repeat the behavior because it brings us a reward. Telling jokes becomes a habit.²

All of us make involuntary decisions. We are given a situation and immediately we respond. Many times, this stimulus-response method is a very useful and important method of arriving at a conclusion. Suppose you are driving along in your car and someone in the next lane begins to move into your lane. Immediately, you react by swerving over. This immediate, non-thinking reaction, involuntary decision may have just saved your life.

Behavioral economist and Nobel Prize laureate, Herbert Simon wrote that when faced with complex decisions, people will resort to what he called **heuristics**. Heuristics is described as decision-making devices that simplify the process of arriving at a reasonable decision when the 'perfect' decision is unreachable or unknowable. We think of these heuristics as mental shortcuts, which allow us to make quick decisions instead of taking a long time to make a decision or even avoiding making a decision. There are a wide variety of examples of these heuristics, which are also known as cognitive biases. Often these involuntary decision-making strategies can lead to poor decisions.



10.3.1: "Decisions" by Peggy Marco, by Pixabay

Domino's Pizza Improves by Understanding Unrecognized Bias

Harvard Business Review November 28, 2016

Patrick Doyle became CEO of Domino's Pizza in 2016 when the stock was worth \$8.76 per share. Now it is worth close to \$260 per share. Doyle reveals his strategy for improvement by sharing the mindset required for organizations to do big things in tough fields. Two of the great ills of executive life are what he calls, borrowing from behavioral economics, "omission bias" and "loss aversion." Omission bias is the tendency to worry more about doing something than not doing something, because everyone sees the results of a move gone badly, and few see the costs of moves not made. Loss aversion describes the tendency to play not to lose rather than play to win. "The pain of loss is double the pleasure of winning," he argues, so the natural inclination is to be cautious, even in situations that demand creativity.

Leaders who want to shake things up have to be comfortable with the idea that "failure is an option," Doyle concludes. In a world of hyper-competition and nonstop disruption, playing it safe is the riskiest course of all. That's a recipe for reinvention that makes for good pizza and big change.

Anchoring Bias We, as humans, rely on the first piece of information we hear on a given subject. If we were to buy a car, and while walking to class we heard that Hondas make poor quality cars, then we will judge the rest of the information we receive on cars based on that first bit of information. It makes no difference whether that initial information was correct or not. We "anchor" the rest of our information on that first one.

First impressions can then be very important. Make sure the first thing you do in class is your best. Your instructor's natural tendency will then be to anchor the rest of your performances based on that initial impression. If you turn in a great assignment the first time and a poor assignment the second time, well that's not like you, so something must have happened. But if you do poorly on the first assignment and then great on the second assignment, an instructor might think that something suspicious happened. As they say, "You never get a second chance to make a good first impression."

Purchase Quantity Limits – An Anchor Bias

Another study by Wansink, Kent, and Hoch looked at how setting purchase quantity limits affect buying behavior. We've all seen the sign before, there's something on sale with a sign reading "Limit 12 Per Customer." Most people conclude this limit is there to protect the store from being wiped out of the sale item of overly eager bargain hunters. However, this limit serves a very different purpose.

Wansink, Kent, and Hoch designed a field study using end-aisle displays to advertise Campbell's soups for \$0.79 per can. A sign was then placed on the display stating "Limit of 12 per person." The results show that purchase limits can increase sales; shoppers who bought soup from the display with no limit purchased an average of 3.3 cans of soup, whereas buyers with limits of 12 purchased an average of 7 cans of soup. The brain anchors with the number 12 and adjusts downward.³

Loss Aversion It has been found that people naturally want to avoid a specific loss more than receive a specific gain. This is one reason why people on trial accept a plea deal. Instead of going to trial to be proven not guilty, they select a plea deal to avoid the possibility of a longer punishment.

These are just two examples of many of these cognitive biases. Other bias's include:

Overconfidence bias: when some has a false sense of confidence

Herd mentality bias: when someone follows along with what others are doing or saying just to be part of the "herd."

Confirmation bias: the seeking out of information that agrees with an existing belief.

IKEA Effect: where people place a higher value on products they partially create

Dunning Kruger Effect: where people who are ignorant or unskilled in a given, domain tend to believe they are much more competent than they are. In simple words, "people who are too stupid to know how stupid they are".

They are all examples of involuntary decision-making. There are many more.^{4, 5}

As critical thinkers, we have to be careful of how many decisions we make involuntarily, because even crossing the street, without thinking, can get us in trouble. When you cross the street do you look left then right, right then left, or do you take time out to think of which way you should look this time as you cross the street? Chances are, because of habit, you first look left then right, because you have learned that the cars closest to you will be coming from your left. You have learned this from life experiences and you don't have to think about it each time you cross the street. You turn over the job of deciding which way to look before crossing the street to your unconscious mind, while your conscious mind concentrates on other applications.

When I was in my 20's, I spent a week in Jamaica. While having a conversation with one of my traveling companions, I started to cross the street as I would if I were home in Southern California. Using the involuntary mode of decision-making, I first looked left, and then right. I was almost killed. In Jamaica, cars travel on the opposite side of the street. When I looked before crossing the street, I should have looked right. A car was there, and about to hit me. Fortunately, the sound of the oncoming car made me aware of the danger.

Helping to influence some of our involuntary decision-making are what author Vance Packard calls **Hidden Persuaders**. Packard writes,

*"Large-scale efforts are being made, often with impressive success, to channel our unthinking habits, our purchasing decisions, and our thought processes by the use of insights gleaned from psychiatry and the social sciences. Typically, these efforts take place beneath our level of awareness; so that the appeals, which move us, are often, in a sense, 'hidden.' The result is that many of us are being influenced and manipulated, far more than we realize, in the patterns of our everyday lives."*⁶ (Packard, 1991)

There are four distinct methods of "hidden" persuasion. One way is through the use of visual stimuli. An example would be to super impose an image into a movie by flashing a message so briefly that a person is unaware of it. A second method uses accelerated speech. This usually happens when music is played over low audible messages, such as the Muzak system. The third method involves the use of embedded images in a print advertisement. It is the hiding of images in larger images that influence the viewer to act or respond in a certain way. The fourth method involves a suggestiveness that would not normally be seen at first glance. It would imply much more than it appeared to, such as in a picture or the use of language.

Hidden messages gain influence from the fact that they circumvent the critical functions of the conscious mind, and therefore are potentially more powerful than ordinary suggestions, because the unconscious mind is incapable of critical refusal of these sub-conscious suggestions. Researcher Louis Cheskin says,

"Hidden persuaders allow us to make decisions, guided not by conscious thought, but by unconscious reaction to the images, language, and designs which, in the subconscious, are associated with the product."

Hidden persuaders can come in several forms. A typical supermarket is purposely designed to influence the buying habits of its customers. First, the bakery is located near the entrance of the market. It is known that the aroma of freshly baked products will stimulate hunger in the customer and cause him to purchase more. The storeowner places the four most purchased item groups, dairy, meat, bread, and vegetables, as far from each other as possible. The customer must therefore pass through rows of other food items before coming to one of the four groups. The storeowner hopes that additional food products will catch the customer's eye and that additional purchases will be made.

In the same way, fast food restaurants use seats that place undue strain on one's spine (called the Larsen chair) if you sit in them

longer than 15 minutes at a time. This encourages you to eat quickly and then leave so others can sit. Las Vegas casinos are designed without windows or clocks. They want you to lose track of time and keep gambling. Many retail stores use background music, masked with anti-shoplifting messages and/or store product advertisements called Muzak, to control theft or to influence customer purchases. Newspaper and magazine advertisements contain embedded pictures, often of a sexual nature, in order to catch your mind's attention, so it will store the name of the product in your memory for future reference.

Do We Make Poorer Decisions as We Age?

From the Los Angeles Times – October 1, 2013

A study published recently in the journal of the Proceedings of the National Academy of Sciences suggests that our ability to make wise choices changes over time, and actually declines with old age. In fact, the study found that in certain situations, the decision-making ability of people older than 65 was worse than that of adolescents.

"We found that even the healthiest of elders show profoundly compromised decision-making," wrote senior study author Ifat Levy, an assistant professor of comparative medicine and neurobiology at Yale University in Connecticut.

Seniors "disturbingly" chose irrational wager options 25% of the time, according to the study authors. By contrast, adolescents chose irrational options 10% of the time, while young and midlife adults chose them only 5% of the time.

Seniors were far more cautious when choosing between two possible cash gains. When seniors faced a choice between two losses, they chose the riskier option with the higher potential loss.

The authors argued that the pattern of decision-making among elder participants in the study was not a function of illness or age-related dementia.

"As for the risk preferences, it may be that as they are getting closer to the end of their life, people assume that it is less likely for uncertain events to actually happen to them, which drives them to take less risks with gains, but more risks with losses," Levy said.¹

Although it is necessary and useful for us to turn over many of our minor decision functions to our subconscious mind, we may also be guilty of turning over more major decisions to this involuntary process without understanding the consequences.

Reference

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6.6: Voluntary Decision-Making

In the voluntary decision-making mode, the decision-maker examines criteria such as: the decision-making situation, the desired end-goals, the people involved, the occasion, and consciously applies his or her brain-processing skills to these criteria, in order to make the best possible decision. When making a voluntary decision, the person applies their cognitive skills to a problem in an attempt to arrive at a quality decision or design an effective argument.

The voluntary method of decision-making is generally more challenging and time consuming. This method of decision-making allows a person to examine all of the information available, all of the decision alternatives known, and all of the decision consequences they can within the time limits they have before he or she freely selects one of the alternatives.

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6.7: Influences on Voluntary Decision-Making

Voluntary decision-making means that the decision-maker is an active participant in the process of making a decision. Yet, even when making a voluntary decision, a person can be influenced by: **credible sources, authority figures, one's peers, Groupthink and the interpersonal needs for affection, inclusion and control**.

Credible sources are people we trust and look to for help, guidance, or direction in making a decision. They may have no special knowledge or insight, but we tend to believe what they have to say. This may include good friends, members of our family, or other trustworthy people. When companies want to market a product, they use a spokesman they believe an audience will trust. The more we trust a person the more credibility he or she is said to possess. The more credibility, or ethos, people have, the more likely we are to trust them and let them influence the decisions we make.

Authority figures are those individuals or institutions we accept as being knowledgeable on the topic we are examining. When confronted with the need to make a critical decision or argument, we often turn to those people we consider to be **authority figures** for help. Social psychologist Stanley Milgram of Yale University has performed a series of experiments, which demonstrates the degree of control people we consider authorities have over us. He was curious as to how far a person would go to conform to the wishes of a person he or she did not want to disappoint.¹

In Milgram's classic experiment, a person is told by a person who appears to be an authority, to apply an ever-increasing electrical shock to a second person, who is in on the experiment, when that person fails to give a correct answer. Although he is not really connected to the electrical current, whenever the button is pressed, the second person screams as if he is being electrocuted. The shocks appear to be causing more and more pain and you have to make a decision to continue administering the shocks, or discontinue them.

How far would you go? If you are the average person Milgram encountered, you might continue applying what you thought was an electrical shock until you "killed" the other person.



10.5.1: "Stanley Milgram" by Harvard Department of Psychology is licensed under fair use

Milgram wrote,

"I observed a mature and initially poised businessman enter the laboratory smiling and confident. Within 20 minutes, he was reduced to a twitching, stuttering wreck, rapidly approaching a point of nervous collapse and yet he obeyed to the end."
2

"It may be that we are puppets – puppets controlled by the strings of society. But at least we are puppets with perception, with awareness. And perhaps our awareness is the first step to our liberation." --Stanley Milgram³

After 10 years of continuous research Milgram concluded in his book, Obedience to Authority, that, in general, most people are highly susceptible to the influence of authority figures. When working with those they consider an authority figure, people tend to

make decisions based on what they think that authority figure would want them to do.

Peer influence exists when a person is motivated to make a decision based primarily on the influence of those he or she wants to be identified with and be accepted by. Peer influence occurs when an individual voluntarily seeks the support or approval or goodwill of others as the basis for making a decision.

There is an entire range of influence we get from others, ranging from intense peer influence to total independence from others' influence. As the scale of peer influence on a person increases, he/she becomes increasingly dependent on others and less likely to make his or her own decisions.

Peer pressure can be very influential. Research has discovered, to no one's surprise, that the initial decision for using drugs, having sex for the first time, smoking, and even shoplifting, is made as a result of peer pressure. When we decide that the only acceptable decision is the one that conforms to our peers' point of view, we severely limit our alternatives. The strength of peer influence rests with the desire to conform to others. Experts on peer influence say that from age twelve on, a person is likely to consider how their peers will view them, based on the decision they are about to make.

In his famous conformity experiments, Solomon Asch set out to determine what happens when people are asked to estimate something that is visually very clear.



10.5.2: "Solomon Asch" by New York Times is licensed under Fair Use

Dr. Asch showed a group of ten people a line, and then asked them which of another group of lines was of the same length. The subjects did not know that the other nine members of the group were in on the experiment, and had been instructed to give the wrong answer. At a point in time, all nine would consistently agree that an unequal line was the correct answer. The subjects were faced with a conflict between what their senses were telling them and what they heard from a majority of those they believed were their fellow group members.

Dr. Asch found that a significant percentage, 75%, of the subjects agreed with the group instead of trusting their own judgment at least one time and conformed to the group nearly one-third of the time. He concluded that peer groups influence people even if the people in the groups are strangers.⁴

Reference

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6.8: Groupthink

After studying groups of very intelligent people who made very poor decisions, Irving Janis described a problem he referred to as Groupthink. Here, the actual group process effects decision-making. In Groupthink, the desire for group cohesion often becomes more important than making a quality decision. Instead of disagreeing and starting an argument with the other group members, a person will just go along with the group, so as not to be isolated and left out. This action is also referred to as the mismanagement of disagreement. Members disagree, but the need to be part of the group keeps them silent.

A common Groupthink experience occurs in marriage. A spouse will experience Groupthink when he or she decides not to argue with a decision that is being discussed. They may disagree with the decision being made, but they decide that harmony within the marriage is more important than their disagreement with the decision. We often refer to this as not *“rocking the boat.”* In this situation spouses voluntarily give up conflicting views to preserve the family’s harmony and closeness.

In our professional lives, we will often be asked to be part of a group or organization that needs to make decisions. Group interaction can create additional challenges to effective decision-making as demonstrated in the 1986 decision to launch the Challenger space shuttle.

After the embarrassment of several days of postponing the launch, NASA officials at Cape Canaveral decided to allow the Challenger to lift off. Just hours before the fateful launch, frigid temperatures, in the mid 20s, and dangerous wind gusts of 35 miles per hour had been recorded. Nevertheless, the signal to go ahead with the launch was initiated. All, seemed to go well at first. Shirley Green, the new public relations officer, remembered thinking, *“It is so beautiful. It seems so perfect.”*

Unfortunately, the flight was anything but perfect. Less than half a second after booster ignition, just as the shuttle began to lift off the pad, a white, then a black puff of smoke gushed from a joint between two segments of the shuttle’s right booster. Just slightly over a minute into the flight, as Shirley Green along with millions of Americans were watching, a huge fireball appeared where the shuttle had been. There was complete silence in the control room. For a moment, there was no sound. She gripped the shoulder of Chuck Hollingshead, the Kennedy Space Center’s veteran public affairs officer. He turned to face her. *“Is it gone?”* she asked. “Yes,” Hollingshead said, shaking his head, *“It is gone.”*

Within days a Presidential Commission was established to investigate the tragedy. Reports from this committee have suggested that the decision to launch the space shuttle was totally wrong. There appears to have been a growing anxiety among the launch crew. Past successes may have given the staff the impression that nothing could go wrong.

Important information, such as the booster project engineers protesting the launch, other engineers reporting that the weather was too cold, and tests revealing abnormal *“cold spots”* on the lower right hand booster rocket, was not conveyed to the people making the launch decision for fear of being ostracized.

When people gather in a group to make a decision, actual communication problems can occur that will lead to a poor decision. In this case, **Groupthink** took place. Groupthink is a type of voluntary group decision-making that occurs when group members don’t really examine the alternatives and instead reach the agreement they feel others want.



10.6.1: "CIA Seal" by U.S. Federal Government is in the [Public Domain](#)

July 10, 2004

According to a scathing report released by the Senate Intelligence Committee, the United States went to war with Iraq on the basis of flawed intelligence assessments.

The report documented sweeping and systemic failures at the CIA and other U.S. intelligence agencies that led to the erroneous conclusions that Iraq had stockpiles of chemical and biological weapons and was reconstituting its efforts to build a nuclear bomb.

The report continued by saying that the CIA analysts suffered a case of Groupthink that rendered them incapable of considering that Iraq might have dismantled its weapons programs.

As Irving Janis stated:

*"Group members adopt a soft line of criticism, even in their own thinking. At their meetings all the members are amiable and seek complete concurrence on every important issue, with no bickering or conflict to spoil the cozy atmosphere. This is known as being yes men. Here you agree with what the person in charge is saying, not because you believe in what is being said, but because you don't want to spoil that we-feeling."*¹

To avoid Groupthink

If you are in a leadership position of any group, delay stating your opinion. Let others share their ideas first or else they may just agree with you to go along with what you are saying

Sincerely ask for differences of opinions. Let others know you really do want to hear different points of view.

Either be or assign a "devil's advocate." That is force someone to disagree and make arguments against the decision that is being made. The term "devil's advocate" was started in the early Catholic Church, when a person was being considered for sainthood. If the process was moving along too easily, without opposition, someone was assigned to speak against that person from becoming a saint. In effect, that person was "advocating for the devil."

People don't usually want to cause a problem in their group. They do not want to *"rock the boat."* Being more knowledgeable of the process of decision-making and our decision-making style could avoid group and individual tragedies.

Interpersonal needs of inclusion, control and affection also guide our decision-making process. William Schutz had identified

three interpersonal needs we strive to meet: the need for affection, the need for inclusion, and the need for control. He calls this his Interpersonal Needs Theory. Our desire to fulfill these needs we have influences the voluntary decisions we make.

The need for affection is our desire to be loved and in turn, to give love. This includes the desire for emotional intimacy and close relationships.

The need for inclusion is the need to be part of a group, organization or family. This is the desire to be a part of something important to you. It could be your family or even a supporter of an athletic team.

The need for control is the need to exert some real power of influence over the decision-making in a relationship or group where you are a member. When your ideas are respected, you are meeting this need.²

We begin to direct our decisions toward the outcomes that best meet our needs. If we have a need that is only fulfilled by one or two groups, we will have the tendency to make decisions that allow us to fulfill that need by choosing one group over another. Imagine that a control need is important to us and our family does not meet that need, but another group does. Schutz's theory suggest that we would make decisions that support that group, instead of our family. The desire to meet our needs becomes a powerful influence on our decision-making process.

Whether our decisions are made subconsciously, out of habit, reflex or repetition, or consciously, with our active involvement in the decision-making situation, all of us at times fall prey to undisciplined or weak thinking. Because we are always not at the top of peak performance, we do not always think clearly, precisely, accurately, logically, deeply or broad-mindedly. We do not always monitor and direct our thinking effectively. We sometimes are victims to the traps and illusions of sloppy thinking.



10.6.2: "Decisions Right False" by geralt by Pixabay

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6.9: Decision Making and Probability

Other than a reflex reaction, human decision-making is not some random act. We make decisions based on the probabilities of the outcome. The following three quotes provide an overall view of how probability affects our decision-making.

Probability is associated with a high degree of likelihood that a conclusion is valid. In critical thinking, probability is how likely a target audience believes something will become reality.

--Austin J. Freeley *Argumentation and Debate*¹

At any given moment, we make our estimate of probabilities on the basis of the evidence available to us at that time. And, we can never reach more than a highly probable conclusion, for ALL the facts can never be known.

--Lionel Ruby and Robert Yarber *The Art of Making Sense* 1978²

People make decisions! To be sure, people sometimes make stupid, uninformed decision. They make highly informed decisions that sometimes turn out badly. They can learn to do a better job of making decisions.

--Richard Reike and Malcom Sillars *Argumentation and Decision-Making Process*³

All three of these quotes refer to the key idea that we make decisions based on the probability of the outcome from the limited information provided. Because of this, we can never be absolutely sure of the outcome of that decision. Therefore, we operate within a range of possibilities that our decision is the correct decision. We look at the probabilities of the outcomes to each decision we make.

No two people will view probability, or the risk involved, the same way. If you are speeding along the highway at 15 miles per hour over the speed limit, what is the probability that you will get a ticket? You might decide that it is only 20% so you continue at that speed. Someone else may decide that 20% is too big a risk to take and slow down. But assume you hear on your navigation app that there may be a police officer up ahead. You believe that the probability of getting a ticket is now closer to 90%. Now you decide to slow down.

Both courts of law and science operate using probability. Neither has to prove their claim, legal charges, or hypothesis with 100% certainty. Both deal in the probability of the decision claim being made. The claim is accepted when the probability reaches the "Threshold" of the person or persons making the decision

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6.10: Threshold of Decision Making

Threshold refers to the degree of validity on the **Continuum of Certainty**, that the advocate must demonstrate before an audience will commit to a decision. Whether you are attempting to gain audience acceptance for a point of view or making a personal decision, you need to reach the threshold of acceptance of your audience. If you are attempting to make a decision on your own, you are the audience and are waiting until the argument is valid enough to reach your threshold.

The Continuum of Certainty is a measurement of how sure you are on a decision from totally uncertain to ninety-nine percent convinced. As we have seen, a good critical thinker is never 100% convinced of anything, that way they stay open-minded.

THE CONTINUUM OF ARGUMENTATIVE CERTAINTY

0%-----25%-----50%-----75%-----99%

Opinion Assertion Inference “Fact”

The Threshold is that point on the continuum where a person is sure enough of what is being argued to actually believe it or accept it. This is what we refer to as reaching the audience's threshold or breakthrough point. They may not be totally convinced, but they are convinced enough to agree with the speaker's point. Most audiences have a threshold with respect to granting adherence to a particular point of view being advanced.

The following chart shows different scientific levels on the Continuum of Certainty.

Different standards of proof are required by different courts in order to establish guilt/liability. Criminal courts demand the highest standard of proof of any court. This is because a finding of guilt can result in the accused losing his or her liberty. In order for an accused to be found guilty, the evidence must establish **beyond a reasonable doubt** that he or she is guilty. There must be no reasonable explanation for what happened other than that the accused did it. If there is any other reasonable explanation, the accused will not be found guilty. This is not a simple concept either to explain or to understand, and it is likely that often juries make findings of guilt or innocence, without fully comprehending this important principle of criminal law.

Civil courts set the threshold as **“preponderance of evidence.”** In law, the term means “the greater weight.” A “preponderance of the evidence” means that the thing alleged is more likely than not to be the case. Unlike the “beyond a reasonable doubt” measure of certainty, the “preponderance of the evidence” measure means that if a jury sees a thing as 51 percent likely to be correct and 49 percent likely to be incorrect, they should decide that it is correct. This is how a civil court case is decided, like The People's Court or any of the other court shows on television.

Likelihood Terminology	Likelihood of the occurrence/ outcome
Virtually certain	> 99% probability
Extremely likely	> 95% probability
Very likely	> 90% probability
Likely	> 66% probability
More likely than not	> 50% probability
About as likely as not	33 to 66% probability
Unlikely	< 33% probability
Very unlikely	< 10% probability
Extremely unlikely	< 5% probability
Exceptionally unlikely	< 1% probability

10.8.1: Intergovernmental Panel on Climate Change Fourth Assessment Report: Climate Change 2007¹

The critical thinker keeps the following in mind when arguing outside the courtroom:

No two people necessarily have the same threshold on the same topics. Some people will accept an argument if it can be proven that it would possibly be the best alternative, that it is potentially capable of happening. Some others must be shown that it is plausible, that it is believable and reasonable. Still others must be persuaded that it is probably the best alternative, that is likely to become a reality. Some will hold out for near certainty that it is sure to happen.

Audience adherence to a point of view is not possible until an advocate reaches the threshold of his or her target audience. Critical thinkers need to determine the threshold level of their audience for making a decision. They need to know what level of proof they will be required to meet before an audience will agree with them. The closer to certainty the threshold of the audience is, the better the argument the advocate will need in order to be able to reach it.

On some topics, people may have thresholds that cannot be reached at all. Dogmatic people and apathetic people are two such audiences. Dogmatic people because they are closed-minded. In argumentation, no amount of evidence, documentation, scholarship, or facts can produce a conclusion that is 100% certain. Generally, arguing with dogmatic people is unproductive and frustrating, because they already are certain about their point of view, and thus have no interest in being open-minded to new information, much less to an opposing viewpoint. A friend of mine was arguing global warming with another man. In frustration, he finally asked him, "Is there any amount of proof that I could show you that would convince you that global warming exists?" His reply was, "No." This person was so dogmatic they had no threshold that could be reached. Apathetic people generally have no defined threshold as a result of their "I don't care" attitude.

Threshold will also vary depending on the topic. Let's say that you have just received a proposal of marriage. What threshold do you hold for granting adherence to the proposal? Given different threshold levels you would need arguments of different strength before you would say, "Yes."

- **Possibility** You would say yes just because you were asked. Here, if you just think it might work, you go for it.
- **Plausibility** You will need some demonstrated proof before saying yes like an engagement ring.
- **Probability** You would have to include assurances that the marriage would work before saying yes. A demonstration of love and guarantees of future security would be required.
- **Near Certainty** You will need to be certain you are making the right decision. A long engagement and contractual obligations will be needed in order for you to make up your mind.

Threshold is affected by both psychological and physiological conditions. For example, if you have just made a decision to purchase an expensive car, your threshold in regard to buying additional "lower priced" options will be lowered. What's another \$300 for a graphic equalizer, when you have just spent \$40,000 on the car?

Threshold can be lowered. Critical thinkers recognize that ambiance, creating favorable conditions like right setting, right time, right place, right occasion, for argumentation to take place, is as important to the argument as it is to other forms of interpersonal communication. If you want a better chance for a yes when asking your boss for a raise, make sure you ask him or her when they are in a good mood, maybe just after you have done a great job at an assigned task. Creating the right kind of argumentative environment can actually soften or lower the threshold of an audience.

As Reike and Sillars write in their book, ARGUMENTATION AND THE DECISION-MAKING PROCESS,

*"The decision-making process occurs every day and is ongoing. Arguments are applied to the entire spectrum of communication situations – from casual interpersonal or small group interactions to more formal situations of conference, debate, or negotiation. The decision-making process may require that you understand the special demands which some kinds of argumentation place on you because of their special rules."*² (Rieke, 1993)

Reference

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6.11: Key Guidelines for Critical Decision Making

From their textbook, Psychology 12th edition, Carole Wade, Carol Tavis and Alan Swinkels list some important and useful guidelines for critical decision-making.

Ask questions; be willing to wonder. Always be on the lookout for questions that have not been answered by the experts in the field or by the media. Be willing to ask “What’s wrong here?” and/or “Why is this the way it is,” and “How did it come to be that way?”

Define the problem. An inadequate formulation of a question can produce misleading or incomplete answers. Ask neutral questions that don’t presuppose answers.

What evidence supports or refutes this argument and its opposition? Just because many people believe, including so-called experts, it doesn’t make it so.

Analyze assumptions and biases. All of us are subject to biases, beliefs that prevent us from being impartial. Evaluate the assumptions and biases that lie behind the arguments, including your own.

Control emotional reasoning. “If I feel this way, it must be true.” Passionate commitment to a view can motivate a person to think boldly without fear of what others will say, but when “gut feelings” replace clear thinking, the results can be disastrous.

Don’t oversimplify. Look beyond the obvious, rest easy generalizations, and reject either/or thinking. Don’t argue solely by anecdote.

Consider other interpretations. Formulate hypotheses that offer reasonable explanations of characteristics, behavior, and events.

Tolerate uncertainty. Sometimes the evidence merely allows us to draw tentative conclusions. Don’t be afraid to say, “I don’t know.” Don’t demand “the answer.”¹

Reference

1. Wade, Carol and Carol Tavis and Alan Swinkels. Psychology. Boston: Pearson, 2017.

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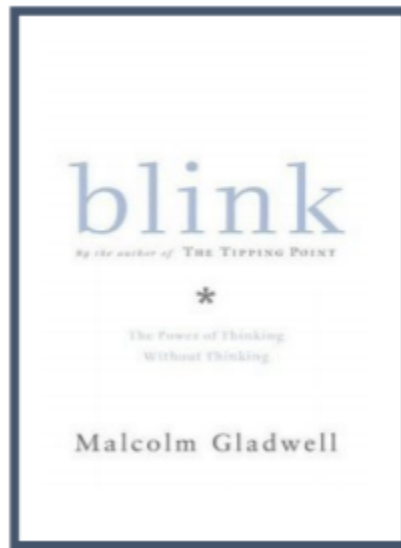
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6.12: Our Critical Decision-Making Style

There is no one ultimate decision-making style. Each of us develops our own style of making decisions. Understanding the strengths and weaknesses of our style is an important aid to help us make higher quality decisions. We call this metacognitive understanding. Metacognition means, “Thinking about thinking.” So, to take a look at how we think, we need to determine our comfortable decision-making style.

Have you ever known the answer to a situation instantly? Did you have a “gut feeling” that something was right or wrong? Or were you just “thinking fast?” In an attempt to explain what happens here, Author Malcolm Gladwell wrote a book titled *Blink*. Malcolm Gladwell explains his ideas in an interview.

“It's a book about rapid cognition, about the kind of thinking that happens in a blink of an eye. When you meet someone for the first time, or walk into a house you are thinking of buying, or read the first few sentences of a book, your mind takes about two seconds to jump to a series of conclusions. Well, "Blink" is a book about those two seconds, because I think those instant conclusions that we reach are really powerful and really important and, occasionally, really good.”



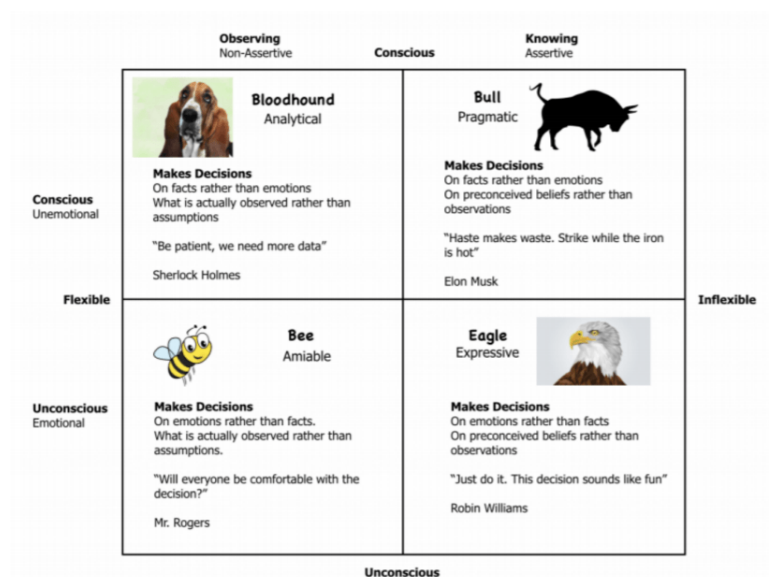
10.10.1: "Blink Bookcover" by Lee Davy on flickr

You could also say that it's a book about intuition, except that I don't like that word. In fact, it never appears in "Blink." Intuition strikes me as a concept we use to describe emotional reactions, gut feelings--thoughts and impressions that don't seem entirely rational. But I think that what goes on in that first two seconds is perfectly rational. It's thinking—it's just thinking that moves a little faster and operates a little more mysteriously than the kind of deliberate, conscious decision-making that we usually associate with "thinking." In "Blink" I'm trying to understand those two seconds. What is going on inside our heads when we engage in rapid cognition? When are snap judgments good and when are they not?



10.10.2: "Decision making" is in the Public Domain, CC0

What kinds of things can we do to make our powers of rapid cognition better In his book, *The Confident Decision Maker*, (Dawson, 1993) ¹Roger Dawson describes four distinct decision making styles and how you know which one best fits you. The following chart is based on his ideas.



10.10.3: "Decision Style Diagram" by J. Marteney is licensed under CC BY 3.0

Understanding the Decision Making Chart

The horizontal line of the chart describes how you react to decisions. Do you react to what you already know or what you observe? Moving to the right on the line is the inflexible thinker who makes decision on what he already knows, while moving to the left we find a more flexible decision-maker who relies more on what he observes.

The vertical line is the way people process information in making a decision. Conscious thought is the gathering of information through the five senses, while with the unconscious thought you just "feel" the information. As you move up the line, the more conscious you are in using information.

Your style is a combination of these two axes. There is no best style. Each style has strengths and challenges. More likely you are a combination of styles, but usually there would be one style that plays a more significant part in your personal decision-making.

The Decision-Making Styles Explained

The Bloodhound is an analytical decision-maker, who makes decisions on facts rather than feelings; On what is observed rather than pre-established emotions. They consciously and unemotionally observe the situation in a non-assertive manner. The Bloodhound is a cautious decision-maker, who relies on more and more information to base their decision. Their motto: "Let's not jump into this, we need more data."

The Bull is a pragmatic-decision maker, who makes decisions on facts rather than feelings; on preconceived beliefs, rather than observation. They consciously and unemotionally feel they know what is going on and conduct themselves in an assertive manner. The Bull has confidence in making decisions quickly. Their motto: "Strike while the iron is hot."

The Eagle is an extroverted decision-maker, who makes decisions on feelings rather than facts; on preconceived beliefs, rather than observation. They unconsciously and emotionally feel they can make decisions in a knowing and assertive manner. The Eagle makes quick and often not well thought out decisions, but is enthusiastic, creative and focuses on people. Their motto: "This idea sounds like fun."

The Bee is an amiable and friendly decision-maker who makes decisions based on feeling rather than fact. They make their decisions on what they observe rather than pre-established emotions. They unconsciously and emotionally observe the situation in a non-assertive manner. The Bee does struggle with decisions that involve change and shows sincere concern for others. Their motto: "Will we be comfortable with the decision?"

The Bull and the Eagle styles (located to the right of the chart) have pretty much made up their minds before they go into the decision-making arena. The Bloodhound and the Bee are much more open to new input.

The Bull and the Bloodhound make their decisions based on facts. The Eagle and the Bee are more aware of things without being conscious of them. They know in their heart the problems, but couldn't tell you why they know them.

Which style best describes you? There are two important ideas about your decision-making style you need to know:

1. You are actually all four styles, there is just one that is usually preferable.
2. Your situation or environment may cause you to respond in a style that is not your preference.

Making decisions has become an increasingly complex challenge for most of us. Very few decisions are made with absolute certainty, because complete knowledge about all of the alternatives is seldom possible. Good decisions come from disciplined thinking.

How should critical thinkers evaluate arguments to make their decisions? The easiest way is to focus on the outcomes, the results of the argumentative process. However, since some decision-making outcomes can be influenced to more or less of a degree by chance, looking at only the results can be misleading and downplay the importance of good preparation and sound reasoning. Critical thinkers need to examine not only the outcome of a decision, but the process used to make that decision. Only by looking at both can we determine why the decision succeeded or failed in obtaining its desired outcome.

We also need to be aware of the ethical implications of the decisions we make. Decisions we make can impact the health and welfare, not only of ourselves, but our family, our community, our state, our nation, and even our world.

As Warnick and Inch write in their book, *Critical Thinking and Argumentation*,

*"We must be aware of the quality of our arguments and knowledgeable about standards that will enable us to distinguish arguments that are ethically or morally right from those that are wrong. Millions of people in Europe died because the Nazis believed Adolf Hitler's arguments that their misfortunes were caused by the Jewish people. Many lives and careers were ruined in the early 1950s when the public believed Senator Joseph McCarthy's claims and accusations about Communist infiltration in all aspects of life."*²(Warnick, 1989)

Examining our decisions and decision-making style allows us to improve our own personal style and thus take more control of our lives.

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6.13: TRANSTHEORETICAL MODEL

6.13.1: Transtheoretical Model

6.13.2: Application of the Transtheoretical Model

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6.13.1: Transtheoretical Model

Kagen S. Silver & Amber K. Worthington

The goal of persuasion is to change behavior. We all know that changing behavior is hard. For example, how many of us have set New Year's resolutions and broken those same resolutions three weeks later? The Transtheoretical Model (Prochaska & DiClemente, 1983; Prochaska, Redding, & Evers, 2002) is a stage model of behavior change that posits that behavior change involves moving through a sequence of distinct stages. The Transtheoretical Model creates a comprehensive concept of change that can be applied to various behaviors, environments, and individuals. The Transtheoretical Model sees the behavior change process occurring through five distinct stages: Precontemplation, Contemplation, Preparation, Action, and Maintenance with the possibility for relapse, as depicted below. Together, the Transtheoretical Model refers to these stages as the Stages of Change.



The Stages of Change

The Transtheoretical Model claims that, when making behavioral changes, individuals pass through each stage at a varying pace subject to the behavior being changed, the environment, and the individual themselves. No stage is subject to any particular timeline; stages can last from as little as one hour to as long as a lifetime. Despite being displayed as a linear model, behavioral change is often nonlinear; progression and regression are common in stages of change. People may move forward, backward, and slide back and forth between stages in a complex and dynamic way. People do not, however, skip any stages; thus people move through this general sequence when changing behavior.

Precontemplation

Those in the precontemplation stage do not intend to conduct any action in the immediate future. Being unaware of one's behaviors is a consequence of being in the precontemplation stage. While in this stage, individuals will defend their behavior and may become defensive when faced by efforts to pressure them to change. For example, someone who smokes in this stage is not even considering or thinking about quitting smoking.

Contemplation

In the contemplation stage, individuals are aware of their behavior's personal consequences and are thinking about possibly changing in the future. In this stage, individuals are more open to new information and are aware of the pros of changing but are still more aware of the negative aspects of change. Individuals can spend a day, a week, or years in the contemplation stage balancing the pros and cons of changing their behavior, and this ambivalence can be identified as behavioral procrastination. Those in this stage may make statements such as "I know I have a problem" or "I should probably do [insert behavior]." For example, someone who smokes in contemplation is thinking about quitting and weighing the pros and cons of doing so.

Preparation

In the preparation stage, individuals have committed to change. They will easily be able to acknowledge their problematic behavior and are committed to changing it. In this stage, the individual is aware that the positive aspects of change outweigh the

negative and are actively looking for information to help them. In this stage, insufficient planning can result in greater challenges in the future, which may lead to relapse. For example, someone who smokes in the preparation stage plans to quit and is actively taking steps to do so (e.g., buying nicotine alternatives).

Action

During the action stage, individuals are actively involved in changing their behavior. They are open to receiving assistance from others. People in this stage are teeming with confidence as they believe they have the personal willpower to take on the process of change. Short term positive reinforcements of change are often established to keep individuals motivated to change. Individuals continue to plan to overcome potential challenges on the journey to behavioral change. For example, in the action stage, someone who used to smoke has now quit smoking.

Relapse

Relapse occurs when an individual returns to the problematic behavior such as beginning to smoke or drink again. Relapse is not a stage, but can occur at any stage during the process. Those trying to change highly addictive behaviors such as drinking, smoking, and drug use are at higher risk of relapsing. Relapse can be avoided with proper support networks and plans to prevent relapse.

Maintenance

The maintenance stage is determined by total abstinence from the changed behavior and the ability to avoid any temptations to return to the previous behavior. In this stage, individuals can remind themselves of the progress they have made, which helps reinforce the changes in behavior. Thoughts of returning to the previous behavior may arise, but the individual is able to resist temptations to do so due to proper planning and positive changes. For example, in this stage, someone who used to smoke has not only quit smoking, but is easily able to maintain that status.

How do people progress through the stages of change?

The Transtheoretical Model proposes that people progress through these stages of change using processes of change. Prochaska, Redding, and Evers (2002) provide several examples, which are depicted in the table below. The Transtheoretical Model states that different processes of change are relevant and effective during different stages of change; however, criticism of the Transtheoretical Model has noted that it is not clear which processes of change apply to which stage of change (see O'Keefe, 2016).

Process of Change	
Self-reevaluation	This involves an individual reconsidering their self-image (e.g., the self-image as a smoker vs. the self-image as a role model).
Environmental reevaluation	This involves an individual's consideration of the impact of their behavior on others (e.g., when a smoker considers the impact of secondhand smoke on others' health).
Counterconditioning	This occurs when an individual substitutes a healthier behavior for the problem behavior (e.g., using a nicotine patch instead of smoking a cigarette).
Consciousness raising	This involves an individual's increased awareness of the causes, effects, and solutions for the problem behavior (e.g., understanding the social situations that lead them to smoke a cigarette).
Self-liberation	This occurs when an individual commits to change through their own willpower (e.g., the commitment to stop smoking, no matter the urges to do so).
Helping relationships	This involves support from an individual's network of family, friends, colleagues, and so on (e.g., social support to do another behavior instead of smoking a cigarette).
Contingency management	This occurs when an individual creates or becomes aware of consequences of a problem behavior (e.g., implementing a monetary "fine" to pay to a family member if they smoke a cigarette).
Stimulus control	This occurs when an individual removes cues that trigger the problem behavior and/or adds cues to trigger the new, healthier behavior (e.g., removing any cigarette cartons from the home).
Social liberation	This occurs when there are external policies that limit the ability to enact the problem behavior (e.g., policies that make it illegal to smoke in a restaurant).

How can the Transtheoretical Model be used to create persuasive messages?

The Transtheoretical Model indicates that people at different stages of change will be motivated by different message content. For example, a smoker in precontemplation likely needs different information to move to contemplation than a smoker in action

needs to move to maintenance. It is therefore important to determine how to develop persuasive messages and interventions that are matched to an individual's stage of change. O'Keefe (2016) notes that decisional balance and self-efficacy are important to create stage-matched persuasive messages.

Decisional Balance

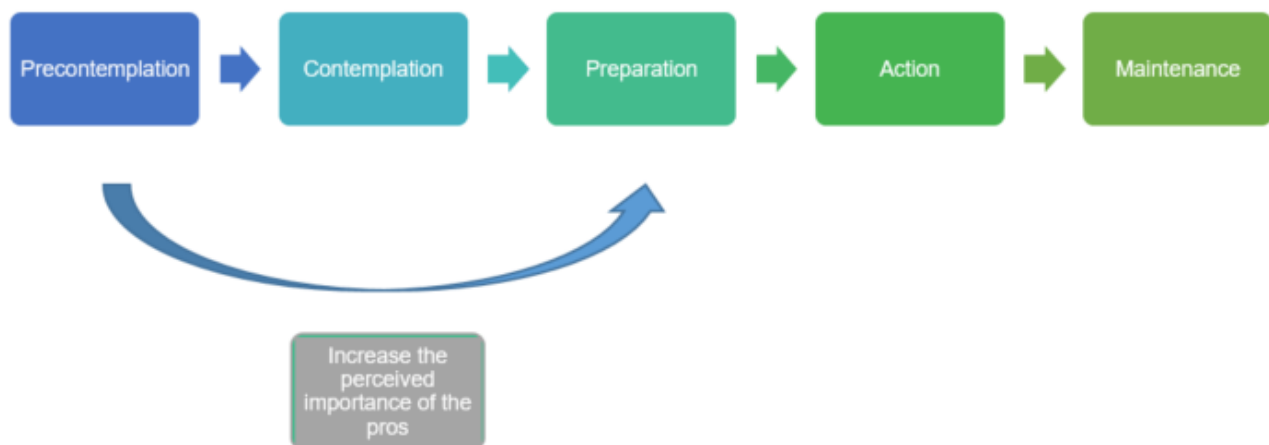
Decisional balance is an individual's belief that they have the ability to perform a new behavior that will or has substituted a problem behavior. As people progress through the stages of change, the pros of behavior change will outweigh the cons. This decisional balance can be assessed with a questionnaire where a participant is asked to rate the importance of various pros and cons on their behavior change. An example is shown here, where the first item assesses a pro and the second item assesses a con:

Saving money by not buying cigarettes is:	
Not important	_____ Extremely important

Smoking with my friends at a party is:	
Not important	_____ Extremely important

The importance of these pros and cons do vary depending on an individual's stage of change. Di Noia and Prochaska (2010) state: "The balance between the pros and cons varies across stages. Because individuals in precontemplation are not intending to take action to change a behavior, the cons outweigh the pros in this stage. [The importance of the] pros increase and [the importance of the] cons decrease from earlier to later stages. In action and maintenance stages, the pros outweigh the cons. A crossover between the pros and cons occurs between precontemplation and action stages" (p. 619). Note that the research on decisional balance has examined the changes in *perceived importance* of various pros and cons across the stages of change, not the *number* of perceived pros or cons (O'Keefe, 2016).

Decisional balance therefore may have an important role in designing persuasive messages using the Transtheoretical Model. For example, an effective message to move individuals from precontemplation to contemplation to action could attempt to increase the perceived importance of the pros of changing the problem behavior (see Prochaska et al., 2002). O'Keefe (2016), however, notes that the fact that decisional balance is related to various stages of change does not necessarily mean that decisional balance was the cause of movement from one stage to the next. Thus, other strategies should also be considered when designing a persuasive message.

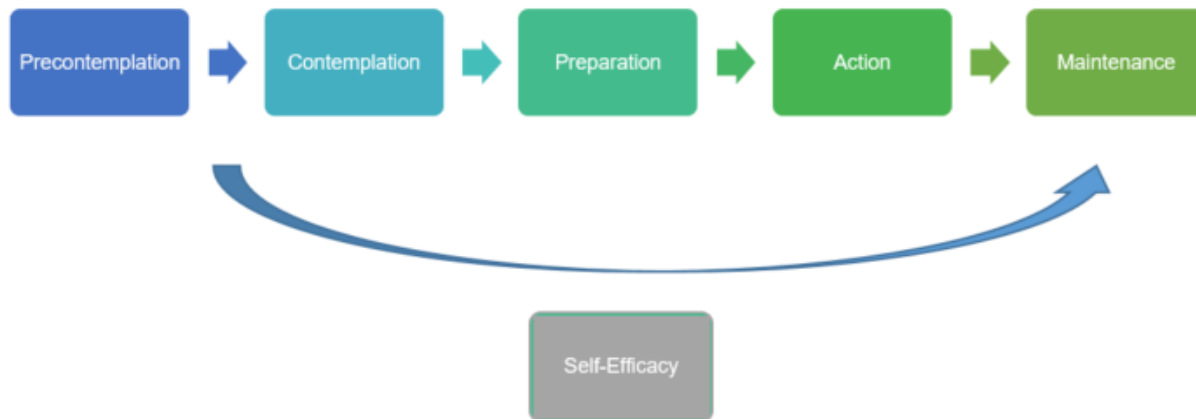


Self-Efficacy

Self-efficacy is an individual's belief that they have the ability to perform and maintain a new behavior that will or has substituted a problem behavior. Self-efficacy can be assessed with a questionnaire where a participant is asked to rate how easy they believe adopting the new behavior would be. An example is shown here.

Quitting smoking is easy.	
Strongly Disagree _____	Strongly Agree _____

The Transtheoretical Model indicates that messages designed to increase self-efficacy are not effective at earlier stages (e.g., precontemplation), because people have not yet decided to change their behavior. As O'Keefe (2016) notes: "...until people have become convinced of the desirability of an action, there is little reason to worry about whether they think they can perform the behavior" (p. 137). Some studies have found support for this idea. For example, Prentice-Dunn, McMath, and Cramer (2009) found that self-efficacy information about the ease of using sunscreen did not move people from precontemplation to contemplation but did move people from contemplation to preparation. Other studies, however, have found that self-efficacy information is effective at all stages. For example, Schwarzer, Cao, and Lippke (2010) found that self-efficacy information about how to exercise was effective at moving people along the stages, even at the early stages. Self-efficacy information may therefore have an important role in designing persuasive messages using the Transtheoretical Model, potentially at all stages.



Criticism of the Transtheoretical Model

It is important to note that there are several important criticisms to consider when planning to use the Transtheoretical Model. First, some have raised concerns about the description and procedures for assessing various stages of the Transtheoretical Model (see O'Keefe, 2016). Typically, an individual's stage has been assessed using answers to a series of yes-no questions about current behavior, thoughts about change, intentions to change, and so on. Some of the resulting stage classifications can seem artificial or vary from study to study. Second, there is a general lack of empirical work testing the idea that a persuasive message is most effective when targeted at individuals in a particular stage, and more research is needed in this area. Finally, some have argued that the Transtheoretical Model's stages may not constitute mutually exclusive categories (see O'Keefe, 2016), and people's intentions and behaviors may be better suited for an approach that sees these transitions along a continuum.

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6.13.2: Application of the Transtheoretical Model

Kagen S. Silver & Amber K. Worthington

Discrimination in the healthcare system can occur in multiple ways, including discrimination related to gender, sexual and gender minorities, and race/ethnicity (e.g., Ayhan et al., 2020; Fazeli Dehkordy, Hall, Dalton, & Carlos, 2016; MacIntosh, Desai, Lewis, Jones, & Nunez-Smith, 2013). Discriminative behaviors can include stigma, denial or refusal of healthcare, and verbal or physical abuse (e.g., Ayhan et al., 2020), which negatively impacts individual and population health.

One way to solve this problem is for individuals to find and use patient advocates in healthcare settings. A patient advocate looks out for the best interest of the patient. Insurance companies may sometimes provide advocates, and there are also non-profit organizations that specifically help communities that are more likely to be impacted by discrimination find patient advocates.

The Transtheoretical Model can be used to understand an individual's readiness to find and use a patient advocate. A patient in the precontemplation stage may not recognize the problems of discrimination in healthcare and does not intend to use a patient advocate in the immediate future. In the contemplation stage, the patient is aware that not using a patient advocate may exacerbate discrimination in healthcare settings, and they are thinking about possibly using a patient advocate in the future. In the preparation stage, the patient has committed to using a patient advocate and is actively trying to find a patient advocate. A patient in the action stage is actively involved in changing the behavior and is using a patient advocate in healthcare settings. A patient in the maintenance stage always uses a patient advocate in healthcare settings.

According to the Transtheoretical Model, a persuasive message should be matched to the patient's current stage of change. To move a patient from the early stages of precontemplation, contemplation, and preparation to the later stages of action and maintenance, the message should help the individual recognize the occurrence of discrimination and to perceive the importance of the benefits of patient advocates (i.e., increase the pros of changing the behavior in decisional balance). The persuasive message should also contain substantial information that will increase the patient's self-efficacy to find and use a patient advocate, including specific phone numbers or organizations that the patient can call for more information.

Example by Kagen S. Silver

I created a message using the Transtheoretical Model that would be effective for patients in the precontemplation and contemplation stages of finding and using a patient advocate.

The goal of the opening lines for those in precontemplation is to gain their attention. Those in contemplation know that discrimination exists, and this opening line therefore functions as a reminder to increase the salience of the issue. The message also connects what the reader is seeing in the world to the doctor's office, a place supposedly free of discrimination because it is a house of health and wellness.

The goal of the next lines ("Patient advocates can speak up for you in healthcare settings to reduce the chances that you will experience discrimination. The benefits of using a patient advocate make it worth it.") is to increase the patient's perceptions that the pros of finding and using a patient advocate outweigh the cons.

The following line ("If you or someone you know may face discrimination in healthcare settings, share these resources today") ties in the idea that the patient can help themselves and others by sharing this information. This line may also create a norm that this information should be shared and will be accepted by others.

The last lines in the message are designed to increase the patient's self-efficacy. Stating the consultation is free makes the resource accessible to all, and adding that patient advocates are covered by most insurance makes the reader see that help is attainable and may not require additional money. Providing a specific number and website would also increase a patient's self-efficacy to find a patient advocate.

Millions of Americans face discrimination every day. Going to the doctor is no different. Patient advocates can speak up for you in healthcare settings to reduce the chances that you will experience discrimination. The benefits of using a patient advocate make it worth it.

If you or someone you know may face discrimination in healthcare settings, share these resources today. Consultations are free, and most insurance plans cover patient advocates. Please call us toll-free at (123) 456-7890 or visit our website.

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6.14: The Focus of This Chapter

In this chapter I wanted to focus on how our unique style of decision-making leads us to make our personal decisions.

- Involuntary decision-making allows us to function but there are many decision-making biases, or subconscious shortcuts, that can lead to poor decisions.
- Voluntary decision-making includes the use of our critical thinking skills to make effective decisions. We can learn from our past decisions, whether they had good or poor outcomes, to improve our decision skills.
- We all have used “Continuum of Certainty,” where we measure the strength of our conviction on a decision. Once we reach our “Threshold” then a decision has been made.
- There is not one universal, correct style of decision-making. We all have a style that fits our personality. In this chapter I presented four of those styles.

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7: THE FOUNDATIONS OF CRITICAL THINKING

- 7.1: Just How “Smart” are You
- 7.2: Defining Intelligence
- 7.3: Measuring Intelligence
- 7.4: Emotional Intelligence
- 7.5: Knowledge and Literacy
- 7.6: Thinking vs. Intelligence
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- 7.9: The Critical Thinking Process
- 7.10: The Focus of This Chapter

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7.1: Just How “Smart” are You

Imagine that now you have to face one of the most challenging, important, difficult decisions of your life. No, I’m not talking about the decision of getting married. I’m talking about what phone service to sign up with. Picking the right smart phone was challenging enough, now you need to decide on a service plan. Is the actual connectivity and service the important aspect or is it the data plan? Do you want the phone service to be consistent with your television service, which is a challenging decision in and of itself? Your emotional self may be telling you one thing, while your intellectual self is telling you another. What should you do?

In an earlier chapter, we looked at the decision-making process. In this chapter we will examine the internal workings of critical thinking and how we create arguments and make decisions based on these arguments. Critical thinking is reasonable thinking that is focused on deciding what to believe and how to act. Now that we have examined argumentation and critical thinking, we can put everything together and determine just what it means to be “smart.”

To do this we need to understand the relationship between intelligence, thinking and knowledge.

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7.2: Defining Intelligence

How intelligent do you need to be to be a good critical thinker, arguer, and decision maker? Many definitions of intelligence exist and there are as many different theories about what intelligence is and how it is measured.

David Wechsler, the creator of a number of intelligence tests, considers intelligence to be the capacity to understand one's world and the resourcefulness to cope with its challenges. Intelligence is not only how much one knows about their environment, but also how effectively one uses that information.

Psychologists Sternberg, Conway, Kerton and Bernstein researched what the American people thought being intelligent meant.¹ They concluded that “you” felt intelligence consisted of the following three sets of abilities:

Problem solving and practical skills include being able to reason logically, to identify connections among ideas, to see all aspects of a problem, to take an interest in world problems, and to keep an open mind.

Verbal ability includes speaking clearly and articulately, conversing well, being knowledgeable about subjects of importance on a global level, studying hard, reading widely, and having a good vocabulary.

Social competence is being able to accept others for what they are, admitting mistakes, having a social conscience, and being sensitive to other people's needs and desires.

The late child psychologist Jean Piaget believed that intelligence was a form of adaptation. As children grow up they construct their knowledge of the world around them through the use of assimilation and accommodation. Piaget theorized that as children interact with both their physical and social environments, they organize new information into groups of interrelated ideas that he called **schemes**. In situations where children come into contact with something new, they must either assimilate it into an existing scheme or create a new scheme. The more proficient they are at doing this, the more intelligent they would be displaying.²

Adaption is both physical and symbolic. The physical relates to your actual psychomotor skills that allow you to adapt to different environments. Environment can mean anything from family, to school, to work, to social, to recreational settings. Each of these environments requires that certain roles be played for you to meet the requirements and expectations of that particular environment.

Physical intelligence involves the use of your motor skills in adapting to varying situations. Babies are born with virtually no physical intelligence. They cannot survive without the assistance of those who are more physically capable. Physical intelligence develops with the growth process.

As a child gets older the structure, conventions, traditions, and demands of the family create new and more complex expectations for the child. By age one the child might be expected to walk, by age two to talk, and by age three to be toilet trained. By the time the child reaches his or her teen years the expectations have become much more demanding. The child is to perform well in school, be involved in some constructive outside activity, help with necessary functions around the home, and obey established rules of behavior. What child hasn't heard the line “This is my house and as long as you live here you will obey my rules?”

Many parents become frustrated from wondering why their child can't follow what they consider simple rules of conduct? As the child gets older and understands more, he or she is expected to be able to readily adapt to the changing family environment. Yet, thousands of children run away from homes across the United States. High school dropouts, people who consistently quit their jobs or can't hold a job, and many marriages that end in divorce, could all qualify as examples of the inability to cope with differing environments. In many of these situations, a lack of physical intelligence is being displayed.

Symbolic adaption is your ability to communicate within an environment, so that you can make your needs, wants, and desires known to others. Given their ability to cry, babies are born with a limited amount of symbolic intelligence. New parents soon learn to recognize the difference between a baby crying for food, to be changed, or just to be held. As one grows, the level of symbolic sophistication increases. Language is added to enable a person to express himself or herself to others using a variety of word choices. One aspect of language is the process of selecting available symbols to match specific thoughts.

As children learn to speak they begin to acquire different symbols. A small child might refer to all four-legged animals as a “doggie,” because that is the only word he or she has learned as a symbol for animals. It is expected that a 3 or 4-year-old child

will be able to distinguish between dogs, cats, cows, horses, etc. As an adult, one can be expected to know specific breeds of those animals.

The process of communication is essentially the symbolic interaction between sender and receiver. Poorly chosen symbols have sent many a person scrambling to clarify what they feel is misinterpreted communication. All of us have used language we later wish we hadn't. These are the times when we have demonstrated a lack of symbolic intelligence. Critical thinkers try to remember the old cliché, "Think before you speak."

Howard Gardner of Harvard has proposed a theory of **multiple intelligences**.³

In this approach, Dr. Gardner states that there is not one overall intelligence measurement that describes a person. Instead, there are different types of intelligence and a person may be good at one or more, but not others. The line that is used when talking of this approach is that "It is not how intelligent you are, it is how you are intelligent." Dr. Gardner argues that there are eight different kinds of intelligence:

- **Linguistic** intelligence or verbal communication.
- **Logical mathematical** intelligence is the ability to solve mathematical problems.
- **Spatial** intelligence is the ability to perceive the world accurately.
- **Musical** intelligence is the ability to perceive and create musical information.
- **Body-kinesthetic** intelligence is the control of body motion and ability to handle objects.
- **Intrapersonal** intelligence is the ability to know one's own feelings.
- **Interpersonal** intelligence is the ability to understand others' feelings and motives, and to communicate that understanding.
- **Naturalist** intelligence is the ability to understand the natural world, which involves describing and categorizing the characteristics of plants and animals.

Gardner argues that each kind of intelligence is independent of each other and that a person could do poorly on one or more of the intelligences, but excel in another. Gardner says,

*"People studying physics, or chemistry or biology or geology in high school, I would say it doesn't make the slightest bit of difference. They should study some topics, of course, but the choice is wide open—I'm interested in depth, not breadth. I'm not talking about college education; I'm just taking on K to 12. What I want when kids get through a K to 12 education is for them to have a sense of what their society thinks is true, beautiful and good; false, ugly and evil; how to think about it and how to act on the basis of your thoughts."*⁴

Yale University psychologist, Robert S. Sternberg, also argues that we don't possess just one type of intelligence. He states that we possess three types of intelligence known as the **Triarchic Theory of Intelligence**. He argues that there are three facets that make up what we call intelligence.⁵

Analytical Intelligence, which is internal knowledge of the type learned in formal education and displayed in the ability of the human to critically think and problem solve.

Creative Intelligence involves insight, synthesis, and the ability to react to novel stimuli and situations. This type reflects how an individual connects the internal world to external reality.

Practical Intelligence involves the ability to grasp, understand, and solve real life problems in the everyday jungle of life. This reflects how the individual relates to the external world about him. In short, practical intelligence is **street smarts**.



12.2.1: "hand holding intelligence card" by Nick Youngson is licensed under CC BY 3.0

Sternberg writes,

*"The basis for our instruction is my own 'balance theory' of wisdom: People are wise to the extent that they use their intelligence to seek a common good. They do so by balancing, in their courses of action, their own interests with those of others and those of larger entities, like their school, their community, their country, even God. And they balance these interests over the long and the short terms. They adapt to existing environments, or shape those environments, or select new environments to achieve ends that include, but go well beyond, their own self-interest."*⁶ (Sternberg, 2009)

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7.3: Measuring Intelligence

People are surprisingly similar to each other. We all eat, drink, think deep thoughts, plan excursions, and seek our goals. Yet, within these broad similarities are differences, uniqueness among individuals. Some are taller than others. Some are more artistic than others while others appreciate the outdoors more than others. Some even appear to be more intelligent than others. Psychologists have long been intrigued by individual differences, and they have developed an array of tests to try to measure these differences. When they focus their attention on the way people differ in their ability to think, reason, and remember, they raise questions about intelligence. How is intelligence measured? Measuring intelligence generally can be broken into tests of intelligence, and tests of aptitude and/or achievement.

The **Stanford-Binet test** is the most influential and traditional way of intelligence testing. It was developed in France by Alfred Binet and his collaborator, Theodore Simon. Binet's tests of intelligence measure skills such as judgment, comprehension, and reasoning--the same kinds of skills measured on most intelligence tests today. The Stanford-Binet test traditionally yields an overall score referred to as an intelligence quotient, or IQ. The term IQ, generally describes a score on a test that rates the subject's cognitive ability as compared to the general population. IQ tests use a standardized scale with 100 as the median score and a score between 90 and 110, indicating average intelligence. A score above 130 indicates exceptional intelligence and a score below 70 may indicate an intellectual disability. Like their predecessors, modern tests do take in to account the age of a child when determining an IQ score. Children are graded relative to the population at their developmental level.

Aptitude tests are designed to predict what a person can accomplish in the future. An example is the general aptitude test battery, SAT-Scholastic Assessment Test, and ACT American College Test. They measure verbal and mathematical abilities. The idea is the knowledge gained in high school and the abilities associated are a predictor of how well a person will do. Achievement tests measure what a person can do at the time the test is given. Intelligence tests are usually aptitude tests designed to measure a broad range of mental capabilities. School grades are also considered a measure of knowledge gained in the formal education environment.

David Wechsler developed The Wechsler Intelligence Scale in 1939. His reason was the need to have a test to measure adult intelligence. Wechsler tests measure intelligence in adults 16-89, children age 6-16, and preschool and primary grades age 3-7 years of age. The Wechsler Scale is used to measure and help determine cognitive disorders. Often it is given to an adult who has suffered brain trauma, to determine what areas that may be affected, or certain childhood disorders, such as dyslexia. The test has 14 parts that measure verbal skills and performance skills.¹

The **Sternberg Multidimensional Abilities Test** measures all three of the types of intelligence he defined in his model. How do his test items differ from those on a conventional test? For one, there is more emphasis on ability to learn than on what has been learned. For example, verbal skill is measured by learning from context, not by vocabulary. For another, the test measures skills for coping with novelty, whereby the examinee must imagine a hypothetical state of the world, such as cats being magnetic, and then reason as though this state of the world were true. For yet another, the test measures practical abilities, such as reasoning about advertisements and political slogans, not just about abstract words or geometric forms.

Sternberg's test measures provide more information than just the analytical intelligence measured by standard IQ tests on which, in Sternberg's view, our society has placed far too much emphasis. Sternberg says, *"If we want to measure intelligence, we can and should measure it broadly rather than in the narrow ways that have failed to give a true picture of human capacities."*²

Reference

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7.4: Emotional Intelligence

When we imagine being a skilled critical thinker we have a tendency to focus on a person's IQ and how we logically approach arguments. But there is another aspect of intelligence that we call Emotional Intelligence that needs to be understood if we are to better understand how we make quality decisions.



12.4.1: "Heart in Head" by Roy Blumenthal is licensed under CC BY-SA 2.0

We are constantly exposed to a vast amount of emotional information about our world and ourselves. For years men have been told to hide their emotions and keep them to themselves, while women have been criticized that they are too emotional. In both cases, we have ignored the power of our emotions to help us be a success. The key is for us to use that information about the world and ourselves to be more effective. Recently, more and more companies are realizing the importance of a high EQ workforce and are bringing EQ into the workplace.

The phrase **emotional intelligence** was coined by Yale psychologist Peter Salovey and the University of New Hampshire's John Mayer to describe qualities like understanding one's own feelings, empathy for the feelings of others and "*the regulation of emotion in a way that enhances living.*" His goal is to redefine what it means to be smart. His thesis: when it comes to predicting people's success, brainpower as measured by IQ and standardized achievement tests may actually matter less than the qualities of mind once thought of as **character** before the word began to sound quaint.

The following two definitions should help you better understand Emotional Intelligence.

"Emotional Intelligence is the ability that helps the individual to sense, understand, and effectively apply the power and acumen of emotions as a source of human energy, information, connection, and influence."

--Robert K. Cooper and Ayman Sawaf,¹ *Executive EQ*

"Emotional Intelligence is the intelligent use of emotions: You intentionally make your emotions work for you by using them to help guide your behavior and thinking in ways that enhance your results."

--Hendrie Weisinger², *Emotional Intelligence at Work*

Emotional Intelligence is nothing new.

"Anyone can become angry—that's easy. But to be angry with the right person, to the right degree, at the right time, for the right purpose, and in the right way—that is not easy." Aristotle, The Nicomachean Ethics

EQ is not the opposite of IQ. Some people are blessed with a lot of both, some with little of either. What researchers have been trying to understand is how they complement each other; how one's ability to handle stress, for instance, affects the ability to concentrate and put intelligence to use. Perhaps the most visible emotional skills, the ones we recognize most readily, are the "people skills" like empathy, graciousness, and the ability to read a social situation.

Navy SEALs Use of Emotional Intelligence



12.4.2: "SEALs Logo" by Unknown is licensed under [CC BY 2.0](#)

In order for more of the candidates to pass the rigid requirements to become a SEAL the Navy implemented Emotional Intelligence training. A four-step process was taught to the candidates to help them stay in control of their emotions. As a result, the pass rate went from a quarter of the candidates to a third.

Goal Setting: Set small, short-term goals that work towards my larger goal. If my goal is to lose 30 pounds, then what am I going to do this week to lose 1 pound. Make that my goal.

Rehearsal: Go over in your mind the nervous situation you are going to be experiencing, be it a job interview or a speech you have to give. Then when you do the challenge, it will be for the second time.

Self-Talk: Tell yourself you can do it. Don't let negative thoughts disrupt your confidence. This self-talk will keep you on track to success

Arousal Control: Taking a deep breath will help you reduce the anxiety you might have in a given situation. A "cleansing breath" is a deep intake of air through the nose, hold it for a moment and then a long, slow exhale through the mouth.

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7.5: Knowledge and Literacy

Another area of our intellectual capability is literacy. Not only is knowledge the acquisition and storage of factual information, but it also includes literacy. Literacy has traditionally been thought of as the ability to read and write. However, in a society as technologically advanced as ours, this minimum ability hardly qualifies someone to be labeled as literate. Our complex, technological society requires one to be literate in a number of areas.

Functional Literacy: This is the ability to operate within the demands of our environment. Functional literacy means that we can balance a checkbook, fill out a job application, prepare an income tax form, figure a home budget, and relate to others. It is the source of information over which we have the most control.

Media Literacy: This is the ability to manage what we watch, read, and listen to. The media has become an important part of our daily lives. Media literacy is the ability to apply critical thinking skills to the media.

"Media literacy is the ability to sift through and analyze the messages that inform, entertain and sell to us every day. It's the ability to bring critical thinking skills to bear on all media— from music videos and Web environments to product placement in films and virtual displays on NHL hockey boards. It's about asking pertinent questions about what's there, and noticing what's not there. And it's the instinct to question what lies behind media productions— the motives, the money, the values and the ownership— and to be aware of how these factors influence content."

--Jane Tallim, contributor for Media Smarts¹

Statistics from the Neilson television ratings service indicate that the average American watches over six hours of television per day. It is hard to imagine that our view of people, events, and things in our life is not be affected by what is viewed on television. Consider the millions of people who understand the world only from reading Facebook. As the influence of the media increases, so will the need to manage the media.

The Center for Media Literacy has many experts who suggest a variety of questions that we can ask as we watch different messages on the variety of medias that are available. In no particular order, here are some of the questions you might want to consider.

- Who the media was intended for?
- Who wants to reach this audience? And why?
- Whose perspective is this story told?
- Whose voices are heard and whose voices are absent?
- What strategies does this message use to get my attention and make me feel included?
- Who profits from this presentation and who loses?
- Who created this message?
- What techniques are used to attract my attention?
- How might different people understand this message differently from me?
- What lifestyles, values, and points of view are represented in or omitted from this message?
- Why was this message sent?

More than you thought?

Here is a great test for you, find a story that is in the news. Then go search a variety of news outlets from television to radio, to websites, to blogs, and see how the story is different. Ask some of the above questions. Notice the differences you find in the stories and the way they are presented. Often it is not what is there that is different, it is what they leave out that makes the stories so different.

Information/Reference Literacy: This refers to understanding data of all types, from a textbook on critical thinking to a business spreadsheet to e-information from the internet. As the amount of information continues to grow, doubling every four years, people are expected to know more about almost everything. Consider the explosion of information available through the Internet with millions of web pages. From entertainment, to bill paying to research, access to the Internet has become more and more of a necessity. A poll conducted by the BBC in early 2010 found that almost four in five internet users and non-users around the world felt that access to the Internet was a fundamental human right. And in several countries including Finland, Greece, Spain, Estonia,

and France, it has actually become a protected human right. On July 6, 2012, the United Nations Human Rights Council backed the notion that Internet access and online freedom of expression is a basic human right.

But as an unfiltered medium, people are individually responsible for knowing what specific electronic information and what web sites are reliable and trustworthy. Many college libraries offer online courses that can improve our Information Literacy.

Cultural Literacy: This type of literacy encompasses history, philosophy, and the arts, any expression that represents an attempt to understand and come to terms with our civilization. Although it is correct that no two humans know exactly the same things, they often have a great deal of knowledge in common. To a large extent this common knowledge or collective memory allows people to communicate, to work together, and to live together. It forms the basis for communities, and if enough people share it, it is a distinguishing characteristic of a national culture. The form and content of this common knowledge constitute one of the elements that make each national culture unique

Cultural literacy, unlike expert knowledge, is meant to be shared by everyone. It is that shifting body of information that our culture has found useful, and therefore worth preserving. Only a small fraction of what we read and hear gains a secure place on the memory shelves of the culturally literate, but the importance of this information is beyond question. This shared information is the foundation of our public discourse. It allows us to comprehend our daily newspapers and news reports, to understand our peers and leaders, and even to share our jokes. Cultural literacy is the context of what we say and read.

Cultural literacy has its roots in what cognitive scientists call “schema theory.” Schema theory describes how people organize all of the amount of background knowledge which they accumulate about the world. This theory asserts that knowledge is organized into mental units called **schemas**. When people learn, when they build knowledge, they are either creating new schemas, or linking together preexisting schemas in new ways. In teaching we call this constructionist learning where students take what is being taught in class and actually construct new knowledge.

Everybody has different experiences, so everyone develops a somewhat different view of the world. However, we also share many common experiences. Most Americans have seen a baseball game, gone to a movie, and have eaten at McDonald’s. Shared schemas constitute an important part of our shared cultural knowledge. When people communicate, they depend on these shared schemas. Conan O’Brien can’t make a joke about sushi unless he can reasonably assume that most of his audience has had the experience of eating sushi. The more background knowledge two people share, the less they have to make explicit in their conversations.

Reference

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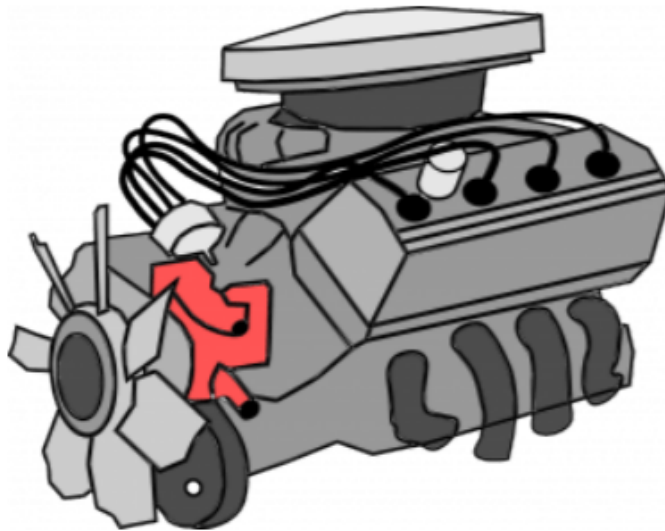
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7.6: Thinking vs. Intelligence

Now we can look at the relationship between Intelligence, knowledge, and finally thinking. There is a difference between intelligence and actual thinking. Too often more credit is given to the person who is “highly intelligent” than the person who effectively uses that intelligence to critically think, argue, and arrive at a decision.

Intelligence may describe our cognitive potential, but thinking examines how we actually use that potential. Brain training pioneer, Edward de Bono, explains our mental capacity by comparing it with the engine of an automobile. He compares the horsepower of an engine with intelligence, fuel with knowledge, and how well-tuned an engine is with one's thinking ability. Just like having a high horse-powered engine that does not go anywhere because it is poorly tuned, so could a person be highly intelligent and still make poor decisions, because he or she does not have good thinking skills.



12.6.1: "Automobile engine" by Unknown on Pixabay

Horsepower --- Intelligence

Fuel --- Knowledge

Tuned --- Thinking

Smart = Effectively using thinking Skills to utilize your Knowledge and Intelligence.

Another way of looking at the interaction between intelligence, knowledge, and thinking is to compare them with the working of a computer. Intelligence can be related to the computer processor and memory storage. Knowledge is the data that is imputed into the computer. Thinking is the program that is written to utilize the capabilities of the computer in processing the information. No matter how impressive the computer processor is, without a quality program it is little more than a doorstop.

If a person has a level of cognitive ability, access to quality information, and effective thinking skills, then we can say that person is **smart**. Since thinking is necessary to best utilize a person's intelligence, we need to more closely examine the skill of thinking.

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7.7: Patterns of Thinking

Instead of one thought process, we can take advantage of five different patterns of thinking.

Emotional Thinking Process occurs when you make a decision based on sympathy, passion, or prejudice. This pattern of thinking stresses the heart over the mind and is dominated by one's emotions. The motto of these people is, "If it feels good, do it." In this pattern of thinking, decisions are arrived at using emotional criteria.

The **Logical Thinking Process** happens when you make decisions because the facts of the situation dictate or justify the decision you are using. This pattern of thinking attempts to ignore emotional considerations in favor of one's ability to use reason. This stresses that humans dominate other species because of their ability to reason, and, therefore, decisions should be made first on logical criteria.

The **Vertical Thinking Process** uses a step-by-step procedure to make decisions. You cannot go to step two until you have first completed step one, and step three is dependent on steps one and two. The vertical thinker, also known as a linear thinker, is dependent on clearly written and organized instructions to get a task accomplished. This is the way recipes are followed or the method computers think. If an instruction is missed or an error is made, work on the task comes to a halt until the error is corrected. This pattern stresses conventional, rather than unique or creative outcomes.

The **Horizontal Thinking Process** is more creative, unconventional, highly innovative, using "off the wall" ideas. Popularized by Edward de Bono, this type of thinking, or processing of information, stresses creativity. Decisions are based on one's ability to select from a wide variety of choices developed from many angles and approaches to the situation.



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7.8: Edward de Bono's Six Hats of Thinking

As described earlier, there is no one thinking method. When we are working on a problem we may have been told to put on "our thinking cap." One of the most popular approaches to alternative modes of thinking is described by Edward de Bono as the **Six Hats of Thinking**¹. This approach says there are six different ways we can think about a problem. Each way is illustrated by a different colored hat.



12.8.1: "Six Thinking Hats" by Unkown is in the [Public Domain](#), CC0

- 1. White Hat:** This is the hat you wear when you are neutral and are just thinking of facts and data.
- 2. Red Hat:** This is the hat you wear when you are using your feelings, intuition, hunches, and emotions.
- 3. Black Hat:** This is the hat you wear when you judge, evaluate, and use caution.
- 4. Yellow Hat:** This is the hat of optimism. Wearing this hat, you look for ways that something can be done.
- 5. Green Hat:** This is the hat you wear when you want to be creative and come up with new ideas.
- 6. Blue Hat:** This is the hat you wear to see an overview of the problem. This hat suggests where your thinking should go next.

Now when someone tells you to "put on your thinking cap," an old expression meaning it is time to stop and think, you now know you have six different caps you can wear.

Reference

1. Edward de Bono, *Six Hats of Thinking* (New York City: Little, Brown, and Company, 1985)

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7.9: The Critical Thinking Process

In the critical thinking process, many factors are taken into consideration before a decision is made. Critical thinking involves using logical, emotional, and ethical criteria as one strives to make up his or her mind. Decisions are reached only after a careful examination of all available data, and are made as a result of considering all of the alternatives and their various consequences.

Can critical thinking be taught? From the work of Dr. Edward de Bono and others like Richard Paul the answer appears to be yes.

Professor of Social Ecology, Peter Scharf, is concerned about the lack of a school curriculum that teaches thinking. Scharf says,

“To be a professional of any kind in the next 20 years, or even an enlightened citizen, will require a complicated set of thinking skills, more than reading and writing. The world isn’t as filtered as it once was. Kids are thinking. What we’re trying to do is have them do it well.”

No one approach is the best, and no one approach works well all of the time. Different presidents have been different types of thinkers. In 1962, when President Kennedy was faced with Soviet missiles in Cuba, he brought together all of his personal advisors, cabinet members, and military personnel to advise him on what course of action ought to be taken by the United States. Kennedy solicited suggestions from numerous advisors who advocated many different positions, from doing nothing to eliminating the missiles with a nuclear strike.

Patterson and Zarefsky write in their book, CONTEMPORARY DEBATE,

*“President Kennedy recognized the invaluable benefits derived from a clash of ideas in reaching a decision. Faced with the Cuban missile crisis, Kennedy rejected the decision- making methods of chance, impulse, or authoritarian action. Instead, he insisted in a high- level debate among experts before making a final decision about the action to take.”*¹

The term we use for examining our thinking is metacognition or the metacognitive process, which simply means “thinking about our thinking.” By stepping back and looking at our level of intellectual and emotional intelligence and seeing how we think, we can improve our thinking.

The good news is that we can become smarter and smarter. We can improve our critical thinking ability and our argumentative skills. This allows us to be in better control of our lives.

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7.10: The Focus of This Chapter

In this chapter I wanted to look at intelligence, thinking, literacy and how these interact with each other to make us “smart.”

- There is a difference between thinking and intelligence. Intelligence seems to be based on how our brains are “wired.” Different kinds of intelligence suggest there are different types of “wiring.”
- Thinking is the skill in how we use our intellectual “wiring.” Since thinking is a skill, we all can improve our ability at critical thinking. No matter what our initial intelligence suggests, we can improve our critical thinking.
- Being “smart” is not just a high intelligent score. Being “smart” occurs when you effectively combine your intelligence with your knowledge and guide them with your thinking skills.

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8: REASONING

- 8.1: Rhetorical Appeals and Devices
- 8.2: Rhetorical Analysis
- 8.3: Rhetorical Devices
- 8.4: The Logic of Our Arguments
- 8.5: Overview of Reasoning
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- 8.7: The Building Blocks of an Argument
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- 8.11: Fallacies
- 8.12: Fear Appeals- The Extended Parallel Process Model
- 8.13: Hope Appeals- Persuasive Hope Theory
- 8.14: Applications of Persuasive Hope Theory
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8.1: Rhetorical Appeals and Devices

Studying rhetorical analysis is crucial in the fields of communication and media, as it goes hand-in-hand with the logical principles discussed in the previous chapter. While logic examines the structure and validity of arguments, rhetorical analysis explores the subtle ways information is shared, understood, and reacted to. It looks at how language, tone, and context are used to influence or inform people.

Those studying communication and media can gain insights into how messages are created and their societal effects by looking at these elements. This study not only sharpens critical thinking but also helps recognize hidden motives and biases in media. In today's information-rich world, being able to scrutinize media rhetoric is key to responsible information consumption and effective communication. It's worth noting that rhetorical analysis and logic aren't separate but work together. Logic lays down the rules of sound reasoning, while rhetorical analysis adds depth by considering emotions and context. Combined, they provide a full view of today's complex media and communication landscape.

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8.2: Rhetorical Analysis

Learning Objectives

- Identify and analyze the three major parts of effective communication (ethos, pathos, and logos) and understand how they are utilized in various forms of communication to create persuasive arguments.
- Recognize and evaluate the rhetorical situation, including the speaker, occasion, audience, and purpose, and understand how these elements interact to shape the effectiveness of a communicator's message.
- Critically assess the credibility, emotional appeal, logical reasoning, and timing (Kairos) in different texts, enabling them to become more discerning consumers of information and more effective communicators themselves.

Simply defined, rhetoric is the art or method of communicating effectively to an audience, usually with the intention to persuade; thus, rhetorical analysis means analyzing how effectively a writer or speaker communicates her message or argument to the audience.

According to Aristotle, the three major parts of effective communication, also called the Rhetorical Triangle, are ethos, pathos, and logos, and they provide the foundation for a solid argument. As a reader and a listener, you must be able to recognize how writers and speakers depend upon these three rhetorical elements in their efforts to communicate. As a communicator yourself, you will benefit from the ability to see how others rely upon ethos, pathos, and logos so that you can apply what you learn from your observations to your own speaking and writing.

Rhetorical analysis can evaluate and analyze any type of communicator, whether they be a speaker, an artist, an advertiser, or a writer, but to simplify the language in this chapter, the term “writer” will represent the role of the communicator.

The Rhetorical Situation

Understanding a rhetorical situation means understanding the context of that situation. A rhetorical situation comprises a handful of key elements, which should be identified before attempting to analyze and evaluate the use of rhetorical appeals.

These elements consist of the speaker in the situation (such as the writer), the occasion (the event that prompted the creation of the text and the topic being addressed), the audience being addressed, and the purpose for addressing the issue.

Answering the following questions will help you identify a rhetorical situation:

- Who is the speaker?
- What is the occasion the speaker is addressing?
 - What prompted the creation of the text?
 - What is the issue/topic of the text?
- Who is the audience?
 - Who is the intended audience?
 - What values does the audience hold that the author or speaker appeals to?
 - Who have been or might be secondary audiences?
 - If this is a work of fiction, what is the nature of the audience within the fiction?
- What is the writer's purpose for addressing this issue?
 - To provoke, to attack, or to defend?
 - To push toward or dissuade from certain actions?
 - To praise or to blame?
 - To teach, to delight, or to persuade?

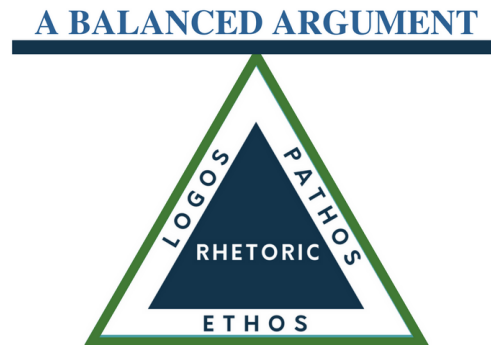


Figure 1: The phrase, “A Balanced Argument” sits atop a triangle. The sides of the triangle read, Logos, Pathos, and Ethos. The phrase rhetoric is in the middle of the triangle. Balanced-Argument-graphic © Kalyca Schultz, Virginia Western Community College is licensed under a [CC0 \(Creative Commons Zero\)](#) license

The foundations of rhetoric are interconnected in such a way that a writer needs to establish all of the rhetorical appeals to put forth an effective argument. If a writer lacks a pathetic appeal and only tries to establish a logical appeal, the audience will be unable to connect emotionally with the writer and, therefore, will care less about the overall argument. Brian Vickers, author of the essay *In Defence of Rhetoric* describes Rhetoric as a “coherent and functional system”.^[1] Immanuel Kant, an Enlightenment thinker (18th century), used a method of Rhetoric in order to get a “passionate, enthusiastic.” reaction from his audience.^[2]

If a writer lacks a logical appeal and tries to rely solely on subjective or emotionally driven examples, then the audience will not take the writer seriously because an argument based purely on opinion and emotion cannot hold up without facts and evidence to support it. If a writer lacks either the pathetic or logical appeal, not to mention the kairotic appeal, then the writer’s ethical appeal will suffer. All of the appeals must be sufficiently established for a writer to communicate effectively with his audience.

Appeal to Ethos

Literally translated, ethos means “character.” In this case, it refers to the character of the writer or speaker, or more specifically, his credibility. The writer needs to establish credibility so that the audience will trust him and, thus, be more willing to engage with the argument. If a writer fails to establish a sufficient ethical appeal, then the audience will not take the writer’s argument seriously.

For example, if someone writes an article that is published in an academic journal, in a reputable newspaper or magazine, or on a credible website, those places of publication already imply a certain level of credibility. If the article is about a scientific issue and the writer is a scientist or has certain academic or professional credentials that relate to the article’s subject, that also will lend credibility to the writer. Finally, if the writer shows that they are knowledgeable about the subject by providing clear explanations of points and by presenting information in an honest and straightforward way, that also helps to establish a writer’s credibility.

When evaluating a writer’s ethical appeal, ask the following questions:

- Does the writer come across as reliable?
 - Viewpoint is logically consistent throughout the text
 - Does not use hyperbolic (exaggerated) language
 - Has an even, objective tone (not malicious but also not sycophantic)
 - Does not come across as subversive or manipulative
- Does the writer come across as authoritative and knowledgeable?
 - Explains concepts and ideas thoroughly
 - Addresses any counter-arguments and successfully rebuts them
 - Uses a sufficient number of relevant sources

- Shows an understanding of sources used
- What kind of credentials or experience does the writer have?
 - Look at byline or biographical info
 - Identify any personal or professional experience mentioned in the text
 - Where has this writer's text been published?

Appeal to Pathos

Literally translated, pathos means “suffering.” In this case, it refers to emotion, or more specifically, the writer’s appeal to the audience’s emotions. When a writer establishes an effective pathetic appeal, they make the audience care about what they are saying. If the audience does not care about the message, then they will not engage with the argument being made.

For example, consider this: A writer is crafting a speech for a politician who is running for office, and in it, the writer raises a point about Social Security benefits. In order to make this point more appealing to the audience so that they will feel more emotionally connected to what the politician says, the writer inserts a story about Mary, an 80-year-old widow who relies on her Social Security benefits to supplement her income. While visiting Mary the other day, sitting at her kitchen table and eating a piece of her delicious homemade apple pie, the writer recounts how the politician held Mary’s delicate hand and promised that her benefits would be safe if he were elected. Ideally, the writer wants the audience to feel sympathy or compassion for Mary because then they will feel more open to considering the politician’s views on Social Security (and maybe even other issues). With this type of approach, being persuasive caters to the emotions, and opposing views do not need to be addressed.^[3]

When evaluating a writer’s pathetic appeal, ask the following questions:

- Does the writer try to engage or connect with the audience by making the subject matter relatable in some way?
- Does the writer have an interesting writing style?
- Does the writer use humor at any point?
- Does the writer use narration, such as storytelling or anecdotes, to add interest or to help humanize a certain issue within the text?
- Does the writer use descriptive or attention-grabbing details?
- Are there hypothetical examples that help the audience to imagine themselves in certain scenarios?
- Does the writer use any other examples in the text that might emotionally appeal to the audience?
- Are there any visual appeals to pathos, such as photographs or illustrations?

An appropriate appeal to pathos is different from trying to unfairly play upon the audience’s feelings and emotions through fallacious, misleading, or excessively emotional appeals. Such a manipulative use of pathos may alienate the audience or cause them to “tune out.” An example would be the American Society for the Prevention of Cruelty to Animals (ASPCA) commercials featuring the song “In the Arms of an Angel” and footage of abused animals.

YouTube Video

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This announcement created by ASPCA with Sarah McLachlan explains the cruelty and abuse of animals in the United States of America and how they can be saved as explained at the end of the video. Even Sarah McLachlan, the singer and spokesperson featured in the commercials, admits that she changes the channel because they are too depressing.^[4]

Even if an appeal to pathos is not manipulative, such an appeal should complement rather than replace reason and evidence-based argument. In addition to making use of pathos, the author must establish her credibility (ethos) and must supply reasons and evidence (logos) in support of her position. An author who essentially replaces logos and ethos with pathos alone does not present a strong argument.

Appeal to Logos

Literally translated, logos means “word.” In this case, it refers to information, or more specifically, the writer’s appeal to logic and reason. A successful logical appeal provides clearly organized information as well as evidence to support the overall argument. If one fails to establish a logical appeal, then the argument will lack both sense and substance.

For example, refer to the previous example of the politician’s speech writer to understand the importance of having a solid logical appeal. What if the writer had only included the story about 80-year-old Mary without providing any statistics, data, or concrete plans for how the politician proposed to protect Social Security benefits? Without any factual evidence for the proposed plan, the audience would not have been as likely to accept his proposal, and rightly so.

When evaluating a writer’s logical appeal, ask the following questions:

- Does the writer organize his information clearly?
 - Ideas are connected by transition words and phrases
 - Ideas have a clear and purposeful order
- Does the writer provide evidence to back his claims?
 - Specific examples
 - Relevant source material
- Does the writer use sources and data to back his claims rather than base the argument purely on emotion or opinion?
 - Does the writer use concrete facts and figures, statistics, dates/times, specific names/titles, graphs/charts/tables?
 - Are the sources that the writer uses credible?
 - Where do the sources come from? (Who wrote/published them?)
 - When were the sources published?
 - Are the sources well-known, respected, and/or peer-reviewed (if applicable) publications?

Pay particular attention to numbers, statistics, findings, and quotes used to support an argument. Be critical of the source and do your own investigation of the facts. Remember: What initially looks like a fact may not actually be one. Maybe you’ve heard or read that half of all marriages in America will end in divorce. It is so often discussed that we assume it must be true. Careful research will show that the original marriage study was flawed, and divorce rates in America have steadily declined since 1985.^[5] If there is no scientific evidence, why do we continue to believe it? Part of the reason might be that it supports the common worry of the dissolution of the American family.

Appeal to Kairos

Literally translated, Kairos means the “supreme moment.” In this case, it refers to appropriate timing, meaning when the writer presents certain parts of their argument as well as the overall timing of the subject matter itself. While not technically part of the Rhetorical Triangle, it is still an important principle for constructing an effective argument. If the writer fails to establish a strong Kairotic appeal, then the audience may become polarized, hostile, or may simply just lose interest.

If appropriate timing is not taken into consideration and a writer introduces a sensitive or important point too early or too late in a text, the impact of that point could be lost on the audience. For example, if the writer’s audience is strongly opposed to their view, and they begin the argument with a forceful thesis of why they are right and the opposition is wrong, how do you think that audience might respond?

In this instance, the writer may have just lost the ability to make any further appeals to their audience in two ways: first, by polarizing them, and second, by possibly elevating what was at first merely strong opposition to what would now be hostile opposition. A polarized or hostile audience will not be inclined to listen to the writer’s argument with an open mind or even to listen at all. On the other hand, the writer could have established a stronger appeal to Kairos by building up to that forceful thesis, maybe by providing some neutral points such as background information or by addressing some of the opposition’s views, rather than leading with why they are right and the audience is wrong.

Additionally, if a writer covers a topic or puts forth an argument about a subject that is currently a non-issue or has no relevance for the audience, then the audience will fail to engage because whatever the writer’s message happens to be, it won’t matter to anyone. For example, if a writer were to put forth the argument that women in the United States should have the right to vote, no one would care; that is a non-issue because women in the United States already have that right.

When evaluating a writer's Kairotic appeal, ask the following questions:

- Where does the writer establish her thesis of the argument in the text? Is it near the beginning, the middle, or the end? Is this placement of the thesis effective? Why or why not?
- Where in the text does the writer provide her strongest points of evidence? Does that location provide the most impact for those points?
- Is the issue that the writer raises relevant at this time, or is it something no one really cares about anymore or needs to know about anymore?

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"The Art of Rhetoric: Persuasive Techniques" explores the use of rhetoric in advertising such as billboards, and apps and how it's presented for people to understand the advertiser's point of an argument.

Connection to Media Literacy

The rhetorical appeals of logos (logic), pathos (emotion), ethos (credibility), and kairos (timing) are essential tools for analyzing and interpreting communication and media messages. Understanding these elements enhances media literacy by providing a framework for evaluating how messages are crafted to influence specific audiences.

Media literacy requires the ability to critically analyze various forms of media, including advertisements, news reports, social media posts, and more. By recognizing the use of logos, pathos, ethos, and kairos, individuals can assess how these appeals are employed to achieve specific communication goals. For example, a political advertisement may use logos to present factual data, pathos to evoke patriotic feelings, ethos to establish the candidate's credibility, and kairos to time the message effectively before an election. This multifaceted analysis enables individuals to discern underlying strategies, biases, and intentions, fostering a more informed and critical engagement with media.

In July of 2013, an NPR broadcast with host Reena Miller and guest Dr. Anne Curzan, professor of English at the University of Michigan, asked, "So when did rhetoric become so closely and negatively tied with politics?" Dr. Curzan states that "rhetoric can be very negative where people say, empty rhetoric, or harsh rhetoric. But sometimes people use it to mean talk." Dr. Curzan is stating a fact about "mean talk" that is ubiquitous ten years after her statement. In 2023, most news networks use the word rhetoric every day. And in most cases this usually refers to "mean talk." So it seems that the word rhetoric can be used in two ways, a politician can use rhetoric that creates a polarization amongst the audience, and or constituents. The opposite usage is often found in academia, such as giving a counterpoint to an argument.^[6]

In today's complex media landscape, understanding the rhetorical appeals of logos, pathos, ethos, and kairos empowers individuals to become more discerning media consumers. It helps them recognize how messages are tailored to persuade or influence through logical reasoning, emotional appeal, credibility, and timing. This awareness promotes responsible and thoughtful media consumption, allowing individuals to evaluate the validity and effectiveness of messages. Whether assessing the reliability of a news story, the persuasiveness of an advertisement, or the timing of a social media campaign, applying these rhetorical principles enhances the ability to navigate and respond to media content critically. This understanding contributes to a more media-literate society, capable of engaging with media messages in an informed and thoughtful manner.

Case Study: Apple Advertising

Outstanding advertising campaigns will find ways to draw on multiple forms of rhetorical appeals. Apple is one company that has done this in many different ways over the years.^[7] Take a look at the three videos below, linked on YouTube, and see if you can determine which one of them uses either logos, pathos, or ethos.

Apple is promoting its latest Mac as bigger and better. The emphasis is on the Mac's ability to multi-task at high-speed with great sound while maintaining outstanding color and giving you more battery power.

Example 8.2.1

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In this famous Apple advertisement, Apple breaks the barrier of “Sameness”. Apple clearly defines its product differently from the rest.

Example 8.2.3

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This Apple advertisement uses the tagline “How hard can it be?”, showing the Mac computer being used in a wide range of applications from creativity to science, emphasizing ease of use.

After watching all three of these videos, how do you think Apple might use an appeal to Kairos in an advertisement?

Key Takeaways

- Rhetoric is the art of effective communication, utilizing ethos (credibility), pathos (emotional appeal), and logos (logical reasoning) to persuade an audience, and understanding these elements is vital for both analyzing and crafting persuasive messages.
- The rhetorical situation, encompassing the speaker, occasion, audience, and purpose, plays a crucial role in shaping communication, and recognizing these elements helps in evaluating the effectiveness of an argument.
- The interconnectedness of rhetorical appeals means that a balanced use of ethos, pathos, logos, and appropriate timing (Kairos) is essential for creating a compelling argument; a lack in any of these areas can diminish the overall impact on the audience.

Exercises

1. Analyze a recent political speech or advertisement using the principles of ethos, pathos, and logos. How does the speaker or writer establish credibility, appeal to emotions, and use logic to persuade the audience? Identify specific examples of each rhetorical element.
2. Create a hypothetical rhetorical situation, including the speaker, occasion, audience, and purpose. Then, write a short persuasive argument that effectively utilizes ethos, pathos, logos, and kairos. Share with a peer and discuss how well each element is integrated.
3. Consider a time when you were persuaded by an argument that later seemed flawed or biased. Analyze that argument using the concepts of ethos, pathos, logos, and kairos. What made the argument initially persuasive, and what did you later recognize as its weaknesses or fallacies?

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8.3: Rhetorical Devices

Learning Objectives

- Understand the historical development and classification of rhetorical devices, including the distinction between schemes and tropes and how they have been organized and cataloged by the Greeks and Romans.
- Recognize and identify various examples of rhetorical devices such as metaphor, simile, antanaclassis, hyperbole, and irony, and will be able to differentiate between artful deviations in word meaning (tropes) and word arrangement (schemes).
- Appreciate the complexity and richness of rhetoric, recognizing that it encompasses more than just figures of speech, and will be able to analyze how rhetorical strategies can be used in expression, composition, or discovery of ideas and arguments.

Like wildflower seeds tossed on fertile ground, the figures of speech, sometimes called the “flowers of rhetoric” (Flores rhetoricae), have multiplied into a garden of enormous variety over time. As the right frame of this web resource illustrates, the number of figures of speech can seem quite imposing. And indeed, the number, names, and groupings of figures have been the most variable aspect of rhetoric over its history.

The figures first acquired their names from the Greeks and Romans who cataloged them. Although attempts have been made to anglicize or update the figures’ names, this sometimes proves to confuse things, even though the Greek and Latin terms are odd to modern ears. Pronunciation guides and etymologies have been provided to clarify the Greek terms, in particular. And because there are so many synonyms or close synonyms among the figures, each entry contains equivalent and comparative terms from Greek, Latin, and English.

Over time, these figures have been organized in a variety of different ways in order to make sense of them and to learn their various qualities —much as a scientist might classify the flora of a forest, grouping like species into families. The simplest (and oldest) arrangement for the figures divides them into two broad categories, “schemes” and “tropes”—useful starting points.

As rich and interesting as the figures are, they do not constitute the whole of rhetoric, as some have mistakenly surmised. Such a view is a vast reduction of the discipline of rhetoric, which has just as much to do with the discovery of things to say (Invention), their arrangement (Arrangement), committal to memory (Memory), and presentation (Delivery—using the rhetorical appeals) as it has to do with the figures of speech, which are typically categorized under the third of these canons of rhetoric, Style. Though this text distinguishes between different elements of rhetoric, in reality, they are all intertwined.

For example, the most identifiable tropes include metaphor and simile. These are simply comparisons: “Life is a journey”; “Watching TV is like taking a visual anesthetic.” But “comparison” itself is a topic of invention, a commonplace to which one may turn to generate ideas about something: “Let us compare life to a journey. We set out at birth, travel through various regions, and arrive at the bleak destination of death...” The difference between a figure and a topic of invention, then, may sometimes simply be a matter of degree, or it may be a matter of whether one views the strategy as one of expression of an idea (an issue of style) or the composition or discovery of an idea or argument (an issue of invention). The point is, that we should recognize the close proximity of the figures and the topics of invention.

Before we dive into the diverse rhetorical devices, watch this video on Basic Rhetorical Devices for a quick overview:

YouTube Video

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This video by Kirks PLE English explains a few basic rhetorical devices to help master them.

Tropes

There are many, many rhetorical devices. Some you may recognize from studying literary devices in English courses through the years and others may seem quite foreign (literally—as they are Greek!). You'll notice that different devices are featured in different places—the key is to be on the lookout for how a speaker uses language to emphasize (or de-emphasize) points.

The main two categories of rhetorical devices are schemes and tropes, which both have to do with using language in an unusual or “figured” way.

- A trope is an artful deviation from the ordinary or principal signification of a word.
- A scheme is an artful deviation from the ordinary arrangement of words.

“I work like a slave” [trope: simile] “I don’t know if I’m working my job or my job, me” [schemes: antimetabole, ellipsis, personification]

Notice how each figure of speech uses language in an artful way to make a point. Tropes focus on how a particular word is used, whereas schemes play with the way words are arranged.

Kinds of Tropes

Remember, a Trope is an artful deviation from the ordinary or principal signification of a word.

1. Reference to One Thing as Another
2. Wordplay and puns
3. Substitutions
4. Overstatement/Understatement
5. Semantic Inversions

Reference to One Thing as Another

Metaphor: Reference to one thing as another, implying a comparison.

No man is an island —John Donne

For ever since that time you went away,
I’ve been a rabbit burrowed in the wood —Maurice Sceve

Life is a beach.

Who captains the ship of state?

Simile: Explicit comparison of one thing to another.

My love is like a red, red rose —Robert Burns

Her hair was like gravy, running brown off her head and clumping up on her shoulders.

The day we passed together for a while
Seemed a bright fire on a winter’s night —Maurice Sceve

You are like a hurricane: there’s calm in your eye, but I’m getting blown away —Neil Young

The air-lifted rhinoceros hit the ground like a garbage bag filled with split pea soup.

Synecdoche (si-nek’-do-kee): A whole is represented by naming one of its parts.

The rustler bragged he'd absconded with five hundred head of longhorns.
Both "head" and "longhorns" are parts of cattle that represent them as wholes.

Listen, you've got to come take a look at my new set of wheels.
One refers to a vehicle in terms of some of its parts, "wheels."

"He shall think differently," the musketeer threatened, "when he feels the point of my steel."
A sword, the species, is represented by referring to its genus, "steel."

Metonymy (me-ton'-y-my): Reference to something or someone by naming one of its attributes.

The pen is mightier than the sword
The pen is an attribute of thoughts that are written with a pen; the sword is an attribute of military action. – Edward Bulwer-Lytton

We await word from the crown.

I'm told he's gone so far as to give her a diamond ring.

The IRS is auditing me? Great. All I need is a couple of suits arriving at my door.

Personification: Reference to abstractions or inanimate objects as though they had human qualities or abilities.

O beware, my lord, of jealousy!
It is the green-ey'd monster which doth mock
The meat it feeds on.
—Iago in Shakespeare's Othello 3.3.165-67

The insatiable hunger for imagination preys upon human life
—Samuel Johnson

Wordplay and Puns

Antanaclasis (an'-ta-na-cla'-sis): Repetition of a word in two different senses.

Your argument is sound...all sound. —Benjamin Franklin
The meaning of "sound" first appears to be "solid" or "reasonable"; in its repetition, it means something very different, "all air" or "empty."

In thy youth learn some craft that in thy age thou mayest get thy living without craft.
The meaning of "craft" first means "vocation"; in its repetition, it means "fraud" or "cunning."

While we live, let us live.

In the following example, antanaclasis occurs with an entire phrase whose meaning alters upon repetition:

"If you aren't fired with enthusiasm, you will be fired with enthusiasm." —Vince Lombardi

Paronomasia: Using words that sound alike but that differ in meaning (punning).

A jesting friar punned upon the name of the famous humanist Erasmus, "Errans mus" [erring mouse]. —Puttenham
A pun is its own reward.

Syllepsis: Using a word differently in relation to two or more words that it modifies or governs (sometimes called zeugma).

In the following example, "rend" governs both objects, but the first rending is figurative; the second literal:
Rend your heart, and not your garments. Joel 2:13

You held your breath and the door for me

—Alanis Morissette

“Fix the problem, not the blame.” —Dave Weinbaum

The verb “fix” governs both “problem” and “blame.” In its first instance, “fix” means “solve,” but this verb shifts its meaning when applied to its second object, where the understood “fix” = “assign.”

Onomatopoeia (on-o-mat-o-pee'-a): Using or inventing a word whose sound imitates that which it names.

The buzzing of innumerable bees

The “zz” and “mm” sounds in these words imitate the actual sounds of bees.

Substitutions

Anthimeria: Substitution of one part of speech for another.

I've been Republicaned all I care to be this election year.

Noun used as verb.

Did you see the way those blockers defenced on that last play?

Noun used as verb.

Feel bad? Strike up some music and have a good sing.

Verb used as noun.

Periphrasis: Substitution of a descriptive word or phrase for a proper name or of a proper name for a quality associated with the name.

In the TV show “Dinosaurs” the infant dino called his father, “Not-the-Mama.”

He's no Fabio to look at; but then, he's no Woody Allen, either.

Said of Aristotle: “The prince of Peripatetics” —Angel Day

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Overstatement/Understatement

Hyperbole (hy-per'-bo-lee): Use of exaggerated terms for emphasis or effect. Hyperbole is often accomplished via comparisons, similes, and metaphors.

I've told you a million times not to exaggerate.

I'm starving.

Auxesis: Arranging words or clauses in a sequence of increasing force. Reference to something with a name disproportionately greater than its nature (a kind of hyperbole).

Said of a scratch: Look at this gaping wound!

After missing breakfast: I'm dying of hunger!

Litotes: (li-to'-tees): Understatement used deliberately, especially when expressing a thought by denying its opposite. Can be used for expressing modesty or downplaying one's accomplishments in order to gain the audience's favor.

It isn't very serious. I have this tiny little tumor on the brain. —J.D. Salinger, *The Catcher in the Rye*

Running a marathon in under two hours is no big deal.

Meiosis: Reference to something with a name disproportionately lesser than its nature (a kind of litotes).

Said of an amputated leg.: "It's just a flesh wound" —Monty Python and the Holy Grail

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Semantic Inversions

Rhetorical Question: Asking a question for a purpose other than obtaining the information requested. Rhetorical questions can be used as an ethical appeal to endear the speaker to the audience.

"Why are you so stupid?" is likely to be a statement regarding one's opinion of the person addressed rather than a genuine request to know.

When someone responds to a tragic event by saying, "Why me, God?!" it is more likely to be an accusation or an expression of feeling than a realistic request for information.

"Shall I compare thee to a summer's day?" says the persona of Shakespeare's 18th sonnet.

Irony: Using language in such a way as to convey a meaning opposite of what the terms used denote (often by exaggeration). Irony is often used for the purpose of derision, mockery, or jest.

When in Shakespeare's *Much Ado About Nothing*, the constable Dogberry says "redemption" instead of "damnation" (itself a malapropism), the fact that he means precisely the opposite of what he so passionately exclaims makes this a comical use of irony:

O villain! thou wilt be condemned into everlasting redemption for this.

Oxymoron: Placing two ordinarily opposing terms adjacent to one another. A compressed paradox.

...Yet from those flames
No light, but rather darkness visible
Served only to discover sights of woe.
—Milton, *Paradise Lost* 1.62-64

The Sounds of Silence

Festina lente (make haste slowly).

Paradox: An apparently contradictory statement that contains a measure of truth.

It seems impossible to me that this administration could so quickly reverse itself on this issue.

Schemes

A **scheme** is an artful deviation from the ordinary arrangement of words.

Kinds of Schemes

1. Structures of Balance
2. Change in Word Order
3. Omission
4. Repetition

Structures of Balance

Parallelism: Similarity of structure in a pair or series of related words, phrases, or clauses.

Parallelism of words:

She tried to make her pastry fluffy, sweet, and delicate.

Parallelism of phrases:

Singing a song or writing a poem is joyous.

Parallelism of clauses:

Perch are inexpensive; cod are cheap; trout are abundant; but salmon are best.

Isocolon: A series of similarly structured elements having the same length.

Veni, vidi, vici (I came, I saw, I conquered).

BOGO-Buy one, get one (free).

Tricolon: Three parallel elements of the same length occurring together.

Veni, vidi, vici. —Julius Caesar (The English is not a tricolon because the translations are not all the same length).

Antithesis: Juxtaposition of contrasting ideas (often in parallel structure).

“It has been my experience that folks who have no vices have very few virtues.” —Abraham Lincoln

“It can’t be wrong if it feels so right” —Debbie Boone

Climax: Generally, the arrangement of words, phrases, or clauses in an order of increasing importance, often in parallel structure. More specifically, climax is the repetition of the last word of one clause or sentence at the beginning of the next, through several clauses or sentences.

Miss America was not so much interested in serving herself as she was eager to serve her family, her community, and her nation.

The following passage from the Bible shows that version of climax that is synonymous with anadiplosis:

But we glory also in tribulations, knowing that tribulation works patience; and patience trial; and trial hope; and hope confound not, because the charity of God is poured forth in our hearts, by the Holy Ghost, who is given to us. —St. Paul

Change in Word Order

Anastrophe (an-as'-tro-pee): Inversion of natural word order for the sake of emphasis.

The verb before the subject-noun (normal syntax follows the order subject-noun, verb):

Glistens the dew upon the morning grass. (Normally: The dew glistens upon the morning grass)

Adjective following the noun it modifies (normal syntax is adjective, noun):
She looked at the sky dark and menacing. (Normally: She looked at the dark and menacing sky)

The object preceding its verb (normal syntax is verb followed by its object):
Troubles, everybody's got. (Normally: Everybody's got troubles)

Preposition following the object of the preposition (normal syntax is preposition, object ["upon our lives"]):
It only stands / Our lives upon, to use Our strongest hands
—Shakespeare, Antony and Cleopatra 2.1.50-51

Parenthesis: Insertion of a verbal unit that interrupts the normal syntactical flow.

The garrulous Polonius from Hamlet can't help but interrupt himself as he speaks to King Claudius about Prince Hamlet's behavior toward his daughter, adding a parenthesis to his own parenthesis:

But what might you think,
When I had seen this hot love on the wing—
As I perceiv'd it (I must tell you that)
Before my daughter told me—what might you,
Or my dear Majesty your queen here, think...?

—Shakespeare, Hamlet 2.2.131-35

Apposition (AKA appositive): Addition of an adjacent, coordinate, explanatory element.

Albert Einstein, perhaps the greatest of scientists, seemed not to have mastered the physics of hair combing.

Omission

Ellipsis: Omission of a word or words readily implied by context.

"The average person thinks he isn't." —Father Larry Lorenzoni
The term "average" is omitted but understood after "isn't."

John forgives Mary and Mary, John.
Note that the comma signals what has been elided, "forgives"

Asyndeton: Omission of conjunctions between a series of clauses, often resulting in a hurried rhythm or vehement effect.

He was a bag of bones, a floppy doll, a broken stick, a maniac. — On the Road by Jack Kerouac

Reduce, reuse, recycle.

Brachylogia: Omission of conjunctions between a series of words with the effect of a broken, hurried delivery.

Phillip! Rise! Eat! Leave!

Love, hate, jealousy, frenzy, fury drew him from pity —Angel Day

Polysyndeton (pol-y-syn'-do-ton): Opposite of asyndeton, a superabundance of conjunctions between clauses, often slowing the tempo or the rhythm.

I said, "Who killed him?" and he said, "I don't know who killed him but he's dead all right," and it was dark and there was water standing in the street and no lights and windows broke and boats all up in the town and trees blown down and everything all blown and I got a skiff and went out and found my boat where I had her inside Mango Key and she was all right only she was full of water.

—Ernest Hemingway, "After the Storm."

Repetition

Alliteration: Repetition of initial or medial consonants in two or more adjacent words.

Why not waste a wild weekend at Westmore Water Park?

Assonance: Repetition of similar vowel sounds, preceded and followed by different consonants, in the stressed syllables of adjacent words.

The sergeant asked him to bomb the lawn with hotpots.

Polyptoton: Repetition of words derived from the same root.

With eager feeding food doth choke the feeder.

—John of Gaunt in Shakespeare's Richard II 2.1.37

Anaphora: Repetition of the same word or group of words at the beginning of successive clauses.

This royal throne of kings, this sceptred isle,
This earth of majesty, this seat of Mars,
This other Eden, demi-paradise,
This fortress built by Nature for herself
Against infection and the hand of war,
This happy breed of men, this little world,
This precious stone set in the silver sea,
Which serves it in the office of a wall,
Or as [a] moat defensive to a house,
Against the envy of less happier lands;
This blessed plot, this earth, this realm, this England,
This nurse, this teeming womb of royal kings [. . .]
This land of such dear souls, this dear dear land,
Dear for her reputation through the world,
Is now leas'd out — I die pronouncing it —
Like to a tenement or pelting farm.

—John of Gaunt in Shakespeare's Richard II (2.1.40-51; 57-60)

Epistrophe: Repetition of the same word or group of words at the ends of successive clauses.

What lies behind us and what lies before us are tiny compared to what lies within us." —Emerson

Hourly joys be still upon you!
Juno sings her blessings on you. [. . .]
Scarcity and want shall shun you,
Ceres' blessing so is on you.
— Shakespeare, The Tempest (4.1.108-109; 116-17)

We are born to sorrow, pass our time in sorrow, end our days in sorrow.

Epanalepsis: Repetition at the end of a clause of the word that occurred at the beginning of the clause. More strictly, repetition at the end of a line, phrase or clause of the word or words that occurred at the beginning of the same line, phrase, or clause.

"In times like these, it is helpful to remember that there have always been times like these. " —Paul Harvey

"Believe not all you can hear, tell not all you believe." —Native American proverb

"A lie begets a lie." —English proverb

"To each the boulders that have fallen to each."

—Robert Frost, “Mending Wall”

Anadiplosis: Repetition of the last word of one clause at the beginning of the following clause.

The love of wicked men converts to fear,
That fear to hate, and hate turns one or both
To worthy danger and deserved death.
—Shakespeare, Richard II 5.1.66-68

The following shows anadiplosis of a phrase:
...a man could stand and see the whole wide reach
Of blue Atlantic. But he stayed ashore.

He stayed ashore and plowed, and drilled his rows...
— Charles Bruce, “Biography”

Climax: Repetition of the scheme anadiplosis at least three times, with the elements arranged in an order of increasing importance.

Miss America was not so much interested in serving herself as she was eager to serve her family, her community, and her nation.

The following passage from the Bible shows that version of climax that is synonymous with anadiplosis:
But we glory also in tribulations, knowing that tribulation works patience; and patience trial; and trial hope; and hope confounds not, because the charity of God is poured forth in our hearts, by the Holy Ghost, who is given to us. —St. Paul

Antimetabole: Repetition of words, in successive clauses, in reverse grammatical order. (Sometimes mistaken as chiasmus)

When the going gets tough, the tough get going.

Ask not what your country can do for you; ask what you can do for your country. —John F. Kennedy

You can take the gorilla out of the jungle, but you can’t take the jungle out of the gorilla.

Integrity without knowledge is weak and useless, and knowledge without integrity is dangerous and dreadful. —Samuel Johnson, Rasselas

Woe unto them that call evil good, and good evil; that put darkness for light, and light for darkness; that put bitter for sweet, and sweet for bitter! —Isaiah 5:20

Chiasmus: Repetition of ideas or grammatical structures in reverse order in successive phrases or clauses (not to be mistaken with antimetabole).

But O, what damned minutes tells he o’er
Who dotes, yet doubts; suspects, yet strong loves.
—Shakespeare, Othello 3.3

The idea of affection occurs in “dotes” and “strongly loves”; the idea of doubting in “doubts” and “suspects.” These two ideas occur in the quotation in an A B B A order, thus repeated and inverted.

It is boring to eat; to sleep is fulfilling

The pattern is present participle-infinitive; infinitive-present participle.

Connection to Media Literacy

Media literacy requires the ability to critically evaluate the content, structure, and intent of media messages. By recognizing and analyzing the use of rhetorical tropes and schemes, individuals can uncover the underlying strategies employed by media creators to persuade, entertain, or inform. For example, an advertisement may use metaphor (a trope) to create a vivid image of a product,

while employing repetition (a scheme) to reinforce a key selling point. Identifying these devices helps in understanding how the message is crafted to appeal to specific emotions, values, or cognitive processes, thereby fostering a deeper and more critical engagement with media content.

Understanding rhetorical tropes and schemes not only enhances the ability to analyze media but also empowers individuals to become more effective communicators and critical consumers. Recognizing how these devices are used in various media forms, such as advertising, journalism, film, and social media, allows individuals to discern the underlying intentions and biases of media messages. Furthermore, those involved in media creation can employ these rhetorical tools to craft more compelling and ethically responsible content. Ultimately, the knowledge of rhetorical tropes and schemes contributes to a more media-literate society, capable of both creating and consuming media in an informed, thoughtful, and responsible manner.

Case study: Commonplaces for climate action in the 2019 general election^[1]

Although the dominant issue at the time of the 2019 General Election was Brexit, climate change received greater attention than it had ever before. Indeed, Chris Stark, chief executive of the Committee on Climate Change, argued that ‘this election really is the climate election’.^[2] The dispute over climate change in the United Kingdom has been intensified since 2010 developing into a partisan issue which, despite not reaching the level of intensity it has in the United States, became a key political battleground.^[3] This conflict culminated during the 2019 General Election, when a ‘climate debate’ was hosted by Channel 4 and attended by five political leaders (with Boris Johnson replaced by an ice sculpture). For the purposes of this article, I have analyzed the manifestos published by five parties: Conservative, Labour, Liberal Democrats, Scottish National, and Green Party. Despite focusing primarily on the sections devoted specifically to climate action, I have studied and integrated into the analysis every reference made on this issue in the manifestos. I have also considered the role of visual rhetoric in these text events, as images ‘provide rich moments of rhetorical invention’;^[4] at the same time, they can stiffen our imagination,^[5] as they naturalize the symbolic message communicated^[6] and therefore can enhance a process of decontestation. The set of data chosen for this study is consistent with the requirements of a rhetorical analysis: it aims to persuade, it is context-specific, and remains open to contestation, as the values that underpin it cannot be verified or discredited using external objective criteria.

The analysis evidences that some parties (Conservative, Liberal Democrats, Scottish National Party (SNP)) used – in different intensities – ‘economic growth’ as the commonplace for the invention of arguments for climate action. Economic growth – measured as the rise of Gross Domestic Product (GDP) – has been the single most important policy goal across the world for most of the last century.^[7] The argument that it is possible to continue growing the global economy while protecting the natural environment is so common that growth ideology dictates the terms of national and international climate discourse.^[8] Although the roots of this argument can be located in the 1990s and the paradigm of ecological modernisation,^[9] it gained prominence on the level of institutional and political support in the years following the global financial crisis of 2007–2009. According to this line of thinking, the impact of the ecological crisis could be minimized or even rectified by introducing a new grand narrative and a new vision for development: that of a ‘green economy’, in the context of which green growth would provide the alternative to the model of growth followed until then. In this context, climate change specifically was framed as an economic opportunity and specifically as the opportunity to create new markets and, therefore, new jobs in an altering economy. Since then, this argument has become the dominant political response to climate change as a number of international organizations, including the International Monetary Fund (IMF), the World Bank, and the United Nations (UN), popularized this argument through their documents and practices.

The ideology of growthism is contested by those who view the very logic of free-market capitalism as being in opposition to physical reality and planetary boundaries (Rockström et al., 2009).^[10] They, therefore, refute the idea that capitalism can be ‘greened’, arguing that the logic of accumulation and growth that is inherent in capitalism further exaggerates problems caused by resource exploitation.^{[11][12]} Yet, even among those who endorse this particular position, there is disagreement over how societies should be organized in view of unprecedented climate changes. For example, proponents of a Green New Deal advocate decarbonization through radical transformation to replace the capitalist social order with democratized control over major energy systems and resources.^[13] Others emphasize that it is possible to remain agnostic about growth when planning economic activities while considering human prosperity, irrespective of whether GDP is growing or not.^[14] They thus advocate a post-growth vision that revolves around social equity and ecological integrity. Yet, others foreground the importance of placing the well-being of humans and nature at the center of economic and social organization.^[15] The analysis that follows shows that these ideas are not merely part of scholarly debates; they inform arguments for climate action in the United Kingdom.

The commonplace of 'economic growth' had a prominent place in the manifestos presented by the Conservative Party and the Liberal Democrats. One of the key six commitments of the Conservative Party was 'reaching net zero by 2050 with investment in clean energy solutions and green infrastructure to reduce carbon emissions and pollution', pledging to 'protect the planet' through 'free markets, innovation, and prosperity'.^[16] The climate action plan proposed by the Conservatives is fuelled by technological innovation and investment 'in clean energy solutions and green infrastructure', exemplified by 'the innovations of British battery-makers and turbine designers'.^[17] The plan would 'deliver economic growth'.^[18] Working with the market, the Party promised 'to deliver two million new high-quality jobs in clean growth' that will deliver 'clean energy', and 'clean transport'.^[19]

In a similar fashion, Liberal Democrats pledged to 'take urgent action to save our planet' outlining a vision for 'a green society' and 'a green economy'.^[20] within the context of 'a growing economy'.^[21] Their plan argued for cutting greenhouse gas emissions by 'creating markets for climate-friendly products',^[22] 'investing in climate-friendly infrastructure and technology and creating new green businesses and jobs',^[23] thus turning 'the birthplace of the industrial revolution into the home of the new Green Revolution'.^[24] The use of images of wind turbines in the manifesto visually supported and complemented this plan, thus reproducing the dominant argument that technological progress and economic growth can be achieved in harmony with the natural environment. All humans have to do is harness the power of nature and put it in the service of economic growth and progress.

For the Conservative Party, environmental protection can deliver economic growth through investment in infrastructure, science, and research. For Liberal Democrats, climate change was explicitly viewed as 'a massive opportunity to create a different future',^[25] greener and climate-friendly. In both cases, growth served as the main commonplace for the invention of arguments for taking action against climate change, with investment in technology and innovation celebrated as the means to achieve economic growth while cutting carbon emissions. For both parties, growth and environmental protection go hand-in-hand; one cannot be delivered without the other. Such intensification of investment, manufacturing, and construction contributes significantly to economic growth, job creation, and energy efficiency. Nonetheless, in practice, the argument that economic growth can be combined with action to avoid climate breakdown lacks empirical support.^[26] It not only intensifies the marketisation of nature and climate change, but it also diverts attention from the issues of social justice inherent in environmental issues.^[27] It is not surprising, then, that other parties deviated from this dominant view.

SNP makes for an interesting case because, although it acknowledged the centrality of economic growth in its vision for Scotland, it simultaneously argued that economic growth cannot be 'unrestricted' and must be 'sustainable'. The SNP pledged 'a moral responsibility to tackle climate change and 'transition to net zero while creating economic opportunity',^[28] while changing the way the economy works to 'address economic injustice at source' and preventing the catastrophic 'impact of unrestricted economic growth'.^[29] on the environment. Although sustainability was at the heart of the SNP's climate plan, the manifesto did not make clear how any restrictions on growth would be applied or how they would be compatible with the goals of increased investment and job opportunities.

The case of Labour was also interesting in that its manifesto sought to insert an alternative position into the climate debate. In advocating a Green Industrial Revolution that would create 1 million jobs to transform 'industry, energy, transport, agriculture, and buildings, while restoring nature',^[30] Labour adopted the terminology of the emerging solution of a Green New Deal. Its manifesto was more detailed compared to that of other parties, outlining plans for how investment would be used as part of a programme for decarbonising the energy sector, with infrastructure operating under public ownership and training offered to workers who would be employed in the sector as part of a green-just transition. Such an embrace of intensified green economic activity without appeal to growth is congruent with the insurgent vision of post-growth. The use of images of wind turbines and electric buses in the Labour manifesto visually supported the argument that post-growth does not have to mean the return to a pre-modern condition. Statements such as 'transforming our economy into one low in carbon, rich in good jobs, radically fairer',^[31] 'tackling the destruction of our planet is a question of justice',^[32] 'our commitments to ecosystem repair and environmental protections work hand in hand with sustainable jobs and industries, and social justice'^[33] point to the fact that the commonplace of Labour's arguments for a 'green transition' is social equity.

The Greens were the only party that explicitly denounced economic growth, stating that it 'will no longer be the way we measure progress'.^[34] The flagship of the Green manifesto was the Green New Deal, a comprehensive plan covering all aspects of economy and society that aims not merely at tackling climate breakdown but also at transforming the economy and society in a fair way. Investment is targeted towards communities and businesses that depend on polluting industries and the overarching goal is to 'kick-start the great transition to a net zero carbon economy and a better quality of life'.^[35] The commonplace for

climate action in the Green manifesto is the concept of well-being, interpreted as ‘improvement in health, reduction of inequality and the restoration and protection of the natural environment on which we all depend’.^[36] The purpose of taking climate action is human and ecological well-being. The lack of images of wind turbines and electric buses from the Green manifesto is not incidental; the visual arguments deployed by the Greens involved climate activists protesting against the climate emergency and Green politicians meeting with people. This is not to suggest that UK Greens do not appeal to technology; the implementation of their Green New Deal requires investment in technologies and energy systems that will replace polluting with renewable ones. What is important is that the goal of such transformations is not the pursuit of economic growth but ‘the wellbeing of citizens, society and the natural world’.

Key Takeaways

- Rhetorical devices, categorized into schemes and tropes, have evolved into a vast and varied garden since their initial cataloging by the Greeks and Romans, and they play a crucial role in enhancing language through artful deviations in word meaning and arrangement.
- The figures of speech, although rich and interesting, are only a part of the broader discipline of rhetoric, which also includes elements like Invention, Arrangement, Memory, and Delivery.
- The text provides a comprehensive overview of different rhetorical devices, including examples and explanations, highlighting the importance of recognizing and understanding these tools for effective communication and expression.

Exercises

1. How do the categories of “schemes” and “tropes” differ in their approach to language manipulation, and why might a writer choose to use one over the other? Provide examples from the text to support your answer.
2. Select five rhetorical devices from the text (at least two from both “schemes” and “tropes”) and create original sentences using each device. Explain how the device functions in your sentence and what effect it might have on a reader or listener.
3. Considering the historical development of rhetorical figures from the Greeks and Romans to modern times, how do you think the use of these figures has evolved in contemporary speech and writing? Reflect on the relevance of these figures in today’s communication, including digital media.

Practice

What kind of rhetorical appeal does each of the examples below use?

1. A politician cites statistics about rising unemployment rates to argue for a new jobs program.
2. A car commercial shows a family enjoying a road trip, laughing and bonding in their new vehicle.
3. A doctor writes an op-ed about the importance of vaccinations, citing her 20 years of medical experience.
4. A charity advertisement shows images of suffering children and asks for donations to make a difference.
5. An environmental organization uses graphs and data to show the increase in global temperatures over the last century.
6. A celebrity endorses a new brand of athletic wear, mentioning their own success in sports.
7. A commercial for a fast-food chain emphasizes the joy of sharing a meal with friends.
8. A tech company advertises its new phone by listing its cutting-edge specifications and features.
9. A politician speaks passionately about the need for change, right before an important election.
10. A student uses personal anecdotes about struggling with mental health to advocate for more counseling services at school.
11. A financial expert writes a book on investment, citing his successful track record and client testimonials.
12. A public service announcement uses images of car crashes to warn against drunk driving.
13. A scientist presents a well-reasoned argument, backed by research, for reducing plastic waste.
14. A fitness trainer promotes a new workout program, emphasizing how it made her feel more energetic and happy.
15. A historical documentary uses primary sources, expert interviews, and archival footage to tell a story.
16. A pet food advertisement shows a dog wagging its tail and looking happy after eating the brand’s product.
17. A lawyer writes a legal column, using case law and statutes to explain a particular legal issue.
18. A motivational speaker tells a personal story of overcoming adversity to inspire others to take action.
19. A technology blogger with years of industry experience reviews the latest gadgets.

20. An advertisement for a university highlights the success stories of its alumni to attract new students.
21. A news report uses graphs and expert opinions to explain the economic impact of a new policy.
22. A skincare product commercial shows before-and-after pictures of users to demonstrate effectiveness.
23. A renowned chef endorses a brand of cooking utensils, citing their quality and his own use of them.
24. A travel advertisement uses beautiful imagery and emotive music to entice viewers to visit a destination.
25. A health organization uses statistics and studies to argue for a new public health initiative.
26. A movie trailer uses suspenseful music and exciting visuals to create anticipation for the film's release.
27. An author with a Ph.D. in psychology writes a self-help book, using research to support her advice.
28. A commercial for a toy shows children laughing and playing with it, emphasizing fun.
29. A journalist with years of experience in the field writes an in-depth analysis of a political situation.
30. A non-profit organization uses heartwarming success stories to encourage volunteer involvement.
31. A tech review website uses detailed comparisons and technical specifications to rate different products.
32. A political campaign ad shows a candidate helping community members, emphasizing empathy and connection.
33. An advertisement for a weight loss program uses testimonials and before-and-after photos to persuade viewers.
34. A safety organization uses statistics about accidents to promote a new child car seat.
35. A social media post by a popular influencer promotes a brand of makeup, citing personal use and satisfaction.

Identify the scheme or trope used in each quote below:

1. "Life is a highway, full of twists and turns."
2. "The pen is mightier than the sword."
3. "She sells seashells by the seashore."
4. "I came, I saw, I conquered."
5. "The movie was a rollercoaster of emotions: thrilling, exciting, terrifying, and exhilarating."
6. "The rustler bragged he'd absconded with five hundred head of longhorns."
7. "Why are you so stupid?"
8. "The buzzing of innumerable bees."
9. "The early bird catches the worm."
10. "The more you learn, the more you earn."
11. "The report was clear, concise, and convincing."
12. "The politician promised peace, prosperity, and progress."
13. "The world is a stage, and we are merely players."
14. "The wind whispered through the trees."
15. "The movie wasn't bad."
16. "The news is all fake, fake, fake!"
17. "The advertisement used bright colors, catchy slogans, and appealing images."
18. "The athlete trained hard, fought bravely, and won deservedly."
19. "The comedian's joke was a home run."
20. "The journalist asked the tough questions, and the tough questions were answered."
21. "The novel was a feast for the mind, a banquet for the soul."
22. "The politician's speech was full of sound and fury."
23. "The singer's voice was like silk."
24. "The storm roared, raged, and rattled throughout the night."
25. "The teacher explained, elaborated, and exemplified the concept."
26. "The technology is new, novel, and innovative."
27. "The thunder clapped, the lightning flashed, and the rain poured."
28. "The writer's words were a beacon of hope."
29. "Time flies like an arrow."
30. "To err is human; to forgive, divine."
31. "We must learn to live together as brothers or perish together as fools."
32. "We must, indeed, all hang together or, most assuredly, we shall all hang separately."
33. "With malice toward none, with charity for all."
34. "You can take the boy out of the country, but you can't take the country out of the boy."
35. "You have to see the forest for the trees."

1. Case study adapted from: Hatzisavidou, S. (2022). Studying political disputes: A rhetorical perspective and a case study. *Politics*, 42(2), 185–199. <https://doi.org/10.1177/0263395720940883>

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8.4: The Logic of Our Arguments

You are a crime scene investigator. You are at a scene of the death of a middle-aged woman. She is lying dead at the base of an 8-story building. She appears to have jumped to her death. Or did she? You have to determine if she committed suicide or was murdered. You look for clues.

There seems to be no one else around. No one was seen with her when she went to the roof of the building. She had some financial problems that could cause her to feel pressure. Her boyfriend had just broken up with her. All these pieces of evidence seem to suggest that she committed suicide.

On the other hand, she left no suicide note. It was reported by her friends that she didn't complain about her life situation and she was generally in a good mood. And even though her boyfriend had broken up with her, she was planning on going on a "singles cruise." All of this evidence suggests that she was murdered.

Both conclusions are reasonable given the evidence. But which one is more valid or more reasonable?

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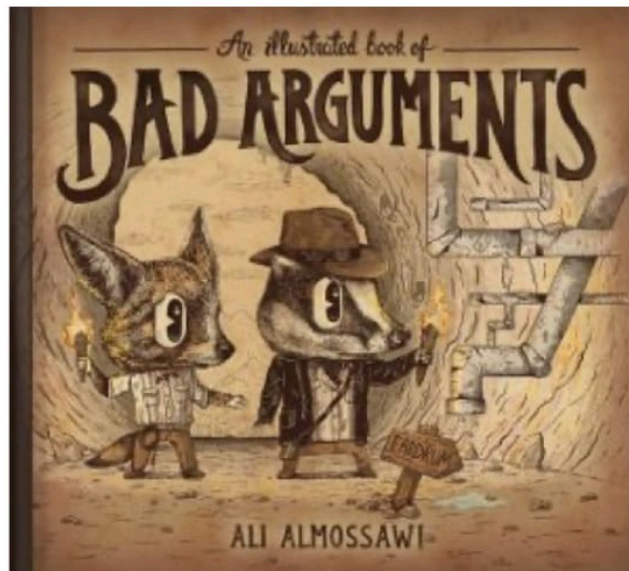
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8.5: Overview of Reasoning

Reasoning is the process of creating or generating conclusions from evidence or premises. This is the logic of an argument. That is, consistency between data and conclusion. Given all of the evidence at the crime scene described at the beginning of the chapter, what can we conclude? Reasoning constructs a logical or rational connection between the evidence and the contention. The more reasonable the argument, the more valid is the conclusion.

Checking the validity of your own arguments will allow you to improve the quality of the arguments you use. When you create logically unsound arguments, you are much less likely to convince people to agree with you. If you are trying to convince an employer that you are indeed the person for a promotion, you want to make sure your arguments are as valid as possible. Not only do you give him or her a reason to accept your argument, but also you can better defend your position if it is challenged.

When you understand how arguments are supposed to be constructed and also how they shouldn't be constructed, you will find all sorts of bad arguments vying for your attention. I am guessing that you are not surprised at how many people are swayed by bad arguments.



7.2.1: "An Illustrated Book of Bad Arguments" (CC BY-NC 2.0; Ali Almosawi via bookofbadarguments.com)

Ali Almosawi has written an entertaining book that introduces logic, *Bad Arguments*. Here, in the final words in the preface of the book, he explains the limits to logic.

"In closing, the rules of logic are not laws of the natural world, nor do they constitute all of human reasoning. As Marvin Minsky asserts, ordinary commonsense reasoning is difficult to explain in terms of logical principles, as are analogies. He adds, "Logic no more explains how we think than grammar explains how we speak." Logic does not generate new truths, but rather allows one to evaluate existing chains of thought for consistency and coherence. It is precisely for that reason that it proves an effective tool for the analysis and communication of ideas and arguments".

-- A.A., San Francisco, October 2013 ¹



7.2.2: "Spock" (Public Domain; NBC Television via [Wikimedia Commons](#))

As Spock from Star Trek would realize, *"Logic is the beginning of wisdom, not the end."*

Testing an argument to see if it is reasonable or logical is a great first step in deciding if you should accept or reject the claim of the argument. If the argument is not reasonable, then you can feel comfortable rejecting the claim. If the argument appears reasonable, then you can go to the next step and check for the accuracy of the statements contained within the argument. Don't be fooled by an argument just because it is repeated over and over. Instead, examine the validity and accuracy of that argument.

The critical thinker must remember that there is a difference between the reasoning needed to establish the validity of the argument and the level of evidence needed to substantiate the accuracy of an argument. Evaluating arguments involves analyzing both the validity of the type of reasoning used and the accuracy of the evidence presented.

When an argument includes both quality evidence and a valid reasoning foundation, the argument is considered to be sound. Professor James Sawyer writes,

"Argumentation gives priority to logical appeals while recognizing the importance of ethical and emotional appeals; persuasion gives priority to ethical and emotional appeals while recognizing the importance of logical appeals."

This chapter will focus on three elements of reasoning; **inductive reasoning**, how we create generalizations; **deductive reasoning**, how we apply those generalizations; and **fallacies**, errors in reasoning.

"Science is simply common sense at its best, that is, rigidly accurate in observation and merciless to fallacy in logic." – Thomas Huxley

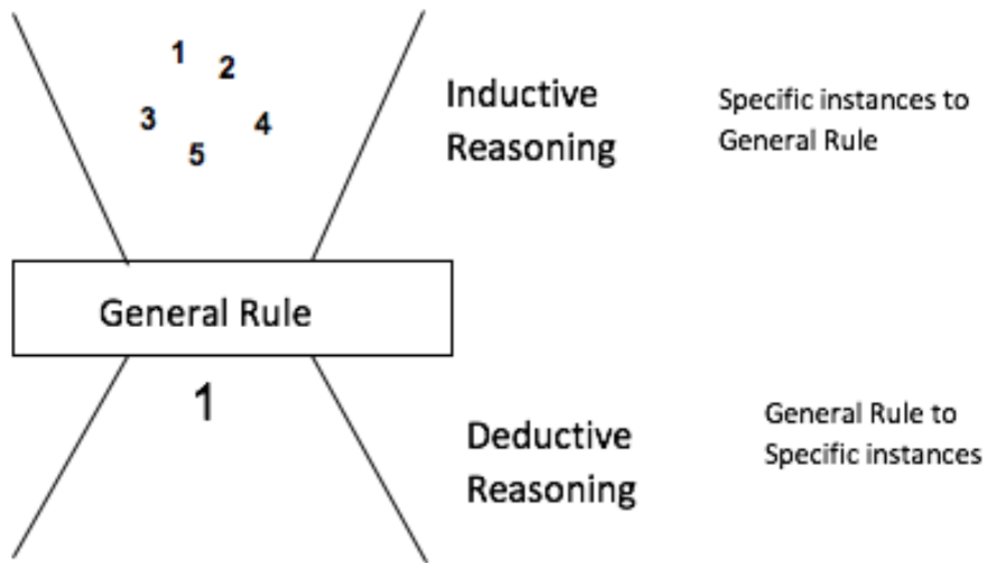
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8.6: Types of Reasoning



7.3.1: "Reasoning Diagram" (CC BY 4.0; J. Marteney)

Inductive Reasoning

Inductive reasoning is the process of reasoning from specifics to a general conclusion related to those specifics. You have a series of facts and/or observations. From all of this data you make a conclusion or as the graphic above calls it, a "General Rule." Inductive reasoning allows humans to create generalizations about people, events, and things in their environment. There are **five** methods of inductive reasoning: **example**, **cause**, **sign**, **comparison**, and **authority**.

Example Reasoning

Example reasoning involves using specific instances as a basis for making a valid conclusion. In this approach, specific instances 1, 2, and 3 lead to a generalized conclusion about the whole situation. For example: I have a Sony television, a Sony stereo, a Sony car radio, a Sony video system, and they all work well. It is clear that Sony produces superior electronic products. Or, I have taken four good professors at this college, Mr. Smith, Mrs. Ortiz, Dr. Willard, and Ms. Richard; therefore, I can conclude that the professors at this college are good.

Tests for Reasoning by Example

1. **There must be a sufficient number of examples** to justify the generalized conclusion. How many examples are enough? The answer depends on the significance of the specific instances and the threshold of your target audience.

Some audiences may find one enough, while others may need many more. For instance, the Nielson Ratings that are used to measure the television viewing preferences of 300 million Americans are determined by roughly 3,000 homes scattered throughout the United States. Yet, the television industry, which uses them to set advertising rates, accepts the 3,000 examples as enough to validate the conclusions.

2. **The examples must be typical of the whole.** They must be representative of the topic about which the conclusion is reached, not fringe examples. For example, you come to college and take one English class whose instructor you find disappointing. You conclude that all 300 instructors at this particular college are poor teachers from this one class from this one Department. The sample might not be representative of the whole population of instructors.

3. **Important counter examples must be accounted for.** If the counter examples mitigate against the examples used, the generalization is threatened. What if a good friend of yours also took another English class and was pleased by the experience. He found that his instructor was an excellent teacher. His example becomes a counter one to the specific instance you used to draw your conclusion, which is now very much in doubt.
4. **The examples must be relevant to the time period of your argument.** If you are dealing with something recent, you need recent examples. If you are trying to prove something in the 1850's, examples from that period are appropriate. If you took the English class 30 years ago, it would be difficult to draw a valid conclusion about the nature of teachers at the college today without using recent examples. Likewise, recent examples may not be reflective of the way the college was 30 years ago.

Causal Reasoning

Causal Reasoning is based on the idea that for every action there is a reaction. Stated very simply, a cause is anything that is directly responsible for producing something else, usually termed the effect. There are two forms of causal reasoning:

The goal of causal reasoning is to figure out how or why something happened. For instance, you did well on a test because you studied two days in advance. I could then predict that if you study two days in advance of the next test, you will do well. In causal reasoning, the critical thinker is trying to establish a predictive function between two directly related variables. If we can figure out how and why things occur, we can then try to predict what will happen in the future.

- Cause to effect, a known cause or causes is capable of producing some unknown effect or effects
- Effect to cause, some known effect(s) has/have been produced by some unknown cause or causes.

Tests of Causal Reasoning

1. **The cause must be capable of producing the effect described, and vice versa.** Has causality really been established or is it just coincidence? Is the cause really capable of producing the effect and vice versa? There must be a direct connection between the cause and the effect that can be demonstrated using empirical evidence. For example, many people mistake superstition for causal reasoning. Is the source of good luck the rubbing of a rabbit's foot? Is the cause of bad luck really the fact that you walked under a ladder or broke the mirror? Did wearing that shirt really cause your team to win five games in a row? The critical thinker must make a clear distinction between a valid causal occurrence and sheer coincidence.
2. **Cumulative causal reasoning increases the soundness of the conclusion.** The more times the causal pattern has happened, the greater the strength given to the causal reasoning, leading to a more valid conclusion. If this is the first time this association has ever been asserted the advocate will have to use more evidence to support the soundness of the causal reasoning advanced.
3. **Counter causal factors must also be accounted for.** The advocate must be aware of the other inherent causal factors that could disrupt the relationship between the cause and effect presented. A claim was made by a father that his son committed suicide, because he was influenced to do so by the songs of a particular rock musician. If we assume that such a causal association exists, we also need to know if there are any other factors that could disrupt the connection: Was the son using drugs; had he tried to commit suicide before; were there family problems; did he listen to other artists and other types of music; did he have peer problems; did he have relationship problems; was he having problems in school, etc.? Each one of these, individually, might be enough to destroy the direct causal relationship that is attempting to be established.

In Massachusetts, Michelle Carter is on trial for manslaughter. As a teenager, she texted her boyfriend, Roy, and encouraged him to commit suicide. And he did. Her defense attorney is arguing that Roy had mental problems, was already suicidal, and that the texts did not cause him to take his life. The prosecution is arguing that the text did cause Roy to kill himself. This is going to be a difficult case to resolve. As stated by Daniel Medwed, a Northeastern University law professor, "*Causation is going to be a vital part of this case, can the prosecution prove that she caused him to kill himself in this way? Would he have done it anyway?*"¹

Sign Reasoning

Sign reasoning involves inferring a connection between two related situations. The theory is that the presence or absence of one

indicates the presence or absence of the other. In other words, the presence of an attribute is a signal that something else, the substance, exists. One doesn't cause the other to exist, but instead is a sign that it exists. Football on television is a sign that Fall has arrived. Football on television does not *cause* Fall to arrive; they just arrive at the same time. A flag is flying at half-staff. is a sign that that there has been a tragedy or a significant person has died. The flag flying at half-staff did not cause the death. It is a sign that the situation occurred.

Sign Reasoning in Poker

Quite a few players' posture betrays the nature of their cards. An unconscious change in their sitting position, such as leaning forward, likely indicates a strong hand. With a weak hand they often show less body tension, for example, having hanging shoulders.

If someone has concealed his mouth with his hand, he often holds a weak hand - he wants to hide his emotions. In a sense, he does not want his expression to betray his hand. The same is true for a player who is reluctant to glance at you: he is worried that his eyes might indicate he is afraid.

Particularly for beginners, a quick glance at his cards is a reliable tell. The tell here is an unconscious one, brief look at the player's own cards. If, for example, the flop brings 3 hearts and the player looks at his cards, it is unlikely he has the flush.

This is because with an off-suit hand, a beginner usually takes no notice of the suits at first glance. Only with a suited hand will they remember the suit. Thus, you can often assume here that they have at most one heart.²

Tests of Sign Reasoning

1. **Other substance/attribute relationships must be considered.** Is there another substance that might have the same attributes? Could the sending of roses to your wife be a sign of something other than love? Can the same signs indicate the presence of a valid second or third substance?
2. **Cumulative sign reasoning produces a more probable connection.** The more often this substance/attribute relationship occurs, the more likely it is to repeat itself. If this is the first time you have noticed the association, you will need a good deal of evidence to demonstrate that it really is a valid sign argument.

Comparison Reasoning

Comparison reasoning is also known as reasoning by analogy. This type of reasoning involves drawing comparisons between two similar things, and concluding that, because of the similarities involved, what is correct about one is also correct of the other. There was once an ad for alligator meat that presented this comparison; "When you try alligator meat just remember what is considered exotic food today may often become normal fare in the future. This was the case with lobster. About 75 years ago, lobster was thought of as poor man's food; many New Englanders would not even think of eating it. Today, of course, lobster is a delicacy savored by many people." This type of reasoning wants us to conclude that alligator meat is to humans today, as lobster meat was to humans 75 years ago. And since lobster is now a delicacy so will alligator meat. There are two types of comparisons: **figurative and literal.**

- **Literal comparisons** attempt to establish a link between similar classifications; cars to cars, states to states, people to people. For instance, you can compare a Ford compact car with a Toyota compact car; the lottery in one state with the lottery in another state; how your parents treat you with how your best friend is treated by her parents. In these comparisons, similar classifications are being used for the purposes of making the analogy. Literal comparisons can provide logical proof for the point being made and thus can increase the validity of the argument.
- **Figurative comparisons** attempt to link similarities between two cases from different classifications. Jim Baker of the Bush 2000 campaign, argued after the 5-4 Supreme Court decision awarding the state of Florida to Bush, "*Saying George W. Bush stole the Presidency from Al Gore is like saying someone tried to steer the Titanic after it had already hit the iceberg.*" Figurative comparisons carry no weight in terms of providing logical proof for an argument. They can, however, be very effective for the purpose of illustration and persuading an audience.

The line between a Literal and Figurative analogy is not clear. Instead of a comparison being totally figurative or totally literal, the

comparison can be viewed in degrees using the following continuum.

Person to
Person

Person to
Animal

Person to
Computer

Literal
Analogy

Figurative
Analogy

7.3.2: "Analogy Diagram" (CC BY 4.0; J. Marteney)

There are few literal comparisons that can be made between a person and a computer. A person to an animal may have some overlapping actual similarities. While comparing one person to another person suggests a Literal Analogy. The more towards the figurative side the comparison is, the less the argument is logically valid. The more towards the literal side the comparison is, the more logically valid the argument is.

Tests for comparison reasoning

1. **To be considered as proof, the analogy must be a literal one.** The further advocates move away from figurative comparisons and toward the literal comparison end of the continuum, the more validity they secure for their argument. Figurative comparisons carry no logical argumentative influence at all.
2. **The cases need to contain significant points of similarity.** The greater the number of important or major similar points between the cases, the easier it is to establish the comparison as a sound one. However, no matter how many points of similarity can be established between the two cases, major points of differences can destroy the analogy.
3. **Cumulative comparison reasoning will produce a more probable conclusion.** The greater the number of cases a person can use for the purpose of comparison, the more valid the comparison. If a student has been to more than one college or has had many instructors, he or she can evaluate the quality of the teachers by comparing them. The validity of his or her conclusion is increased as the number of teachers compared increases.

Children often try to convince a parent to let them do or try something the parent is opposed to by comparing themselves to another child. They point out they are the same age as the other child, they are in the same grade in school, the child lives in the same neighborhood as they do, thus they should be allowed to do what the other child is allowed to do. This seems to be a very effective argument by comparison until the parent says, you are not that child or we are not their parents. To the parents, these points of difference destroy the comparison the child is trying to make.

Poor Figurative Analogy May 23, 2016

(CNN) Veterans Affairs Secretary Bob McDonald downplayed Monday the time it takes for veterans to receive medical treatment by comparing the "experience" of waiting for health care to Disneyland guests waiting for a ride.

"When you go to Disney, do they measure the number of hours you wait in line? Or what's important?" McDonald told reporters at a Christian Science Monitor

breakfast in Washington. "What's important is what's your satisfaction with the experience?"

American Legion National Commander Dale Barnett excoriated McDonald: "The American Legion agrees that the VA secretary's analogy between Disneyland and VA wait times was an unfortunate comparison because people don't die while waiting to go on Space Mountain." ³



7.3.3: "Robert McDonald" (Public Domain; [US Department of Veterans Affairs](#) via [Wikimedia Commons](#))

Reasoning from Authority

Reasoning from Authority is used when a person argues that a particular claim is justified, because, it is held or advocated by a credible source. That credible source can be a person or organization. Basically, the authority possesses some credentials that qualify the source as an authority. Thus, you accept the argument because someone you feel is an authority tells you so. You can use this type of argument in two ways. First, you can ask that an argument be accepted simply because someone you consider an authority advocates it. People grant authority status to other people they think have more knowledge than they do: students to teachers, patients to doctors, and clients to lawyers. Children often argue this way when they justify a position by saying “because my mommy or daddy said so.”

Second, you can support your arguments with the credibility of another person. Here you are attempting to transfer the positive ethos from the credible source to the position you are advocating. Advertisers do this when they get popular athletes and entertainers to promote their products. The advertisers are hoping that your positive view of these people will transfer to their product, thus producing higher sales for the products. You may be persuaded to see a particular movie, attend a certain play, or eat at a restaurant because, it was advocated by a well-known critic.

Tests for reasoning from authority

1. **The authority must be credible.** That is, the authority must possess the necessary qualifications for the target audience in order for the source to be used as justification for a point of view. If challenged, the advocate must be prepared to defend the expertise and ethos of his or her authority.
2. **Views of counter authorities must be taken into account.** The advocate must be aware of the other “experts” or highly credible sources who take an opposite position from the one being advocated. If he or she fails to do this, the argument breaks down into a battle over whose expert or authority should be accepted as being the most accurate.
3. **Cumulative views of authorities increase the validity of the reasoning.** Citing more than one expert or authority will increase the likelihood that your position will be viewed as the most valid one being argued.

Important conclusion: Since the process of reasoning by induction usually involves arriving at a conclusion based on a limited sampling, the conclusion to an inductive argument can never be totally certain. Why? Because no matter which type of inductive reasoning is used, nor how carefully critical thinkers adhere to the tests of each reasoning pattern, critical thinkers can never sample the totality of the population used to infer the generalization about that population.

Thus, **conclusions drawn from inductive reasoning are always only probable.** To use induction effectively, an advocate must demonstrate that the specifics are compelling, and thus justify the conclusion, but never claim that the conclusion is guaranteed in all situations.

Deductive Reasoning

Deductive reasoning is the process of reasoning from general statements, or rules, to a certain, specific, and logical conclusion. Deductive arguments begin with a general statement that has already been arrived at inductively. Unlike inductive reasoning, where the conclusion may be very valid, but is always only probable, the conclusion reached by deductive reasoning is logically certain.

A deductive argument offers two or more premises that lead to a conclusion directly related to those premises. As long as the two premises are sound, there can be no doubt that the final statement is correct. The final statement is a matter of logical certainty.

Deductive arguments are not spoken of as “true” or “false,” but as “sound” or “unsound.” A sound argument is one in which the premises guarantee the conclusion, and an unsound argument is one in which the premises do not guarantee the conclusion.

An advocate who uses deduction to frame an argument must be certain that the general statement is accepted as correct and then must demonstrate the relationship between this general statement and the specific claim, thus proving beyond a doubt the conclusion.

A deductive argument has three parts: a major premise, a minor premise, and a conclusion. This form is called a syllogism.

The major premise is a general statement. For example: **All telemarketers are obnoxious.** The subject section of the major premise (All telemarketers) is known as the antecedent; the predicate section of the major premise (are obnoxious) is known as the consequent.

The minor premise is a statement of a specific instance related to the major premise:

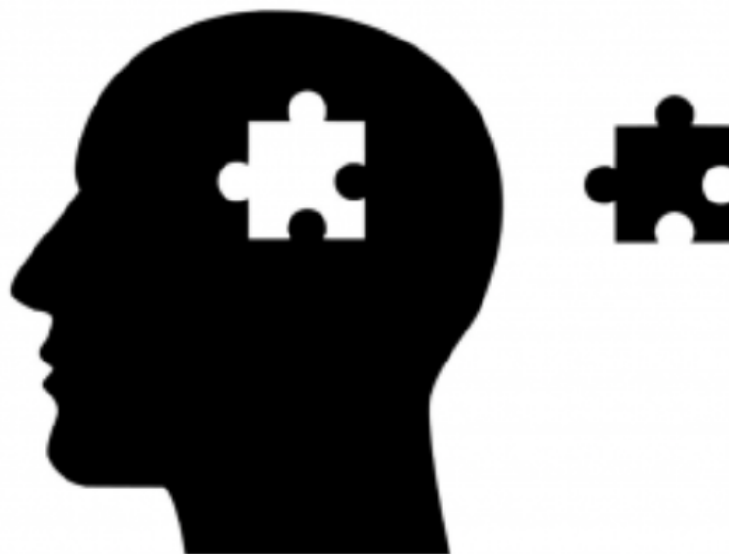
The person on the phone is a telemarketer.

The conclusion is the statement derived from the minor premises relationship to the major premise: **The person on the phone is obnoxious.**

An effective deductive argument is one in which your audience accepts the general statement and is then logically compelled by the development of the argument to accept your conclusion.

Thus, we use inductive reasoning to create generalizations or major premises, and we can use deductive reasoning to apply those generalizations to specific situations.

The final step in checking the strength of reasoning is to make sure there are no fallacies. Often, correcting for fallacies is the missing piece to creating and evaluating logical arguments



7.3.4: "Silhouette Brain Logic" (CC0 1.0; mohamed_hassan via [Needpix.com](https://www.needpix.com))

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8.7: The Building Blocks of an Argument

"Everyone is entitled to his own opinion, but not to his own facts"

--Daniel Patrick Moynihan



6.1.1: "Napoleon Bonaparte" by Unkown is licensed under [CC BY-SA 4.0](#)

After the death of the famous French leader, Napoleon Bonaparte, an autopsy was performed and the doctors announced that he had died of a perforated stomach ulcer that had turned cancerous. Some of his supporters did not believe this. They were convinced he was murdered. Their beliefs were fueled by the fact that Napoleon himself had written that he was being poisoned. What evidence existed to support his accusations?

Fortunately, from his wishes in his will, many relatives were given strands of his hair that could be tested. One hundred years after his death Napoleon's hair was tested and the results indicated that Napoleon had a degree of arsenic in his body. This raw data seemed to suggest that he was poisoned. But 20 years later a second interpretation of the data suggested that he was killed by his wallpaper.

In the 1800's a type of wallpaper that used a color called Scheele Green, was made with lead. That lead gave off arsenic compounds that could be absorbed by the human body and eventually effecting the health of that person. Napoleon's room had this wallpaper.

But a third interpretation indicated that the wallpaper did not contain enough arsenic to kill Napoleon, but it did contain enough to exacerbate a stomach ulcer which eventually killed him. So, although the wallpaper wasn't the ultimate killer, it did seem to contribute to Napoleon's death. The conclusion indicated that Napoleon Bonaparte was not intentionally poisoned.

This story illustrates two important aspects of evidence,

- The quality of evidence
- The accurate interpretation of evidence

Both of which we will explore in this chapter.

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8.8: Defining Evidence

What is evidence? According to Reike and Sillars, *"Evidence refers to specific instances, statistics, and testimony, when they support a claim in such a way as to cause the decision maker(s) to grant adherence to that claim."*¹



6.2.1: "Evidence" by Nick Youngson is licensed under CC BY-SA 3.0

Evidence is information that answers the question *"How do you know?"* of a contention you have made. Please take that question very literally. It is often hard to tell the difference at first between telling someone what you know and telling them how you know it. To become an effective arguer in almost any context, you need to be able to ask this question repeatedly and test the answers you hear to determine the strength of the evidence.

Only experts can use phrases like "I think" or "I feel" or "I believe" as they have the qualifications needed that allow you to accept their observations. As for everyone else, we need to use evidence to support our arguments. As a critical thinker, you should rely much more on what a person can prove instead of what a person "feels."

Evidence is a term commonly used to describe the supporting material used when persuading others. Evidence gives an objective support to your arguments, and makes your arguments more than a mere collection of personal opinions or prejudices. No longer are you saying, *"I believe"* or *"I think"* or *"In my opinion."* Now you can support your assertions with evidence. Because you are asking your audience to take a risk when you attempt to persuade them, audiences will demand support for your assertions. Evidence needs to be carefully chosen to serve the needs of the claim and to reach the target audience.

An argument is designed to persuade a resistant audience to accept a claim via the presentation of evidence for the contentions being argued. Evidence establishes the amount of accuracy your arguments have. Evidence is one element of proof (the second is reasoning), that is used as a means of moving your audience toward the threshold necessary for them to grant adherence to your arguments.

Quality argumentation depends in part on the quantity and diversity of evidence. The arguer should expect audiences to not be persuaded by limited evidence or by a lack of variety/scope, evidence drawn from only one source as opposed to diverse sources. On the other hand, too much evidence, particularly when not carefully crafted, may leave the audience overwhelmed and without focus. Evidence in support of the different contentions in the argument needs to make the argument reasonable enough to be accepted by the target audience.

Challenge of Too Much Evidence

I attended a lecture years ago where the guest speaker told us that we have access to more information in one edition of the

New York Times than a man in the middle ages had in his entire life time. The challenge is not finding information, the challenge is sorting through information to find quality evidence to use in our arguments and decision-making. In his book, "Data Smog, Surviving the Information Glut", David Shenk expresses his concern in the first chapter:

"Information has also become a lot cheaper--to produce, to manipulate, to disseminate. All of this has made us information-rich, empowering Americans with the blessings of applied knowledge. It has also, though, unleashed the potential of information-gluttony...How much of the information in our midst is useful, and how much of it gets in the way? ...

As we have accrued more and more of it, information has emerged not only as a currency, but also as a pollutant."

- In 1971 the average American was targeted by at least 560 daily advertising messages. Twenty years later, that number had risen six- fold, to 3,000 messages per day.
- In the office, an average of 60 percent of each person's time is now spent processing documents.
- Paper consumption per capita in the United States tripled from 1940 to 1980 (from 200 to 600 pounds), and tripled again from 1980 to 1990 (to 1,800 pounds).
- In the 1980s, third-class mail (used to send publications) grew thirteen times faster than population growth.
- Two-thirds of business managers surveyed report tension with colleagues, loss of job satisfaction and strained personal relationships as a result of information overload.
- More than 1,000 telemarketing companies employ four million Americans, and generate \$650 billion in annual sales.

Let us call this unexpected, unwelcome part of our atmosphere "data smog," an expression for the noxious muck and druck of the information age. Data smog gets in the way; it crowds out quiet moments, and obstructs much-needed contemplation. It spoils conversation, literature, and even entertainment. It thwarts skepticism, rendering us less sophisticated as consumers and citizens. It stresses us out." ²

We need ways of sorting through this information and the first method is understanding the different types of evidence that we encounter.

Sources of Evidence

The first aspect of evidence we need to explore is the actual source of evidence or where we find evidence. There are two primary sources of evidence; primary and secondary.

Primary Sources

A primary source provides direct or firsthand evidence about an event, object, person, or work of art. Primary sources include historical and legal documents, eyewitness accounts, results of experiments, statistical data, pieces of creative writing, audio and video recordings, speeches, and art objects. Interviews, surveys, fieldwork, and Internet communications via email, blogs, tweets, and newsgroups are also primary sources. In the natural and social sciences, primary sources are often empirical studies—research where an experiment was performed or a direct observation was made. The results of empirical studies are typically found in scholarly articles or papers delivered at conferences. ³

Included in primary sources:

- Original, first-hand accounts of events, activity or time period
- Factual accounts instead of interpretations of accounts or experiments
- Results of an experiment
- Reports of scientific discoveries
- Results of scientifically based polls

Secondary Sources

Secondary sources describe, discuss, interpret, comment upon, analyze, evaluate, summarize, and process primary sources. Secondary source materials can be articles in newspapers or popular magazines, book or movie reviews, or articles found in scholarly journals that discuss or evaluate someone else's original research. ⁴

Included in secondary sources:

- Analyzation and interpretation of the accounts of primary sources
- Secondhand account of an activity or historical event
- Analyzation and interpretation of scientific or social research results

The key difference between the two sources is how far the author of the evidence is removed from the original event. You want to ask, "*Is the author giving you a firsthand account, or a secondhand account?*"

Types of Evidence

There are **five** types of evidence critical thinkers can use to support their arguments: **precedent evidence, statistical evidence, testimonial evidence, hearsay evidence, and common knowledge evidence.**

Precedent evidence is an act or event which establishes expectations for future conduct. There are two forms of precedent evidence: legal and personal.

Legal precedent is one of the most powerful and most difficult types of evidence to challenge. Courts establish legal precedent. Once a court makes a ruling, that ruling becomes the legal principle upon which other courts base their actions. Legislatures can also establish precedent through the laws they pass and the laws they choose not to pass. Once a principle of law has been established by a legislative body, it is very difficult to reverse.

Personal precedents are the habits and traditions you maintain. They occur as a result of watching the personal actions of others in order to understand the expectations for future behaviors. Younger children in a family watch how the older children are treated in order to see what precedents are being established. Newly employed on a job watch to see what older workers do in terms of breaks and lunchtime in order that their actions may be consistent. The first months of a marriage is essentially a time to establish precedent. Who does the cooking, who takes out the garbage, who cleans, which side of the bed does each person get, are precedents established early in a marriage. Once these precedents are displayed, an expectation of the other's behavior is established. Such precedent is very difficult to alter.

To use either type of precedent as evidence, the arguer refers to how the past event relates to the current situation. In a legal situation, the argument is that the ruling in the current case should be the same as it was in the past, because they represent similar situations. In a personal situation, if you were allowed to stay out all night by your parents "just once," you can use that "just once" as precedent evidence when asking that your curfew be abolished.

Statistical evidence consists primarily of polls, surveys, and experimental results from the laboratory. This type of evidence is the numerical reporting of specific instances. Statistical evidence provides a means for communicating a large number of specific instances without citing each one. Statistics can be manipulated and misused to make the point of the particular advocate.

Don't accept statistics just because they are numbers. People often fall into the trap of believing whatever a number says, because numbers seem accurate. Statistics are the product of a process subject to human prejudice, bias, and error. Questions on a survey can be biased, the people surveyed can be selectively chosen, comparisons may be made of non-comparable items, and reports of findings can be slanted. Take a look at all the polls that predict an election outcome. You will find variances and differences in the results.

Statistics have to be interpreted. In a debate over the use of lie detector tests to determine guilt or innocence in court, the pro-side cited a study which found that 98% of lie detector tests were accurate. The pro-side interpreted this to mean that lie detector tests were an effective means for determining guilt or innocence. However, the con-side interpreted the statistic to mean that two out of every 100 defendants in this country would be found guilty and punished for a crime they did not commit.



6.2.2: "Scully" by Floatjon is licensed under CC BY-SA 3.0

The great baseball announcer Vin Scully once described the misuse of statistics by a journalist by saying that *"He uses statistics like a drunk uses a lamppost, not for illumination but for support"*

Statistics are often no more reliable than other forms of evidence, although people often think they are. Advocates need to carefully analyze how they use statistics when attempting to persuade others. Likewise, the audience needs to question statistics that don't make sense to them.

Testimonial evidence is used for the purpose of assigning motives, assessing responsibilities, and verifying actions for past, present and future events. Testimony is an opinion of reality as stated by another person. There are three forms of **testimonial evidence: eyewitness, expert-witness, and historiography.**

Eyewitness testimony is a personal declaration as to the accuracy of an event. That is, the person actually saw an event take place and is willing to bear witness to that event. Studies have confirmed that eyewitness testimony, even with all of its problems, is a powerful form of evidence. There seems to be almost something "magical" about a person swearing to "tell the whole truth and nothing but the truth."

Expert-witness evidence calls upon someone qualified to make a personal declaration about the nature of the fact in question. Courts of law make use of experts in such fields as forensics, ballistics, and psychology. The critical thinker uses the credibility of another person to support an argument through statements about the facts or opinions of the situation.

What or who qualifies as an expert witness? Does being a former military officer make them an expert in military tactics? Often an advocate will merely pick someone who they know the audience will accept. But as an audience we should demand that advocates justify the expertise of their witness. As we acquire more knowledge, our standards of what constitutes an expert should rise. We need to make a distinction between sources that are simply credible like well-known athletes and entertainers that urge you to buy a particular product, and those who really have the qualities that allow them to make a judgment about a subject in the argumentative environment.

Although expert witness testimony is an important source of evidence, such experts can disagree. In a recent House Energy and Commerce subcommittee, two experts gave opposite testimony, on the same day, on a bill calling for a label on all aspirin containers warning of the drug's often fatal link to Reye's Syndrome. The head of the American Academy of Pediatrics gave testimony supporting the link, but Dr. Joseph White, President of The Aspirin Foundation of America, said there was insufficient evidence linking aspirin to Reye's syndrome.

Historiography is the third form of testimonial evidence. In their book, ARGUMENTATION AND ADVOCACY, Windes and Hastings write, *"Historiographers are concerned in large part with the discovery, use, and verification of evidence. The historian traces influences, assigns motives, evaluates roles, allocates responsibilities, and juxtaposes events in an attempt to reconstruct the past. That reconstruction is no wiser, no more accurate or dependable than the dependability of the evidence the historian uses for his reconstruction."*⁵

Keep in mind that there are many different ways of determining how history happens. Remember, historians may disagree over why almost any event happened. In the search for how things happen, we get ideas about how to understand our present world's events and what to do about them, if anything.

Primary sources are essential to the study of history. They are the basis for what we know about the distant past and the recent past. Historians must depend on other evidence from the era to determine who said what, who did what, and why.

How successful is the historian in recreating "objective reality?" As noted historian Arthur Schlesinger, Jr. says,

"The sad fact is that, in many cases, the basic evidence for the historian's reconstruction of the really hard cases does not exist, and the evidence that does exist is often incomplete, misleading, or erroneous. Yet, it is the character of the evidence which establishes the framework within which he writes. He cannot imagine scenes for which he has no citation, invent dialogue for which he has no text, assume relationships for which he has no warrant."

Historical reconstruction must be done by a qualified individual to be classified as historical evidence. Critical thinkers will find it useful to consider the following three criteria for evaluating historical evidence.

Around 1,000 books are published internationally every day and the total of all printed knowledge doubles every 5 years.

More information is estimated to have been produced in the last 30 years than in the previous 5,000.

----The Reuters Guide to Good Information Strategy 2000

Was the author an eyewitness to what is being described, or is the author considered an authority on the subject?

Eyewitness accounts can be the most objective and valuable but they may also be tainted with bias. If the author professes to be an authority, he/she should present his/her qualifications.

Does the author have a hidden agenda? The author may purposely or unwittingly tell only part of the story. The excerpt may seem to be a straight-forward account of the situation, yet the author has selected certain facts, details, and language, which advance professional, personal or political goals or beliefs. They may be factual, but the hidden agenda of these books was to make money for the author, or get even with those in the administration they didn't like.

Does the author have a bias? The author's views may be based on personal prejudice rather than a reasoned conclusion based on facts. Critical thinkers need to notice when the author uses exaggerated language, fails to acknowledge, or dismisses his or her opponents' arguments. Historians may have biases based on their political allegiance. Conservative historians would view events differently than a liberal historian. It is important to know the **political persuasion** of the historian in order to determine the extent of bias he or she might have on the specific topic they are writing about.



"6.2.3: "Daniel Boorstin" by Unkown is in the [Public Domain](#), CC0

Sometimes we think we might know our history, but Historian Daniel Boorstin puts a perspective on the ultimate validity and accuracy of historical testimony when he writes, "*Education is learning what you didn't even know you didn't know.*" Modern techniques of preserving data should make the task of recreating the past easier and adding to our education.

Hearsay evidence (also called rumor or gossip evidence) can be defined as an assertion or set of assertions widely repeated from person to person, though its accuracy is unconfirmed by firsthand observation. "Rumor is not always wrong," wrote Tacitus, the Roman historian. A given rumor may be spontaneous or premeditated in origin. It may consist of opinion represented as fact, a nugget of accuracy garbled or misrepresented to the point of falsehood, exaggerations, or outright, intentional lies. Yet, hearsay may well be the "best available evidence" in certain situations where the original source of the information cannot be produced.

Rumor, gossip or hearsay evidence carries proportionately higher risks of distortion and error than other types of evidence. However, outside the courtroom, it can be as effective as any other form of evidence in proving your point. Large companies often rely on this type of evidence, because they lack the capability to deliver other types of evidence.

A recent rumor was started that actor Morgan Freeman had died. A page on "Facebook" was created and soon gained more than 60,000 followers, after it was announced that the actor had passed away. Many left their condolences and messages of tribute. Only one problem, Morgan Freeman was very much alive, actually that is not so much a problem, especially to Morgan Freeman. The Internet is a very effective tool when it comes to spreading rumors.

Common knowledge evidence is also a way to support one's arguments. This type of evidence is most useful in providing support for arguments which lack any real controversy. Many claims are supported by evidence that comes as no particular surprise to anyone.

Basing an argument on common knowledge is the easiest method of securing belief in an idea, because an audience will accept it without further challenge. As Communication Professors Patterson and Zarefsky explain:

"Many argumentative claims we make are based on knowledge generally accepted by most people as true. For example, if you claimed that millions of Americans watch television each day, the claim would probably be accepted without evidence. Nor would you need to cite opinions or survey results to get most people to accept the statement that millions of people smoke cigarettes." ⁶(Patterson, 1983)

Credibility of Evidence or How Good Is It?

In order to tell us how you know something, you need to tell us where the information came from. If you personally observed the case you are telling us about, you need to tell us that you observed it, and when and where. If you read about it, you need to tell us where you read about it. If you are accepting the testimony of an expert, you need to tell us who the expert is and why she is an expert in this field. The specific identity, name or position and qualifications of your sources are part of the answer to the question "How do you know?" You need to give your audience that information.

Keep in mind that it is the person, the individual human being, who wrote an article or expressed an idea who brings authority to the claim. Sometimes that authority may be reinforced by the publication in which the claim appeared, sometimes not. But when you quote or paraphrase a source you are quoting or paraphrasing the author, not the magazine or journal. The credibility of the evidence you use can be enhanced by:

Specific Reference to Source: Does the advocate indicate the particular individual or group making the statements used for evidence? Does the advocate tell you enough about the source that you could easily find it yourself?

Qualifications of the Source: Does the advocate give you reason to believe that the source is competent and well-informed in the area in question?

Bias of the Source: Even if an expert, is the source likely to be biased on the topic? Could we easily predict the source's position merely from knowledge of his job, her political party, or organizations he or she works for?

Factual Support: Does the source offer factual support for the position taken or simply state personal opinions as fact?

Evaluating Internet Sources of Evidence

We currently obtain a significant amount of the evidence we use in an argument from the Internet. Some people are still under

the influence that if they read it on the Internet, it must be accurate. But we all know that some Internet sources are better than others. We need to be able to evaluate websites to obtain the best information possible. Here are two approaches to evaluating websites

Who, What, When, Where, and Why

This first test is based on the traditional 5 “W’s.” These questions, like critical thinking, go back to Greek and Roman times. The notable Roman, Cicero, who was in office in 63 BC, is credited with asking these questions

Journalists are taught to answer these five questions when writing an article for publication. To provide an accurate interpretation of events to their viewers or readers, they ask these five questions and we can ask the same questions to begin discovering the level of quality of an online source.

Who wrote the post? What are their qualifications?

What is actually being said in the website. How accurate is the content?

When was the website’s latest post?

Where is the source of the post? Does the URL suggest it is from an academic source or an individual?

Why is the website published? Is the website there to inform or entertain?

There is a second method of evaluating websites that is more popular and includes a more in depth analysis. This method is known as the CRAAP test.

The C.R.A.A.P. Test

C.R.A.A.P. is an acronym standing for Currency, Relevance, Authority, Accuracy, and Purpose. Developed by the Meriam Library at the California State University at Chico, each of these five areas is used to evaluate websites.

Currency How recent is this website. If you are conducting research on some historical subject a web site that has no recent additions could be useful. If, however you are researching some current news story, or technology, or scientific topic, you will want a site that has been recently updated.

Questions to Ask:

- When was the content of the website published or posted?
- Has the information been revised or updated recently?
- Have more recent articles on your subject been published?
- Does your topic require the most current information possible, or will older posts and sources be acceptable?
- Are the web links included in the website functional?
- **Relevance** This test of a website asks you how important is the information to the specific topic you are researching. You will want to determine if you are the intended audience and if the information provided fits your research needs.

Questions to Ask:

- Does the content relate to your research topic or the question you are answering?
- Who is the intended audience?
- Is the information at an appropriate level for the purpose of your work? In other words, is it college level or targeted to a younger or less educated audience?
- Have you compared this site to a variety of other resources?
- Would you be comfortable citing this source in your research project?

Authority Here we determine if the source of the website has the credentials to write on the subject which makes you feel comfortable in using the content. If you are looking for an accurate interpretation of news events, you will want to know if the author of the website is a qualified journalist or a random individual reposting content.

Questions to Ask:

- Who is the author/ publisher/ source/ sponsor of the website?
- What are the author's credentials or organizational affiliations?
- Does the author have the qualifications to write on this particular topic?
- Can you find information about the author from reference sources or the Internet?
- Is the author quoted or referred to on other respected sources or websites?
- Is there contact information, such as a publisher or email address?
- Does the URL reveal anything about the author or source?

Accuracy In this test we attempt to determine the reliability and accuracy of the content of the website. You need to determine if you can trust the information presented in the website or is it just slanted, personal beliefs.

Questions to Ask:

- Where does the information in the website come from?
- Is the information supported by Evidence, or is it just opinion?
- Has the information presented been reviewed by qualified sources?
- Can you verify any of the content in another source or personal knowledge?
- Are there statements in the website you know to be false?
- Does the language or tone used in the website appear unbiased or free of emotion or loaded language?
- Are there spelling, grammar or typographical errors in the content of the website?

Purpose Finally we examine the purpose of the website. We need to determine if the website was created to inform, entertain or even sell a product or service. If we want accurate, high quality evidence, we would want to avoid a site that is trying to sell us something. Although a company selling solar power may have some factual information about solar energy on their site, the site is geared to sell you their product. The information they provide is not there to educate you with all aspects of solar power.

Questions to Ask:

- What is the purpose of the content of this website? Is the purpose to inform, teach, sell, entertain or persuade?
- Do the authors/sponsors of the website make their intentions or purpose clear?
- Is the content in the website considered facts, opinion, or even propaganda?
- Does the point of view appear objective and impartial?
- Does the author omit important facts or data that might disprove the claim being made in the post?
- Are alternative points of view presented?
- Does the content of the website contain political, ideological, cultural, religious, institutional or personal biases?

Questions used here are inspired from questions from the Meriam Library at California State University Chico, the University of Maryland University College Library and Creighton University Library



6.2.4: "Question Mark on Face" is in the [Public Domain](#), CC0

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8.9: Using Evidence

In his book, ARGUMENTATION AND DEBATE, Austin J. Freeley discusses the uses of evidence. He says that the various types of evidence can be used in two ways:

To establish Conclusive Proof for your position. Conclusive proof is using evidence that is strong and convincing enough to override any objections to it. This evidence is so strong that the law will not permit it to be contradicted.

Often the argumentative environment will define what type of evidence is needed to establish your arguments to the defined threshold of that environment. For example, fingerprints at the crime scene may be the conclusive proof needed to find a person guilty of that crime. For a scientist to prove a hypothesis they need an experiment to reach a 95% certainty threshold. That is, they need to be 95% certain of the results. If the experiment by the scientist reaches this level, this would be conclusive proof.

To establish Circumstantial Proof for your position. This is where the various types of evidence are used to form a link strong enough to prove your point. Using the different types of evidence as support gives the argument the strength needed to establish the accuracy of your argument. The evidence is put together in such a manner so as to create an evidence chain. One bit of evidence is connected to another, and so on. Each piece of evidence, in and of itself, is not enough to reach the threshold of your audience for accepting your argument, but taken altogether, the accuracy of the claim can be established.¹

Many Americans hold the incorrect view that circumstantial evidence cannot be used to convict someone in a court of law. In fact, more convictions are based on circumstantial proof than on conclusive proof.

How Much Evidence is Necessary?

All good arguments must be supported by a strong foundation of evidence. An argument filled with no supporting evidence is merely an assertion. It is instead a collection of interpretations or beliefs, and the audience will have no reason to believe the interpretations or beliefs if they are not well supported with evidence.

How much evidence do you need to support each contention that you make in support of your stand on a claim? Good question. To some extent, the amount of evidence needed depends on the degree of controversy of the claim you are trying to support and your credibility as an advocate. Thus, how much evidence an advocate needs to present is ultimately determined by the demands of his or her target audience. Since evidence must ultimately be persuasive to an audience, arguers must adjust their usage of evidence for maximum appeal. An advocate must deal with one of the following audience types:

A **friendly audience** is one that already supports an advocate's position on a claim. Audience members are already predisposed to granting adherence to the position, so very little additional evidence is needed as support.

A **neutral audience** is one that has made no commitment to granting adherence to the advocated point of view. Audience members are "fence sitting," waiting to see what type of support can be provided in order to move them over to one side or the other. The quality of the evidence used is important to this type of audience.

A **hostile audience** is one that is opposed to the advocate's point of view. Audience members are already predisposed to reject the advocated point of view. In this case, a great deal of high-quality evidence is needed in order to move audience members off their existing position.

Tests of Evidence

You have evidence that you plan to use in your arguments. The key question for you, because it will be a key question for your audience, is whether the evidence is accurate, whether you can trust it. Unless you are reporting your own personal experience directly to us, your evidence comes from somebody else.

If you use the word of some other person or group to answer the question "How do you know?" it just moves the question back a step: How do they know? Even if you understand them, and they were correct as they saw it, they may have been just plain wrong. If you really care about the accuracy or correctness of what you are reporting, then you have to have some way of checking the reliability of your sources. In reviewing evidence, you can use a few tests that are widely used to evaluate evidence.

Recency: Is the evidence too old to be of current relevance to the issue? Would the source have had knowledge of recent

developments or discoveries that might have bearing on the issue?

Sufficiency: Is there enough evidence to justify all of the claims being made from it?

Logical Relevance: Does the claim made in the evidence provide a premise which logically justifies the conclusion offered? Can you reasonably draw the conclusion being urged based on what the evidence says?

Internal Consistency: Does this source make claims that are contradicted by other claims from the same source?

External Consistency: Are the claims made by this source consistent with general knowledge and other evidence? If not, does the writer account for this discrepancy? If printed, can it be found? If not in print format, can you provide citation as to time, place and date?

Reference

1. Freeley, Austin J. *Argumentation and Debate*. Wadsworth Publishing Co., 1993

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8.10: Checking on the Domain Indicators

Every website address ends with a domain indicator. This graphic illustrates four of them. Understanding each domain indicator can help us better understand the quality of the website.

Domain Indicators	
.com Commercial Content Can be created by anyone with a website	.org Organization Wide range of credibility
.edu Educational Institution Since 2001, must be a U.S. Institute of higher education	.gov Government Entity Restricted to US government sites, Federal, State, and Local

What follows is a list of domain indicators from most reliable to least reliable sites. The sites at the top of the list are considered more trustworthy than those towards the bottom of the list.

.gov This is the site that is restricted for use of federal, state and local governments only. And yes, here I am saying that the government is to be trusted. These sites are reviewed for accuracy by individuals and agencies.

.edu Since 2001, these sites have been restricted for use of U.S. educational institutions of higher education. The content on this site will not only be written by people associated by that institution, but will be subject to review by that institution.

.org Although we think of this as a domain indicator for an organization, anyone can obtain this domain indicator. And even if it is an organization, you need to check the credibility of that organization.

.com Any individual can obtain this domain indicator and publish a site. There are no review boards to evaluate the content that is in this site.

.net As with .com, any individual can obtain this domain indicator.

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8.11: Fallacies

A **fallacy** is an error in reasoning. A fallacy indicates there is a problem with the logic of deductive or inductive reasoning. This differs from a factual error, which is simply being wrong about the facts. To be more specific, a fallacy is an “argument” in which the premises given for the conclusion do not provide the needed degree of support.

A fallacy is a mistake in the way that the final conclusion of the argument, or any intermediate conclusions, are logically related to their supporting premises. When there is a fallacy in an argument, the argument is said to be unsound or invalid

The presence of a logical fallacy in an argument does not necessarily imply anything about the argument’s premises or its conclusion. Both may actually be correct, but the argument is still invalid because the conclusion does not follow from the premises using the inference principles of the argument.

Recognizing fallacies is often difficult, and indeed fallacious arguments often persuade their intended audience. Detecting and avoiding fallacious reasoning will at least prevent adoption of some erroneous conclusions.

Types of Fallacies

Fallacies are usually recognized in isolation, but woven into the context of an argument they may pass unnoticed, unless the critical thinker is on guard against them. Some advocates openly use fallacies in order to exploit an unknowing audience, but many times we use fallacies unintentionally. Many fallacies exist. Here is a few of the most common ones used in everyday argumentation.

False Dilemma The False Dilemma fallacy occurs when an argument offers a false range of choices and requires that you pick one of them. Usually, the False Dilemma fallacy takes this form: Either A or B is true. If A is not true, then B is true. “Either you love me or hate me.” The range is false because there may be other, unstated choices which would only serve to undermine the original argument. If you agree to pick one of those choices, you accept the premise that those choices are indeed the only ones possible. Seeing something as “black and white” is an example of a false dilemma.

Appeal to Emotion This fallacy is committed when someone manipulates peoples’ emotions in order to get them to accept a claim. More formally, this sort of “reasoning” involves the substitution of various means of producing strong emotions in place of evidence for a claim. Here the attempt is to transfer a positive emotion you have on one thing to the object or belief that is being argued.

This sort of “reasoning” is very common in politics and it serves as the basis for a large portion of modern advertising. Most political speeches are aimed at generating feelings in people, so that these feelings will get them to vote or act a certain way. How many times will you see pictures of American flags in a political commercial? The flag and other traditional images are aimed at getting the audience emotionally involved. In the case of advertising, the commercials are aimed at evoking emotions that will influence people to buy certain products. Beer commercials frequently include people at parties to get the potential consumers excited about the product. In many cases, such speeches and commercials are notoriously free of real evidence.

Non-sequitur The phrase “non-sequitur” is Latin for “it does not follow.” If an inference is made that does not logically follow from the premises of the preceding argument, then the inference is a non-sequitur. For example, “I am wearing my lucky hat today, nothing can go wrong.” Though the term “non-sequitur” can be used broadly as an informal fallacy to describe any unwarranted conclusion, it is most often used when a statement openly contradicts itself and just makes no sense.

Slippery Slope This fallacy reduces an argument to absurdity by extending it beyond its reasonable limits. This is an abuse of causal reasoning by trying to link events that normally have very little to do with each other. For example: legalizing marijuana will lead to the legalization of cocaine. If you legalize cocaine, you’ll be able to buy crack and every other drug at your local 7-11. In this argument, it is asserted that the legalization of marijuana will eventually lead to purchasing crack at local 7-11’s. Once one accepts the legalization of marijuana, then one is assumed to be on the slippery slope towards the legalization and availability of every other drug. In a Slippery Slope argument, you suggest that a series of events will occur leading to an undesirable conclusion instead of just one step as in Causal Reasoning.

Ad Hominem Translated from Latin to English, “Ad Hominem” means “against the man” or “against the person.” An ad hominem fallacy consists of saying that someone’s argument is wrong purely because of something about the person rather than about the

argument itself. You will hear people on the radio and television dismiss comments by people they label as a conservative or a liberal, just because of how they label that person. Merely insulting another person or questioning the credibility of someone does not necessarily constitute an ad hominem fallacy. For this fallacy to exist it must be clear that the purpose of the characterization is to discredit the person offering the argument, in an attempt to invite others to then discount his or her arguments.

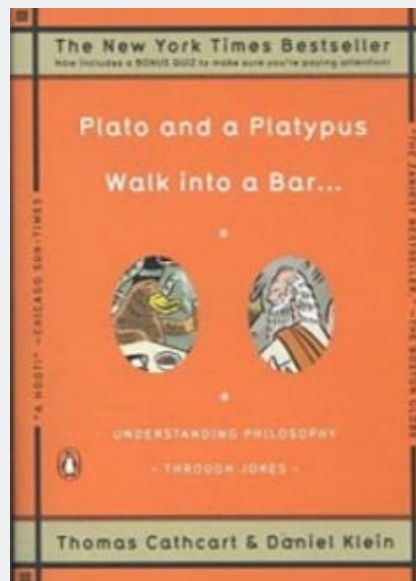
The Ad Hominem fallacy was employed by those who wanted to silence 16-year-old Climate Change activist Greta Thunberg. Those who disagreed with her argued that she should be ignored as she is just a child.

Hasty Generalization This fallacy occurs when an arguer bases a conclusion on too few examples, that are not necessarily typical of the conclusion being made. For instance, "My two boyfriends have never shown any concern for my feelings. Therefore, all men are insensitive, selfish, and emotionally uncaring." Or, "I read about this man who got worms from eating sushi. I always knew that sushi was not good to eat." Without more examples, these arguments can be considered fallacies.

Circular Reasoning The fallacy of circular reasoning is the assertion or repeated assertion of a conclusion, without giving reasons in its support. In other words, supporting a premise with a premise, instead of a conclusion. It may imply that the conclusion is self-evident or rephrase the conclusion to sound like a reason. Circular reasoning creates an illusion of support by simply asserting its conclusion as though it were a reason, or by reasserting the same claim in different words. For example, "Kerosene is combustible; therefore, it burns." Or, "George Clooney is the best actor we have ever had, because he is the greatest actor of all time."

Appeal to Ignorance In this fallacy, the arguer claims that something is valid only because it hasn't been proven false. This fallacy errs by trying to make this argument in a context in which the burden of proof falls on the arguer to show that his or her position is actually accurate, not just that it has not yet been shown false. The argument mistakes lack of evidence for evidence to the contrary. In effect, the argument says, "No one knows it is accurate. Therefore, it is false." For example, "There is no proof that hand gun legislation will reduce crime. Therefore, outlawing handguns would be a futile gesture." Or, "We have no evidence that God doesn't exist, therefore, God must exist." Ignorance about something says nothing about its existence or non-existence.

Plato and a Platypus Walk into a Bar



7.4.1: "Cover of Plato and a Platypus Walk Into a Bar" (Fair Use; Paul Buckley & Penguin Group via [Wikimedia Commons](#))

In their book authors Thomas Cathcart and Daniel Klein illustrate logical principles and fallacies using classic jokes. For example, to illustrate the fallacy of post hoc ergo propter hoc, they use the following:

"In general, we're deceived by post hoc ergo propter hoc because we fail to notice that there's another cause at work.

A New York boy is being led through the swamps of Louisiana by his cousin. 'Is it true that an alligator won't attack you if you carry a flashlight?' asks the city boy.

His cousin replies, 'Depends on how fast you carry the flashlight.'

The city boy saw the flashlight as a propter when it was only a prop." ¹

Bandwagon The name "bandwagon fallacy" comes from the phrase "jump on the bandwagon" or "climb on the bandwagon" a bandwagon being a wagon big enough to hold a band of musicians. In past political campaigns, candidates would ride a bandwagon through town, and people would show support for the candidate by climbing aboard the wagon. The phrase has come to refer to joining a cause because of its popularity. For example, trying to convince you that you should do something because everyone else is doing it, is a bandwagon fallacy. "Everybody is buying a Tesla car, so should you."

Post hoc ergo propter hoc The post hoc ergo propter hoc, "after this, therefore because of this," fallacy is based upon the mistaken notion that simply because one thing happens after another, the first event was a cause of the second event. Post hoc reasoning is the basis for many superstitions and erroneous beliefs.

For example, California earthquakes always happen after unusual weather patterns. Or, Allison always scores a goal when she wears her red and white soccer shoes. Or, I wore my Packers shirt and my Packers team won. I now wear my Packers shirt for every game. These are all, post hoc ergo propter hoc fallacies

Appeal to Pity With this fallacy, the arguer tries to get people to agree with his or her conclusion by evoking pity and sympathy either with the situation or with the situation of some third party. By appealing to people's ability to sympathize with others, a powerful emotive force can be created. Unfortunately, however serious another person's problems are, that does not automatically make their claims any more logical. My sympathy for that situation does not create a reasonable basis for believing his or her claims. For example, "I really need this job since my grandmother is sick" or "I should receive an 'A' in this class. After all, if I don't get an 'A' I won't get the scholarship that I need." These appeals evoke emotions, but are not necessarily logical.

Straw-Man Fallacy The arguer attacks an argument that is different from, and usually weaker than, the opposition's best argument. To distort or misrepresent an argument one is trying to refute is called the straw man fallacy. In a straw man fallacy, the opponents argument is distorted, misquoted, exaggerated, misrepresented or simply made up. This makes the argument easier to defeat, and can also be used to make opponents look like ignorant extremists. The refutation may appear to be a good one to someone unfamiliar with the original argument.

Logical fallacies are errors of reasoning, errors which may be recognized and corrected by critical thinkers. Fallacies may be created unintentionally, or they may be created intentionally in order to deceive other people. The vast majority of the commonly identified fallacies involve arguments, although some involve explanations, or definitions, or other products of reasoning. Sometimes the term fallacy is used even more broadly to indicate any false belief or cause of a false belief. A fallacy is an argument that sometimes fools human reasoning, but is not logically valid.

In his book, *PERSUASION: THEORY AND PRACTICE*, Kenneth Anderson writes,

"Logical appeals are powerful forces in persuasion. However, logic alone is rarely sufficient to yield persuasion. Desires and needs of receivers affect and determine what they will accept as logical demonstration. Thus, it is possible for one person to report that he or she is convinced by the logic used while another person remains horrified at the lack of logic presented." ²

You can have high quality evidence, but lead to incorrect conclusions because your argument has poor reasoning. You always want to create the "soundest" or most logical argument possible. And you also want to examine the logic of others presentations to determine what fallacies might be evident.

Reference

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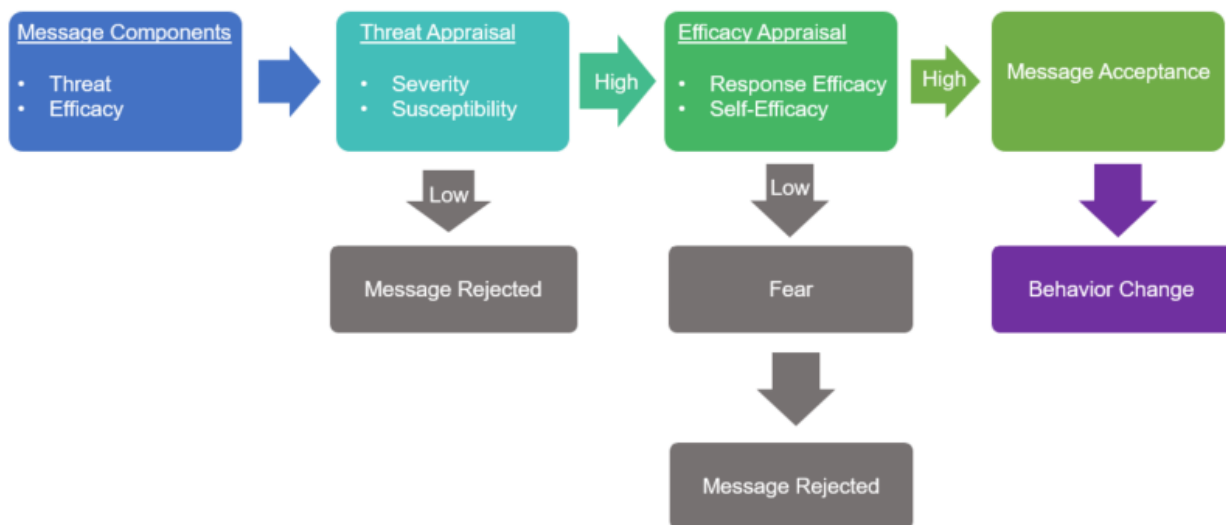
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8.12: Fear Appeals- The Extended Parallel Process Model

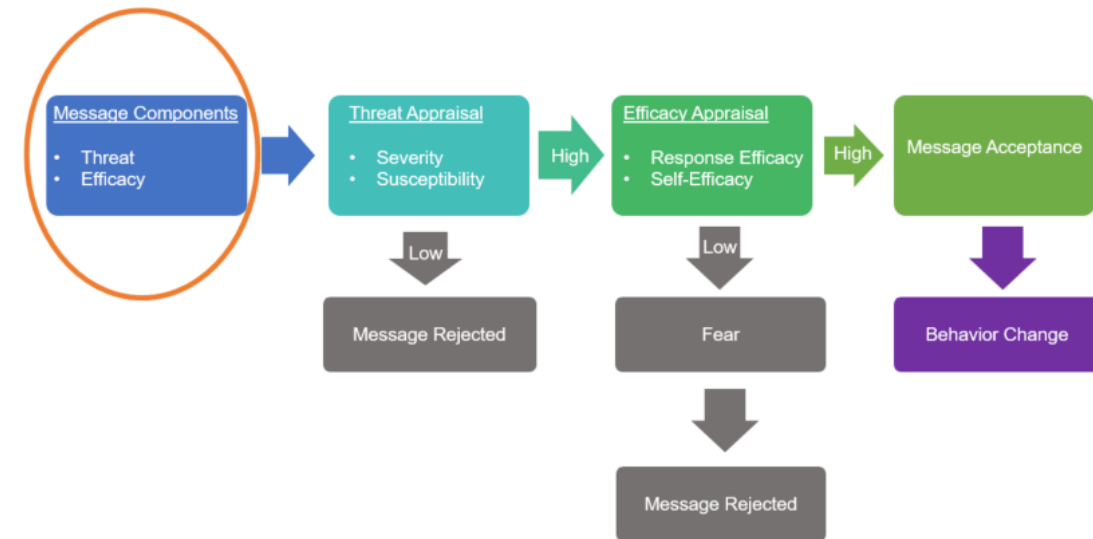
How many times have you come across a message that tries to scare people into doing something? For example, messages may attempt to use fear to persuade people to stop smoking, refrain from drinking alcohol and driving, wear a helmet, and so on.

Importantly, messages that use fear are not always effective, and communication theories can be used to help explain when these fear appeals likely will or will not work. This chapter reviews fear appeals and explains how to create effective fear appeal messages.

A fear appeal is a message strategy that attempts to persuade people to adopt a specific action by arousing fear. Fear appeals have a long history, including Levanthal's (1970, 1971) parallel process model and Roger's (1975, 1983) protection motivation theory. This chapter focuses on the most frequently used fear appeal theory today, which is Witte's (1992) Extended Parallel Process Model. The Extended Parallel Process Model describes when a message with fear will be effective and when it will not. The image below depicts the Extended Parallel Process Model:



The Extended Parallel Process Model begins with a fear appeal message, which includes message content related to a specific threat and the efficacy of a specific recommended behavior to resolve that threat. This part of the model is highlighted in the figure below:



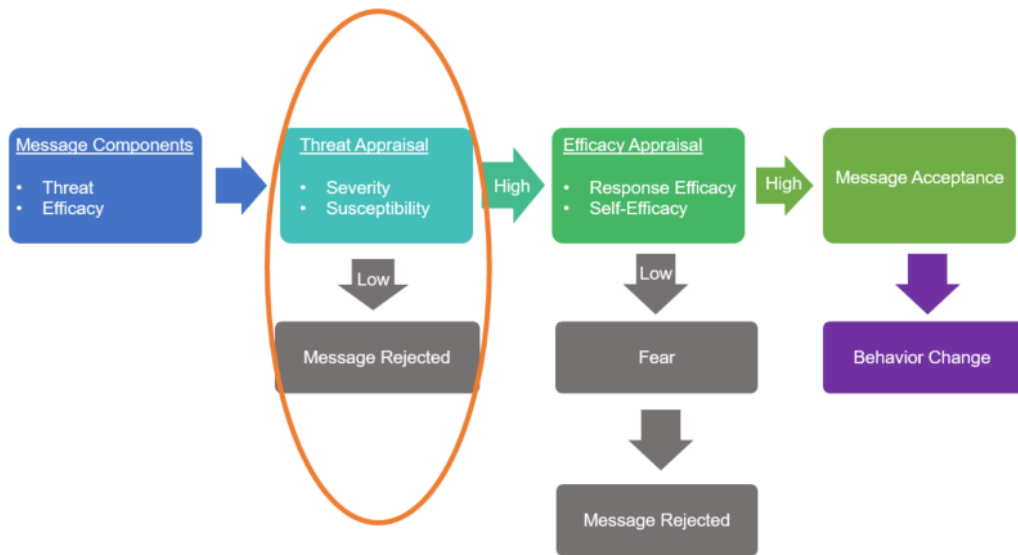
For example, a threat might be icy sidewalks on a university campus, and a specific recommended behavior to resolve that threat might be to wear ice cleats. Here is an example message:



According to the Extended Parallel Process Model, the first thing someone does when reading the message is to appraise the threat. This includes assessing whether they perceive that the threat is severe, which refers to their perception of the magnitude of the threat (i.e., **perceived severity**), and whether they perceive that they are susceptible to the threat, which refers to their perception of the likelihood that the threat will impact them (i.e., **perceived susceptibility**).

In the above example, this would be whether or not someone reading the message perceives that falls on snow and ice are severe (e.g., “Falls cause more than 1,500 deaths and 300,000 injuries per year”) and whether or not they perceive that they are susceptible to falling on snow and ice (e.g., “On University Campuses”). For example, a student in Florida might perceive that falling on snow and ice is severe, but they might not believe they are susceptible to falling on snow and ice on their Florida campus. A student in Alaska, on the other hand, might perceive that falling on snow and ice is severe and that they are susceptible to it on their Alaska campus.

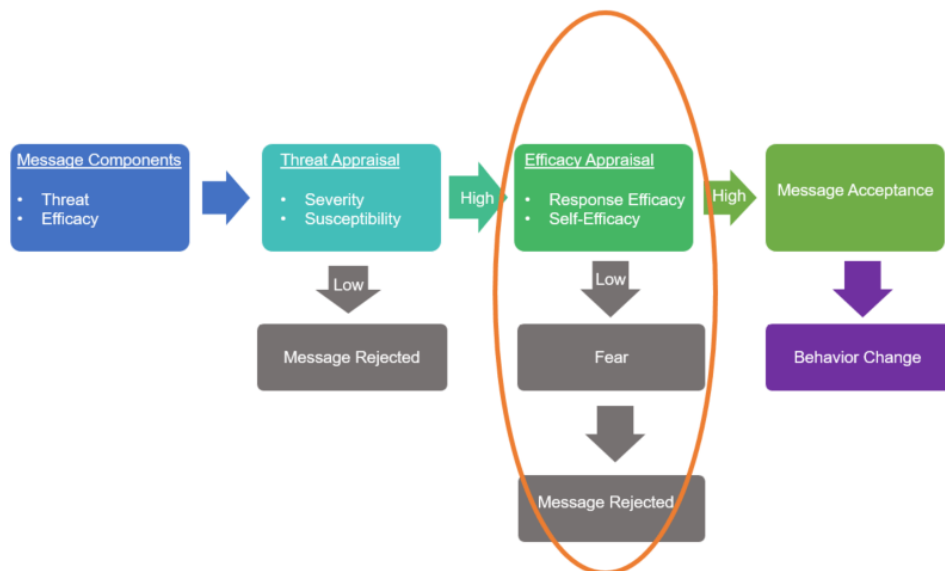
If someone perceives the threat as low (i.e., if the person does not believe the threat is severe and/or does not believe they are susceptible to the threat) then they will reject the message. This part of the model is highlighted in the figure below:



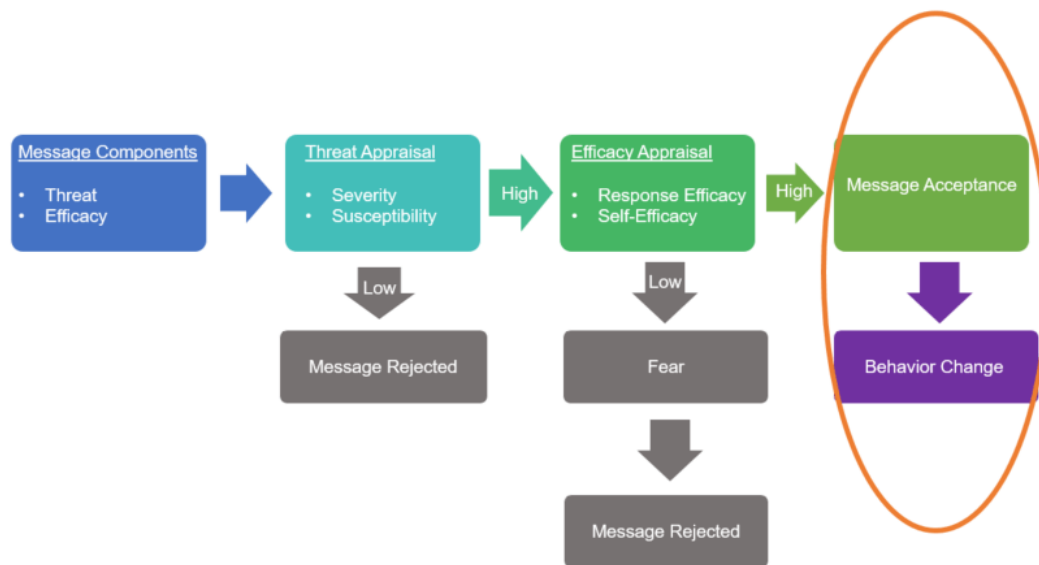
If someone perceives the threat as high (i.e., if the person believes the threat is severe and that they are susceptible to it) then they will keep reading the message. The next thing they will do is appraise the efficacy. This includes assessing whether they believe that the recommended behavior will prevent or reduce the threat, which is referred to as **response efficacy**, and whether they believe they are capable of doing the recommended behavior, which is referred to as **self-efficacy**.

In the above example, this would be whether or not someone reading the message perceives that the recommended behavior to wear ice cleats would prevent a fall on ice (i.e., response efficacy) and whether they believe they are capable of affording, using, and finding ice cleats (i.e., self-efficacy). For example, someone might believe that ice cleats would work to prevent falls (i.e., high response efficacy) but might also think they would not be able to afford them (i.e., low self-efficacy). Someone else might think that ice cleats would work to prevent falls (i.e., high response efficacy) and might also think they could afford to purchase them (i.e., high self-efficacy).

If someone perceives the efficacy as low (i.e., if the person does not believe that the recommended behavior would prevent the threat and/or does not believe they are capable of enacting the recommended behavior) then they will reject the message. This part of the model is highlighted in the figure below:



If someone perceives the efficacy as high (i.e., they have both high response efficacy and self-efficacy), they will accept the message. According to the Extended Parallel Process Model, someone who accepts the message is then likely to change their behavior accordingly. This part of the model is highlighted in the figure below:



What influences the relationship between message acceptance and behavior change?

The Extended Parallel Process Model states that message acceptance leads to behavior change; however, similar to the Theory of Planned Behavior (Chapters 4 & 5) and the Technology Acceptance Model (Chapters 6 & 7), message acceptance does not always guarantee behavior change. For example, someone might accept the message and intend to buy and use ice cleats but not follow through. There are several factors that influence the strength of the relationship between message acceptance and behavior change.

First, in order to best predict behavior change, the message acceptance beliefs must relate to specific intentions and a subsequent specific behavior. Any given behavior can include an action, target, context and time period. For example, a goal might be “to use ice cleats every time when walking outside during winter.” In this example, “using ice cleats” is the action, “every time” is the target, “when walking outside” is the context, and “during winter” is the time period. As the specificity of the behavior increases, message acceptance becomes a better predictor of behavior change.

Additionally, the temporal stability of message acceptance influences the strength of the relationship between message acceptance and behavior. If an individual's message acceptance fluctuates over time (e.g., some days I perceive the threat of falling to be high and other days I do not), then message acceptance measured at one particular time might not predict subsequent behavior change (e.g., Rhodes & Dickau, 2013). As the stability of an individual's message acceptance increases over time, message acceptance becomes a better predictor of behavior.

When is it appropriate to use fear in persuasive messages?

Fear can be an effective persuasive tool when following the Extended Parallel Process Model. Very importantly, however, there are certain conditions where fear may be appropriate and other conditions where fear may be inappropriate or even unethical. Indeed, Peters, Ruiter, and Kok (2013) note that high feelings of threat when coupled with low efficacy can cause people to engage in health-defeating behaviors. Thus, using fear only works when the population has a high baseline efficacy or when the message also includes powerful information to enhance efficacy (Peters et al., 2013). Together, this suggests that fear is only appropriate when the message recipients have high response and self-efficacy regarding the recommended behavior or when it is possible to strongly increase their response and self-efficacy with the message. When efficacy is low, other persuasive tools should be used (e.g., see Chapters 12 & 13 on Hope Appeals).

How can the Extended Parallel Process Model be used to create persuasive messages?

The Extended Parallel Process Model specifies that it is possible to change someone's behavior by influencing their perceived threat (i.e., perceived severity and perceived susceptibility) and perceived efficacy (i.e., response efficacy and self-efficacy).

Perceived Severity

The Extended Parallel Process Models notes that vivid language can be used to increase perceptions that a specific health

threat is severe. Vivid language and descriptions to increase perceptions of severity include specific references to the severity of the threat (e.g., the magnitude of harm) and the terrible consequences of a health threat (Witte & Allen, 2000). Witte (1992) also stated gruesome symptom descriptions are a form of vivid language. Examples ranged from neutral language (“the patient complained of fatigue and a rash”) to moderately vivid language (“the patient complained of fatigue and lumps on the neck”) to extremely vivid language (“the patient complained of fatigue and bleeding, oozing sores all over his body”; Witte, 1994, p. 120).

Perceived Susceptibility

The Extended Parallel Process Models states that personalistic language or imagery can be used to increase perceptions that someone is susceptible to a specific health threat. Personalistic language and descriptions can include references to the target population’s susceptibility to the specific health threat (e.g., their likelihood of experiencing the negative consequences of the threat; Witte & Allen, 2000). Personalistic language could also emphasize the similarities between people impacted by the health threat and the target audience (e.g., “You face a 40% chance of facing these consequences”; see Witte & Allen, 2000).

Response Efficacy

There are some message strategies that could be used to increase a message reader’s perceived response efficacy. For example, the message could provide examples of when the recommended behavior has previously effectively prevented the threat (e.g., “This has worked in the past!”) or explicitly state ways that the recommended behavior will prevent the threat.

Self-Efficacy

Various message strategies could be used to increase a message reader’s perceived self-efficacy. For example, the message could provide examples of others who have successfully performed the behavior (e.g., “If they can do it, I can do it”), provide verbal encouragement (e.g., “You can do it!”; O’Keefe, 2016), or explicitly state that the recommended behavior is affordable, easy to implement, and so on. Any of these strategies individually, or concurrently, could influence a person’s perceptions of self-efficacy.

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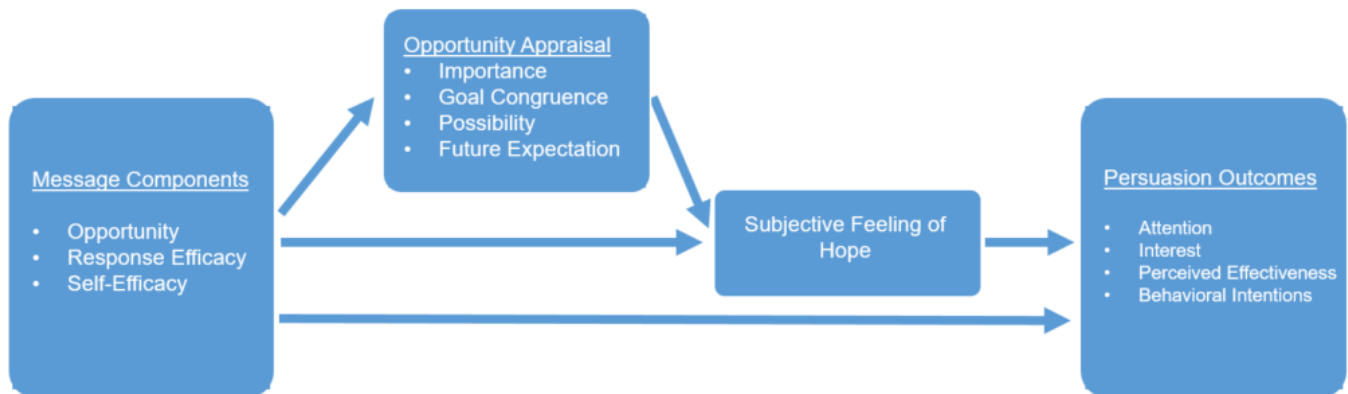
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8.13: Hope Appeals- Persuasive Hope Theory

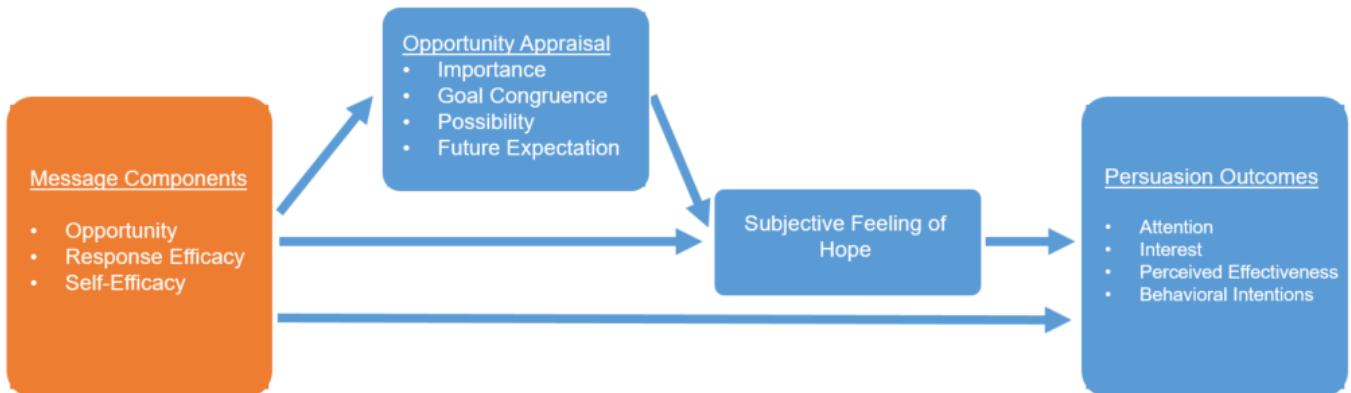
Acknowledgements: The examples used in this chapter were provided by Jordan Q. Ahgeak. The examples were adapted for use in this chapter by the author.

Hope has the potential to persuade people to adopt various behaviors. Indeed, hope is a discrete, future-oriented emotion that can motivate people's behavior by focusing their thoughts on opportunities to achieve future rewards (Chadwick, 2015).

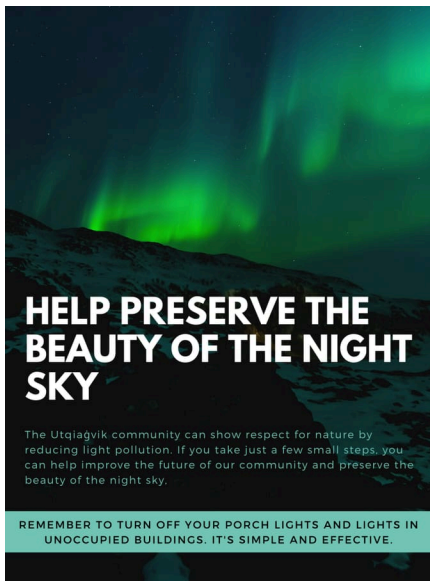
A hope appeal is a message strategy that attempts to persuade people to adopt a specific action by arousing hope. Hope appeals are a relatively recent addition to the study of persuasion (see Chadwick, 2010), and this chapter focuses on Persuasive Hope Theory (Chadwick, 2015). Persuasive Hope Theory defines hope and describes the message features needed for an effective hope appeal. The image below depicts Persuasive Hope Theory:



Persuasive Hope Theory begins with a hope appeal message, which includes message content related to a specific opportunity and the efficacy of a specific recommended behavior to achieve a desired outcome. This part of the theory is highlighted in the figure below:



For example, Jordan Q. Ahgeak (see Acknowledgements) noted that one opportunity in Alaska might be to reduce light pollution in Utqiaġvik (also known as Barrow), and a specific recommended behavior to achieve that outcome might be to lessen the amount of insignificant artificial lighting (for example, turning off porch lights and turning off lights of unoccupied buildings/offices). Here is an example message:



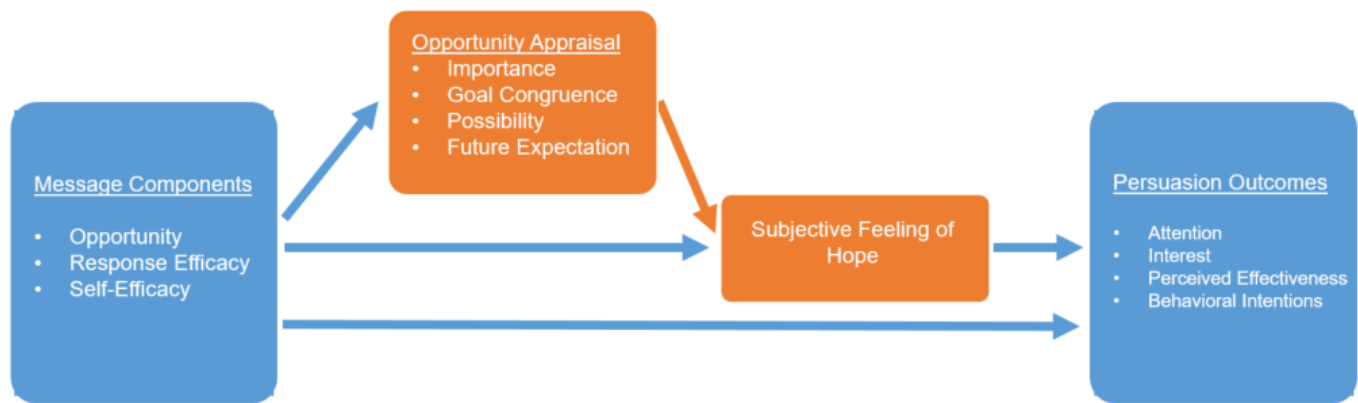
According to Persuasive Hope Theory, the first thing someone does when reading the message is to appraise the opportunity. This includes assessing the opportunity using perceptions of importance, goal congruence, possibility, and future expectation. In the above example, this would be whether or not someone reading the message perceives that reducing light pollution in Utqiaġvik is important, congruent with their goals, possible, and would lead to a better future.

Perceived importance includes an assessment of whether the future outcome is personally relevant. **Perceived goal congruence** refers to whether the future outcome is consistent with and favorable to their personal goals or motives. **Perceived possibility** includes an assessment of the likelihood of the future outcome, and **perceived future expectation** refers to whether the outcome would lead to a better future.

The message component designed to lead to appraisals of **importance** and **goal congruence** connects reducing light pollution to preserving “the beauty of the night sky” and showing “respect for nature.” This was done because Jordan Ahgeak noted that her Utqiaġvik community follows a traditional set of twelve values: Avoidance of Conflict, Compassion, Cooperation, Family and Kinship, Humility, Humor, Hunting Traditions, Knowledge of our Language, Love and Respect for our Elders and One Another, Respect for Nature, Sharing, and Spirituality. The community members have learned, taught, and incorporated these values throughout their lives and subsistence living, thus underscoring the personal relevance and importance of respecting nature for a message recipient from Utqiaġvik. The **possibility** and **future expectation** message components indicate that it is likely that the message recipient can help improve the situation, which would make the future better.

When reading this message, someone in the contiguous United States (or Lower 48) might believe that preserving the beauty of the night sky in Utqiaġvik is possible, but they might not believe that this outcome is personally important to them, is congruent with their goals, or that it would lead to a better future. A community member in Utqiaġvik, on the other hand, might perceive that preserving the beauty of the night sky is important, congruent with their personal goals, possible, and would lead to a better future.

If someone perceives the opportunity as low (i.e., if the person does not believe the opportunity is important, goal congruent, possible, and/or would lead to a better future) then they will not feel hope. If someone perceives the opportunity as high (i.e., if the person does believe the opportunity is important, goal congruent, possible, and would lead to a better future) then they will feel hope. This part of the theory is highlighted in the figure below:

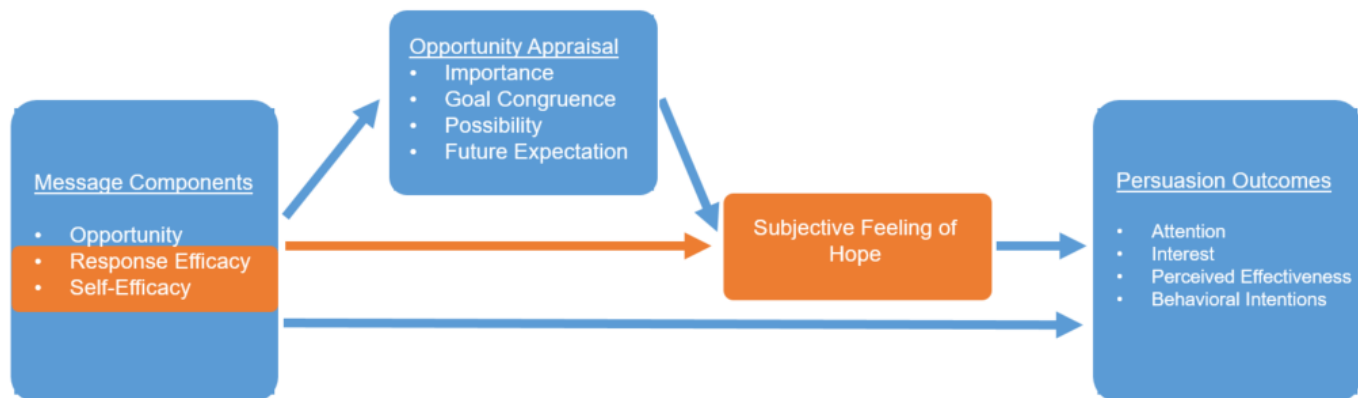


The next thing someone will do when reading the message is appraise the efficacy. This includes assessing whether they believe that the recommended behavior will help them achieve the desired outcome, which is referred to as **response efficacy**, and whether they believe they are capable of doing the recommended behavior, which is referred to as **self-efficacy**.

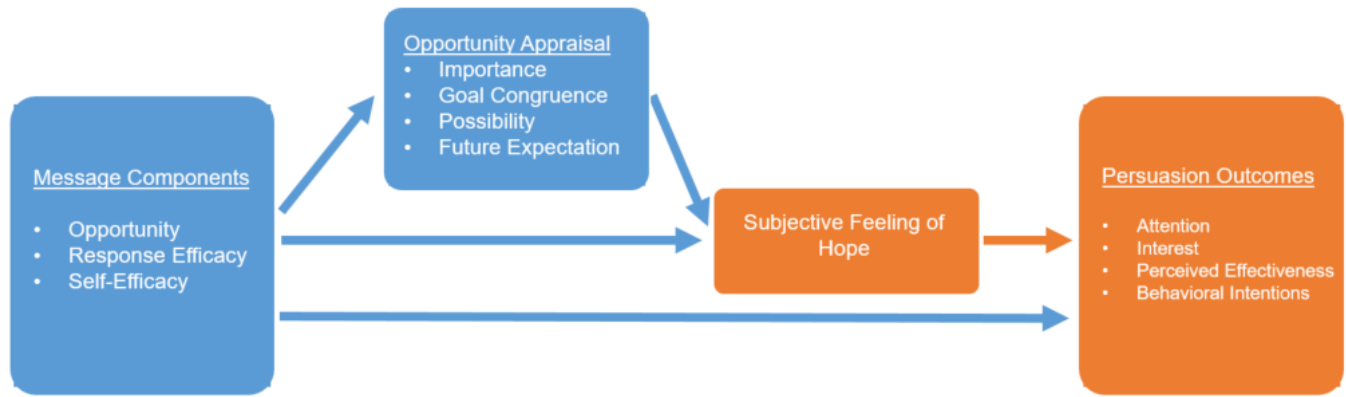
In the above example, this would be whether or not someone reading the message perceives that the recommended behavior to “turn off porch lights and lights in unoccupied buildings” would help reduce light pollution (i.e., response efficacy) and whether they believe they are capable of turning off those lights (i.e., self-efficacy).

For example, someone might believe that turning off porch lights would not help reduce light pollution (i.e., low response efficacy) even if they think they could turn off their porch lights (i.e., high self-efficacy). Someone else might think that turning off their porch lights would help reduce light pollution (i.e., high response efficacy) and might also think they are capable of doing that (i.e., high self-efficacy).

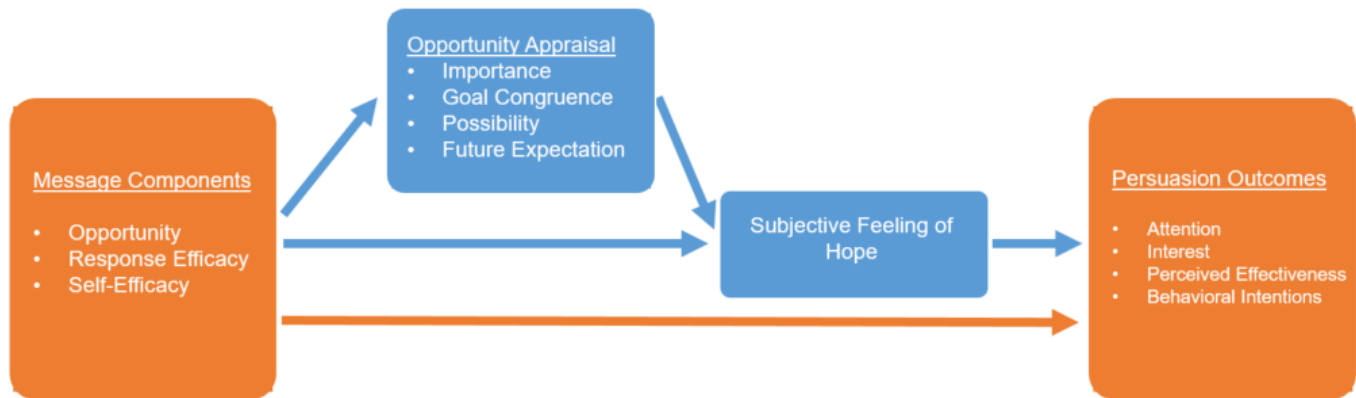
If someone perceives the efficacy as low (i.e., low response efficacy and/or low self-efficacy) then they will not feel hope. If someone perceives the efficacy as high (i.e., high response efficacy and high self-efficacy), then they will feel hope. This part of the theory is highlighted in the figure below:



Persuasive Hope Theory states that this subjective feeling of hope can lead to several different persuasion outcomes, including attention, interest, perceived effectiveness, and behavioral intentions. Indeed, Chadwick (2015) notes that the focused, eager feeling of hope should increase general attention to the message, general interest in the topic, perceptions that the message is effective, and intentions to engage in the recommended behavior. Additional research is needed to refine this part of the theory, but some previous research and empirical work support this. This part of the theory is highlighted in the figure below:



Persuasive Hope Theory also notes that the message components themselves can lead directly to the above mentioned persuasion outcomes. This means that when a message specifically states that the future outcome is important, congruent with goals, possible, and would lead to a better future, this can lead directly to an increase in general attention to the message, general interest in the topic, perceptions that the message is effective, and intentions to engage in the recommended behavior. This part of the theory is highlighted in the figure below:



This is a relatively new theory in persuasion, and therefore additional research is needed to establish all of these theoretical claims.

What influences the relationship between attention, interest, perceived effectiveness, behavioral intentions, and behavior change?

Persuasive Hope Theory states that a hope message can lead to increased attention, interest, perceived effectiveness, and behavioral intentions. However, in persuasion, we are also interested in changing behaviors themselves.

Similar to the Theory of Planned Behavior (Chapters 4 & 5) and the Technology Acceptance Model (Chapters 6 & 7), the persuasion outcomes in Persuasive Hope Theory do not always guarantee behavior change. For example, someone might pay attention to the message, think it is interesting, and intend to turn their porch lights off but not follow through. There are several factors that influence the strength of the relationship between attention, interest, perceived effectiveness, behavioral intentions, and behavior change.

First, in order to best predict behavior change, the beliefs must relate to specific intentions and a subsequent specific behavior. Any given behavior can include an action, target, context and time period. For example, a goal might be “turning off porch lights every night when I’m back home during winter.” In this example, “turning off porch lights” is the action, “every night” is the target, “when I’m back home” is the context, and “during winter” is the time period. As the specificity of the behavior increases, the persuasion outcomes in Persuasive Hope Theory become a better predictor of behavior change.

Additionally, the temporal stability of attention, interest, perceived effectiveness, and behavioral intentions influences the strength of the relationship between these persuasion outcomes and behavior. If an individual's feeling of hope and therefore, for example, interest fluctuates over time (e.g., some days I perceive a high opportunity to reduce light pollution and other days I do not), then persuasion outcomes measured at one particular time might not predict subsequent behavior change (e.g., Rhodes & Dickau, 2013). As the stability of an individual's persuasion outcomes increases over time, message acceptance becomes a better predictor of behavior.

How can Persuasive Hope Theory be used to create persuasive messages?

Persuasive Hope Theory specifies that it is possible to change someone's behavior by influencing their perceived opportunity (i.e., perceived importance, goal congruence, possibility, and future expectation) and perceived efficacy (i.e., response efficacy and self-efficacy).

Importance

Chadwick (2010) notes several message strategies that could be used to increase a message reader's perceived importance. For example, the message can use the second person (e.g., "you") and focus specifically on how the recommended behavior would affect the reader. For example, a message on climate change manipulated to have high importance could include: "The climate affects your well-being in many ways. Protecting the climate is VERY important for your well-being" (see Chadwick, 2010).

Goal Congruence

There are also message strategies that could be used to increase a message reader's perceived goal congruence (Chadwick, 2010). For example, the message can again use the second person (e.g., "you") and focus specifically on how the opportunity impacts the reader's goals (which may require some background research). Chadwick (2010) found that saving money is an important goal for undergraduate students, and therefore used this background research to construct an example message on climate change that was manipulated to have high goal congruence: "Protecting the climate saves you a lot of money. You can make simple changes to protect the climate. You can use less energy, use less hot water, and make less trash. These changes are free or cheap. These small changes will directly save you at least \$500 per year. Protecting the climate saves you In four years at Penn State, you will save \$2000! That is a lot of money."

Possibility

A message reader's perceptions of possibility could be created by several message strategies. Chadwick (2010) notes that a message should use the second person (e.g., "we") and should state that it is possible for the message reader to help create a better future. Modifiers like "very" can also be used. Here is an example message on climate change that was manipulated to have high possibility: "It is very likely that we can make the climate better. All over the world, people like you are taking action. They are using less energy, using less hot water, and making less trash. Billions of people are taking action to protect the climate. You can join the effort and make it even more likely that we will make the climate better" (Chadwick, 2010).

Future Expectation

Chadwick (2010) also discusses several ways to increase a message reader's perceptions of future expectation. Again, the second person (e.g., "you") should be used, and the message should explicitly say how much better the future will be. Additional modifiers like "many" and "much" can be added for emphasis. Here is an example message related to climate change that has high future expectation: "Protecting the climate will make the future much better. Protecting our climate will bring a wonderful future. Our air will be much cleaner. Our weather will be much less extreme. Our summers will be beautiful and mild. We will experience many fewer diseases and will live much longer. Growing food will be easier and more productive. Protecting the climate will have By helping protect the climate, you can help create a wonderful future" (Chadwick, 2010)

Response Efficacy

There are some message strategies that could be used to increase a message reader's perceived response efficacy. For example, the message could provide examples of when the recommended behavior has previously effectively achieved the desired future outcome (e.g., "This has worked in the past!") or explicitly state ways that the recommended behavior will lead to the desired future outcome.

Self-Efficacy

Various message strategies could be used to increase a message reader's perceived self-efficacy. For example, the message

could provide examples of others who have successfully performed the behavior (e.g., “If they can do it, I can do it”), provide verbal encouragement (e.g., “You can do it!”; O’Keefe, 2016), or explicitly state that the recommended behavior is affordable, easy to implement, and so on. Any of these strategies individually, or concurrently, could influence a person’s perceptions of self-efficacy.

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Chadwick, A. E. (2015). Toward a theory of persuasive hope: Effects of cognitive appraisals, hope appeals, and hope in the context of climate change. *Health Communication*, 30(6), 598-611.

O’Keefe, D. J. (2015). *Persuasion: Theory and research* (Third edition). Thousand Oaks, CA: Sage Publications.

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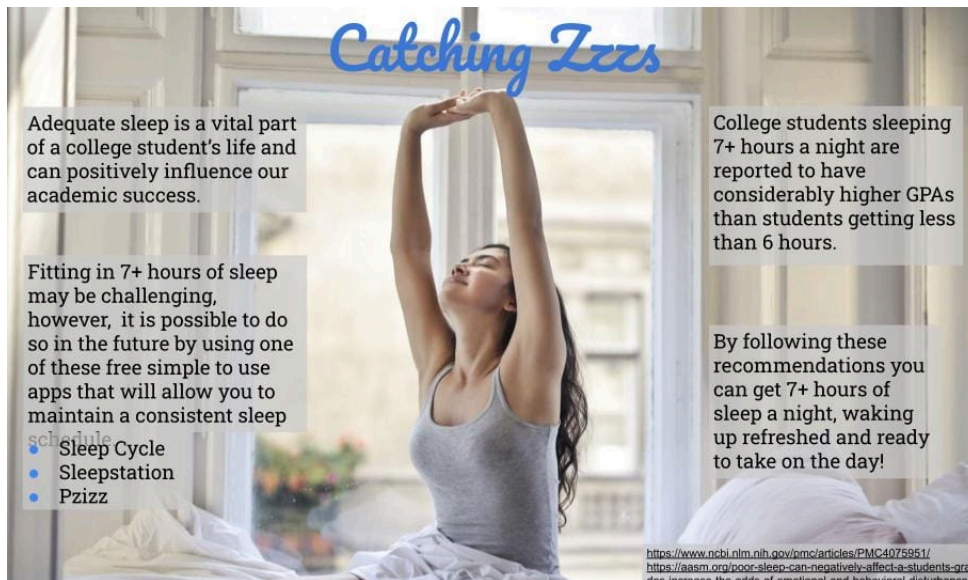
8.14: Applications of Persuasive Hope Theory

Alejandra Salazar, Auston L. Vreeland, Amber K. Worthington, & Parker Yeates*

**Authors names are listed in alphabetical order; all authors contributed equally to this chapter*

Hope appeals, specifically Persuasive Hope Theory (Chadwick, 2015), are explained in detail in Chapter 12. Persuasive Hope Theory can be used to design messages to try to persuade college students to get adequate sleep, reduce food insecurity by accessing a university's food bank, and recycle. Examples on these topics are provided below by Alejandra Salazar, Parker Yeates, and Auston L. Vreeland, respectively.

Example by Alejandra Salazar



Persuasive Hope Theory can be used to persuade college students to sleep adequate amounts in order to promote academic success. A persuasive hope appeal message would need to influence students' perceptions of opportunity and efficacy.

Perceptions of opportunity include perceived importance, goal congruence, possibility, and future expectation. The example message above states that adequate sleep is a vital part of a college student's life and can positively influence academic success. This message content focuses on how the opportunity to achieve academic success through adequate sleep would affect college students, which can increase perceived importance.

The example message also focuses on how the opportunity impact's a college student reader's goals. College students all share a similar goal, which is to achieve academic success. The message above states that "college students sleeping 7+ hours a night are reported to have considerably higher GPAs...". This message content can therefore increase perceived goal congruence.

Perceived possibility message content includes information that states that it is possible for the message reader to achieve the desired future outcome. The message above notes that sleeping 7+ hours may be difficult to manage; however, the message also states that it is something that can be accomplished and "...it is possible to do so in the future by..." This message content can increase perceived possibility.

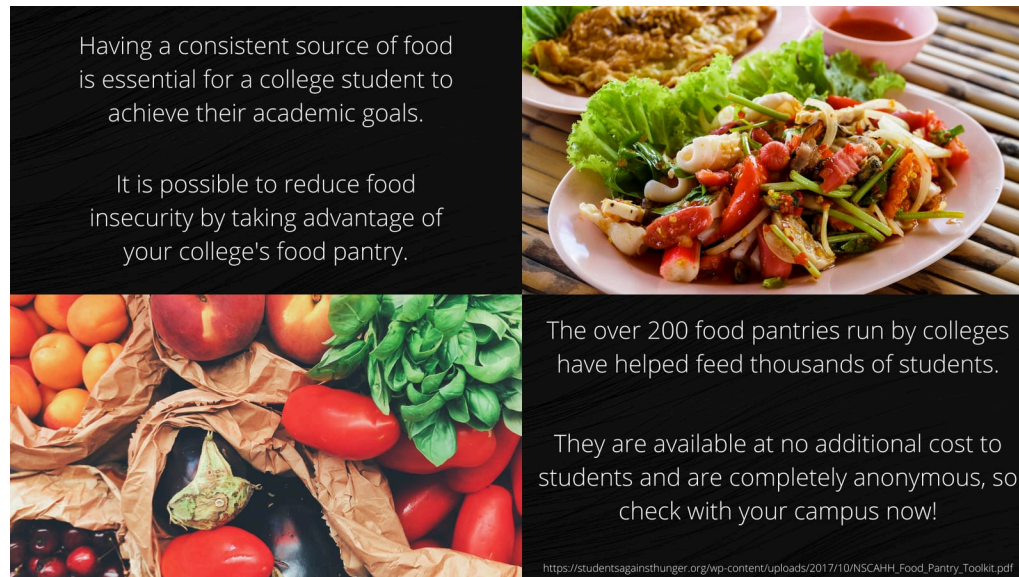
The example message above also contains content designed to increase perceived future expectation. The message should say explicitly that the future will be better, which is included in the statement: "By following these recommendations you can get 7+ hours of sleep a night, waking up refreshed and ready to take on the day!".

Perceptions of efficacy include response efficacy and self-efficacy. The example message above states that "college students sleeping 7+ hours a night are reported to have higher GPAs than students getting less than 6 hours." This explicitly states that

the recommended behavior, getting adequate sleep, will help achieve the desired future outcome of academic success, which can increase perceived response efficacy.

The example message above also provides strategies to make enacting the recommended behavior, adequate sleep, easier. This includes the suggestion to use one of the free, simple to use apps listed on the message to maintain a consistent sleep schedule. All of this information can help increase the college students' beliefs that getting adequate sleep would be easy to implement, thus potentially increasing perceived self-efficacy.

Example by Parker Yeates



Having a consistent source of food is essential for a college student to achieve their academic goals.

It is possible to reduce food insecurity by taking advantage of your college's food pantry.

The over 200 food pantries run by colleges have helped feed thousands of students.

They are available at no additional cost to students and are completely anonymous, so check with your campus now!

https://studentsagainsthunger.org/wp-content/uploads/2017/10/NSCAHH_Food_Pantry_Toolkit.pdf

Persuasive Hope Theory can be used to persuade college students to utilize the university's food bank in order to reduce food insecurity. A persuasive hope appeal message would need to influence students' perceptions of opportunity and efficacy.

Perceptions of opportunity include perceived importance, goal congruence, possibility, and future expectation. The example message above states that having a consistent food source is essential for college students. This message content focuses on how the opportunity to reduce food insecurity would affect college students, which can increase perceived importance.

The example message also focuses on how the opportunity impact's a college student reader's goals. College students all share a similar goal, which is to achieve academic success. The message above states that a consistent food source is needed for college students to achieve their academic goals. This message content can therefore increase perceived goal congruence.

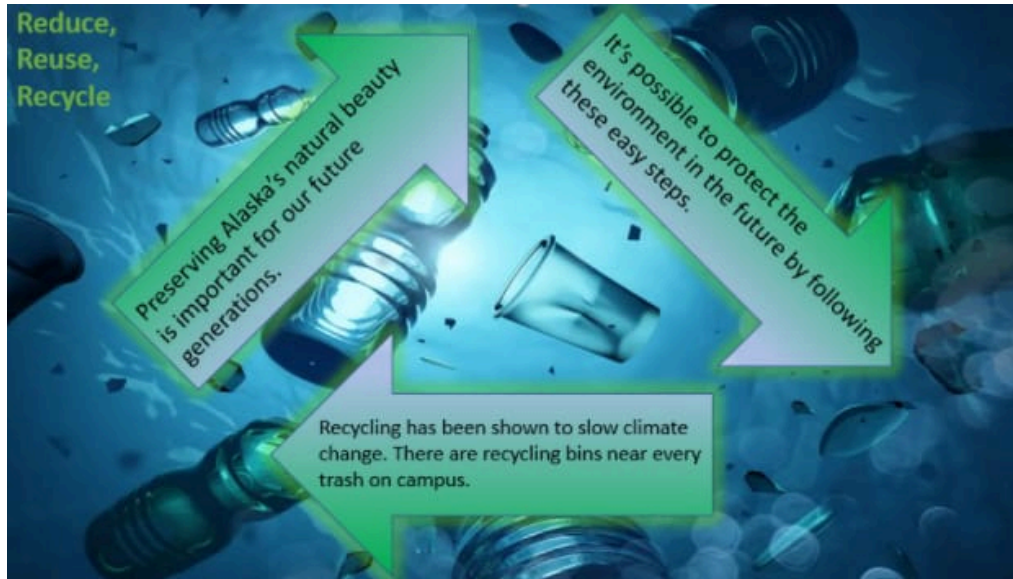
Perceived possibility message content includes information that states that it is possible for the message reader to achieve the desired future outcome. The message above notes that "it is possible to reduce food insecurity." This message content can increase perceived possibility.

The example message above also contains content designed to increase perceived future expectation. The message should say explicitly that the future will be better. The above examples does not explicitly say that the future will be better, but does imply that the future would be better if the reader took advantage of the opportunities presented by their college's food pantry.

Perceptions of efficacy include response efficacy and self-efficacy. The example message above states that "the over 200 food pantries run by colleges have helped feed thousands of students." This explicitly states that the recommended behavior, using a college food pantry when facing food insecurity, will help achieve the desired future outcome of adequately fed college students, which can increase perceived response efficacy.

The example message above also provides strategies to make enacting the recommended behavior, using a college food pantry, easier. This includes the statement that the food pantries "are available at no additional cost to students and are completely anonymous". All of this information can help increase the college students' beliefs that using the food pantry when facing food insecurity would be easy to implement, thus potentially increasing perceived self-efficacy.

Example by Auston L. Vreeland



Persuasive Hope Theory can be used to persuade college students in Alaska to recycle in order to help preserve Alaska's natural beauty. A persuasive hope appeal message would need to influence students' perceptions of opportunity and efficacy.

Perceptions of opportunity include perceived importance, goal congruence, possibility, and future expectation. The example message above states that preserving Alaska's natural beauty is important for future generations. This message content focuses on how the opportunity to preserve Alaska's natural beauty would affect college students in Alaska and those in future generations, which can increase perceived importance.

The example message also focuses on how the opportunity impact's a college student reader's goals. College students in Alaska share a similar goal, which is to preserve Alaska's natural beauty. The message above states that recycling is needed for college students to achieve this goal. This message content can therefore increase perceived goal congruence.

Perceived possibility message content includes information that states that it is possible for the message reader to achieve the desired future outcome. The message above notes that "it is possible to protect the environment in the future by..." This message content can increase perceived possibility.

The example message above also contains content designed to increase perceived future expectation. The message should say explicitly that the future will be better. The below examples does not explicitly say that the future will be better, but does imply that the future of a beautiful Alaska is possible if the reader follows the recycling recommendations.

Perceptions of efficacy include response efficacy and self-efficacy. The example message above states that "recycling has been shown to slow climate change." This explicitly states that the recommended behavior, recycling, will help achieve the desired future outcome, which can increase perceived response efficacy.

The example message above also provides strategies to make enacting the recommended behavior, recycling, easier. This includes the statement that "there are recycling bins near every trash can on campus". This information can help increase the college students' beliefs that recycling would be easy to implement, thus potentially increasing perceived self-efficacy.

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8.15: Applications of the Extended Parallel Process Model

Alejandra Salazar, Auston L. Vreeland, Amber K. Worthington, & Parker Yeates*

**Authors names are listed in alphabetical order; all authors contributed equally to this chapter*

Fear appeals, specifically the Extended Parallel Process Model (Witte, 1992), are explained in detail in Chapter 10. Of note, the Extended Parallel Process Model is only appropriate to use when the target audience has a high perception of efficacy already or when it is possible to increase efficacy with message content.

The Extended Parallel Process Model can be used to design messages to try to persuade college students to drink adequate amounts of water, take a vitamin D supplement, and wear reflective clothing. Examples on these topics are provided below by Alejandra Salazar, Auston L. Vreeland, and Parker Yeates, respectively. The authors felt that their intended audience (college students) would have preexisting high efficacy to engage in the recommended behaviors in these examples, thus making fear an appropriate persuasive tool. Message content related to response and self-efficacy are of course included to reinforce high perceptions of efficacy.

Example by Alejandra Salazar



The Extended Parallel Process Model can be used to persuade college students to drink adequate amounts of water. A persuasive fear appeal message would need to influence students' perceptions of threat and efficacy.

Perceptions of threat include perceived severity and perceived susceptibility. The example message above states that "75% of Americans are chronically dehydrated" and that dehydration can lead to "dry lips & skin, nausea, fatigue, and feeling dizzy, irritable, or tired." This message content specifically references the magnitude of harm and negative consequences of the health threat, which can increase perceived severity.

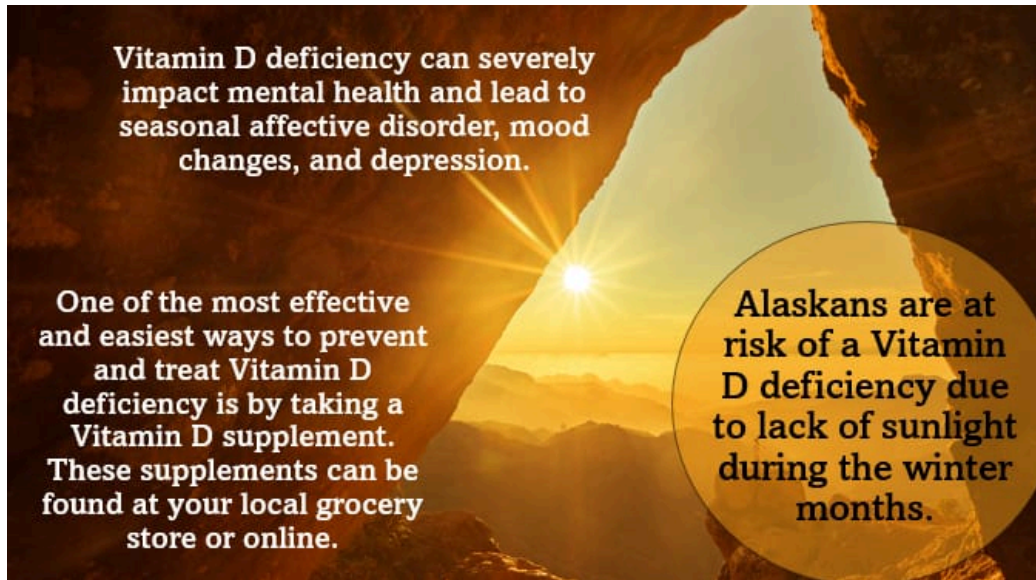
The example message also specifically references that dehydration impacts "Americans" and, in particular, "college students who deal with busy schedules." This message content specifically references the likelihood that college students in the United States of America could experience the negative consequences of the health threat, which can increase perceived susceptibility.

Perceptions of efficacy include response efficacy and self-efficacy. The example message above states that "drinking at least 11 cups of water a day can keep dehydration away." This explicitly states that the recommended behavior, drinking water, will prevent the health threat, which can increase perceived response efficacy.

The example message above also provides strategies to make enacting the recommended behavior, drinking 11 cups of water,

easier. This includes the suggestion to buy a reusable water bottle, to refill the water bottle at convenient locations across campus, and to keep track of water consumption using a free app. All of this information can help increase the college students' beliefs that drinking water would be easy to implement, thus potentially increasing perceived self-efficacy.

Example by Auston L. Vreeland



The Extended Parallel Process Model can be used to persuade college students in Alaska to take a Vitamin D supplement. A persuasive fear appeal message would need to influence students' perceptions of threat and efficacy.

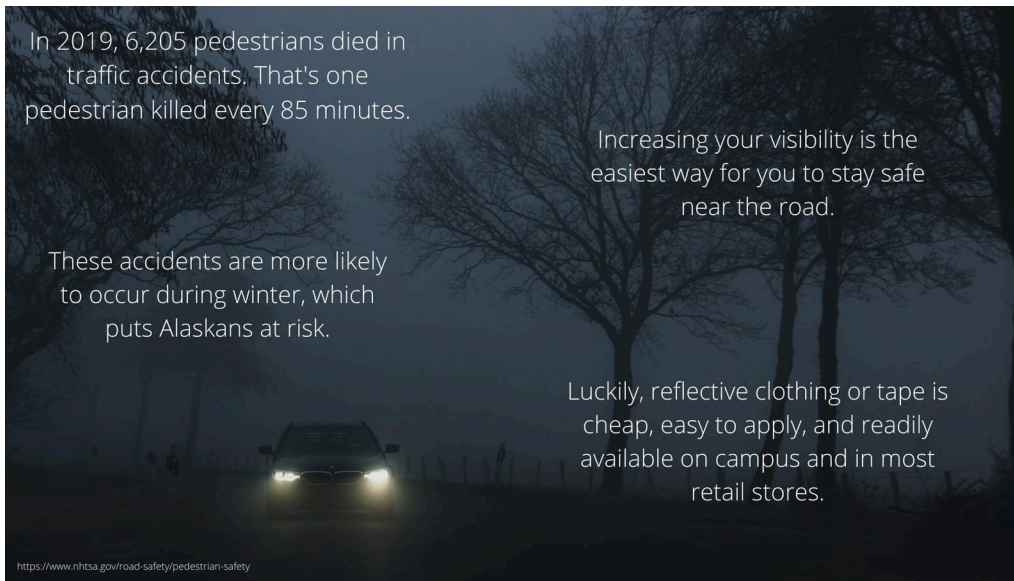
Perceptions of threat include perceived severity and perceived susceptibility. The example message above states that "Vitamin D deficiency can severely impact mental health and lead to seasonal affective disorder, mood changes, and depression." This message content specifically references the magnitude of harm and negative consequences of the health threat, which can increase perceived severity.

The example message also specifically states that "Alaskans are at risk of a Vitamin D deficiency due to lack of sunlight during the winter months." This message content specifically references the likelihood that college students in Alaska could experience the negative consequences of the health threat, which can increase perceived susceptibility.

Perceptions of efficacy include response efficacy and self-efficacy. The example message above states that "One of the most effective and easiest ways to prevent and treat Vitamin D deficiency is by taking a Vitamin D supplement." This explicitly states that the recommended behavior, taking a Vitamin D supplement, will prevent the health threat, which can increase perceived response efficacy.

The example message above also states that "These supplements can be found at your local grocery store or online." This can help increase the Alaskan students' beliefs that taking a Vitamin D supplement would be easy to implement, thus potentially increasing perceived self-efficacy.

Example by Parker Yeates



The Extended Parallel Process Model can be used to persuade college students to wear reflective clothing when it is dark outside. A persuasive fear appeal message would need to influence students' perceptions of threat and efficacy.

Perceptions of threat include perceived severity and perceived susceptibility. The example message above states that "In 2019, 6,205 pedestrians died in traffic accidents. That's one pedestrian killed every 85 minutes." This message content specifically references the magnitude of harm and negative consequences of the health threat, which can increase perceived severity.

The example message also specifically notes that "These accidents are more likely to occur during winter, which puts Alaskans at risk." This message content specifically references the likelihood that those in Alaska could experience the negative consequences of the health threat, which can increase perceived susceptibility.

Perceptions of efficacy include response efficacy and self-efficacy. The example message above states that "Increasing your visibility is the easiest way for you to stay safe near the road." This explicitly states that the recommended behavior, increasing your visibility, will prevent the health threat, which can increase perceived response efficacy.

The example message above also notes that "reflective clothing or tape is cheap, easy to apply, and readily available on campus and in most retail stores." This information can help increase the Alaskan students' beliefs that increasing their visibility by applying reflective tape or purchasing reflective clothing would be easy to implement, thus potentially increasing perceived self-efficacy.

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8.16: The Focus of this Chapter

The foundation of any argument is evidence. The higher the quality of evidence the stronger the argument. Poor quality evidence is open to counter arguments that weaken the strength of your argument. In this chapter, we looked at:

- The challenge of sifting through the enormous amount of evidence that is available to us.
- We looked at the five types of evidence and their strengths and weaknesses.
- It is important to analyze the source of the evidence. To do this we can use the “5 W’s” or the C.R.A.A.P test
- If the source of the evidence is the Internet, checking on the domain names becomes important.
- Because of the growth of “Fake News” sites, determining what is “real news” and what is “fake news” has become more and more of a challenge.

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9: UNDERSTANDING NETWORKED INFORMATION

9.1: The Fact-Checking Process (Four moves)

9.2: Keywords

9.3: Checking Emotions

9.4: Finding Already-Checked Facts

9.5: Handy Tricks for Fact-Checkers

9.6: What If I'm Not Sure About a Source's Reliability?

9.7: Sorting News From Opinion

9.8: Understanding Media and Information Quality in an Age of Artificial Intelligence, Automation, Algorithms and Machine Learning

9.9: Stupid News Tricks

9.10: Fake News and Fake Solutions- How Do We Build a Civics of Trust?

9.11: How Social Media Platforms Intersect With News

9.12: 3 Ways Facebook and Other Social Media Companies Could Clean Up Their Acts – If They Wanted To

9.13: Testing of Fake News Sources

9.14: When Going Upstream Is Hard Work

9.1: The Fact-Checking Process (Four moves)

“Abandoning facts means abandoning freedom.” Timothy Synder, *On Tyranny*.

Being able to prove or disprove factual information is not the only way we can assess information or evaluate an argument, but facts are a key building-block of knowledge. Given the volume of factual claims we encounter every day in social media, in news stories, in political speeches, in arguments with That Opinionated Uncle, it may seem impossible to tackle the problem. Who has the time?

What people need most when confronted with a claim that appears to be factual but may not be 100 percent true is simple strategies to get closer to the truth. It doesn't have to take a lot of time and work to take one or two key fact-claims and check them for accuracy.

These four moves (or tactics) can get you started with the fact-checking process. Try them in order.

- **Check for previous work:** Look around to see if someone else has already fact-checked the claim or provided a synthesis of research on the claim. Fact-checking sites are good sources for this move, particularly if the fact you're checking has been getting a lot of attention. When you encounter a claim you want to check, your first move might be to see if sites like *PolitiFact*, *Snapes*, or even *Wikipedia* have researched the claim.
- **Go upstream:** Most web content is not original. Get to the original source to understand the trustworthiness of the information. This may be the first newspaper article that reported the claim; it may be a published journal article reporting original research or a government document. If the claim is about a research finding, try to find the original article. If the claim is about an event, try to find the original reporting.
- **Read laterally:** (This useful phrase was popularized by Sam Wineburg and his colleagues at the Stanford History Education Group.) Once you get to the source of a claim, make a quick check to see what other people think about the source (the publication, the author, etc.). Maybe you get lucky and the source is something you already know is reputable, such as the journal *Science* or the newspaper *The New York Times*. If so, you can stop there. If not, dig around to see what you can find out about the source. Increasingly Wikipedia includes articles about publications with basic background about them. You can also make a quick check to see how others have addressed the same topic. Is this claim widely believed? Embraced by a particular group? Or is it contradicted by most sources? The truth is in the network.
- **Circle back:** If you get lost, hit dead ends, or find yourself going down an increasingly confusing rabbit hole, back up and start over knowing what you know now. You've learned something about the claim. Now you're likely to take a more informed path with different search terms and better decisions. And if at any point you fail—if the source you find is not trustworthy, complex questions emerge, or the claim turns out to have multiple sub-claims—then circle back to step one, pick another fact-claim, and start over.

In general, try these moves in sequence. If you find success at any stage, your work might be done.

But How Do I Know What Sources are “Reputable”?

This is a fraught question today. A sizeable percentage of Americans distrust all “mainstream media.” A recently published book, *Network Propaganda: Manipulation, Disinformation, and Radicalization in American Politics* by Yochai Benkler, Robert Faris, and Hal Roberts (Oxford, 2018) conducted extensive network analysis of news consumption and social sharing. They concluded our news media have bifurcated. There's an entire self-referential media ecosystem centered on Fox News and embracing many right-wing and far-right websites that amplify and affirm one another while discrediting all news sources that fall outside their circle as “biased,” “left-wing,” or even “fake.” This is what the authors of the book call a “propaganda feedback loop.” In this media sphere, adherence to a partisan belief system and cultural identity is more important than being factually correct. A claim that is demonstrably false is more acceptable than stating something that challenges the overarching political narrative.

Doesn't this happen on the left-wing too? There are hyperpartisan sites on the left that traffic in rumors and lies, but the difference is their audiences tend to balance their consumption of those sites with mainstream news organizations that generally attempt to adhere to journalistic norms set out in the Society of Professional Journalists *Code of Ethics*. In this sphere, it's harder to maintain a story or a position based on “facts” that can be disproved or that even seem unlikely. Traditional journalistic processes are valued as much as or more than alignment with a set of political beliefs, and fewer people on the left dismiss the mainstream media's reporting out of hand.

In this course, healthy skepticism is encouraged, but blanket distrust of mainstream news organizations based only on alleged political bias is not supportable. Part of the job of becoming a savvy information consumer is figuring out what sources of information you can, for the most part, trust to get it right much of the time and strive to correct mistakes.

Some generally-respected news organizations include . . .

- [*The New York Times*](#)
- [*The Wall Street Journal*](#)
- [*The Los Angeles Times*](#)
- [*The Washington Post*](#)
- [*PBS NewsHour*](#)
- [*NPR*](#)
- [*BBC*](#)

Sorting News from Opinion

These news organizations publish both news reporting and opinion pieces. Opinion pieces will be deliberately persuasive and often provocative. News reporting strives to be more objective. However, in both cases the publishers strive to avoid promoting obvious falsehoods, though they will accept opinion pieces that readers (and their own editorial board) may vehemently disagree with. When you look at an article, pay attention to who wrote it and why. For more on sorting news from opinion, see [Chapter 6](#).

9.2: Keywords

This chapter defines words and phrases that pertain to networked information. As the course progresses, we might add to this list.

ADTECH – advertising technology that directs advertising to individuals through systems such as behind-the-scenes auctions and the use of data to tailor ads to individual histories and susceptibilities and to analyze the results of advertising (also called “tailored advertising” or “targeted advertising”; if highly personalized it might be called “microtargeted advertising”). One common practice used in digital advertising is A/B testing in which people are shown two different messages to determine which is more successful and to tailor messaging to specific populations. Adtech is not just used to sell consumer goods; it’s also influential in political campaigns and, unlike in print or broadcast political advertising, disclosures about who paid for the ad are not required.

ALGORITHM – the set of logical rules used to organize and act on a body of data to solve a problem or to accomplish a goal, usually carried out by a machine. Typically, an algorithm is modeled, trained on a body of data, and then adjusted as the results are examined. Because algorithms are generally processed by computers and follow logical instructions, people often think of them as neutral or value-free, but the decisions made by humans as they design and tweak an algorithm and the data on which an algorithm is trained on can introduce human biases that can be compounded at scale. Humans who interact with an algorithm may also find ways to influence the outcomes, as when a marketer finds ways to push a website up in the results of a search.

ATTENTION ECONOMY – contemporary technology platforms benefit when people use them both to place ads in front of potential consumers and to increase their acquisition of personal data. Since our attention is a limited resource, companies (both platforms and people who use the platforms to sell, entertain, or persuade) try to engage and keep people’s attention. This rewards clickbait and influences the design of algorithms and platforms to maximize time spent online.

BIAS – Everyone has a limited perspective and, to that extent, every human utterance is subject to bias, but the word is generally used to mean an unfair and disproportionate preference for one side against another. For example, a journalist may make every effort to avoid having their reporting influenced by personal beliefs, but still must decide how to frame a story, including what examples to provide and who to consult as sources. A scholar will take steps to avoid personal beliefs from influencing their research, but will always struggle with the impossibility of total objectivity. When thinking about bias, it’s important to distinguish between deliberate and unfair weighting of a perspective from the inescapable limits of a person’s position.

BULLSHIT – communication without regard to truthfulness. Claims are invented or adopted to suit a purpose and the speaker doesn’t care whether they are true or false. Unlike a lie, which is a deliberate falsehood, bullshit is created without any particular truth or falsity in mind; it’s invention that purports to be true without any concern about truth itself and without employing or respecting methods used to distinguish truth from falsity. The concept overlaps at times with clickbait (statements are invented for profit) and propaganda (statements are invented for a political purpose) and, of course, can be both profitable and political. See Harry Frankfurt’s [On Bullshit](#) for a philosophical treatment of the concept.

CLICKBAIT – headlines or teasers for stories that are designed to encourage clicking through to view the digital content by using scandalous, sensational, exaggerated, gross-out, or misleading information. Because success of advertising and of digital platforms is measured by click-through rate, there is an incentive to create clickbait both among new media sites and traditional journalism. Some platforms have begun to minimize those incentives. For example, in 2014 Facebook announced it would automatically demote content if those who clicked through left a site quickly because the headline didn’t live up to its promise. Whether that has actually been accomplished is unclear.

DATA VOID – a word or phrase that can be manipulated in search results for ideological purposes. When something new enters the culture, pages can be quickly created to fill a void by providing information geared to the interests of a particular viewpoint. Manipulators may also introduce new names for concepts that will surface propaganda in a search or take advantage of problematic expressions to provide their preferred definitions when others aren’t available. Any void in search results is ripe for manipulation by filling it with misinformation or propaganda..

DISINFORMATION – the deliberate communication of false or misleading information for political purposes. The origin of the word is Russian and dates to the Stalin era when disinformation was used by intelligence organizations to foster state aims. It began to be included in dictionaries of the English language in the 1980s. While some disinformation is intended to convince people something false is true, the larger goal is to disillusion the populace by making it seem impossible to believe in the truth

of anything.

FAKE NEWS – a phrase that in its early use described content that looked like news but was invented simply to attract clicks for profit. It evolved into a description of new media outlets that presented news stories that aligned with a political perspective while being largely indifferent to traditional journalistic practices. The phrase flipped its meaning and became a synonym for traditional mainstream news organizations when President Trump began to call them “fake news,” essentially setting up a binary opposition between right-wing publications that supported Trump and mainstream and left-wing publications that either opposed Trump or reported news he didn’t like.

LISTICLE – a form of clickbait that uses lists, such as “Top Ten . . .” “100 most . . .” or “50 ways . . .”, a style particularly popular in the non-journalistic articles at [BuzzFeed](#).

MEME – small units of culture, often humorous, frequently visual in nature, that are spread through imitation and alteration. Though the term was coined in the pre-internet age, it now refers primarily to digital works that riff off a common image or idea. Memes may form within a specific community and require a kind of “insider” knowledge to decode or remix. They can spread quickly through social media, offering a multitude of variations on a theme. The origin and meaning of specific memes can be explored at [Know Your Meme](#).

MODERATION – the process of screening user-contributed content online. Every online platform that allows users to contribute, whether uploading videos to YouTube or making a comment on a news article, has to put rules in place to screen out illegal or offensive content as well as automated advertising messages (i.e. spam). Moderation usually involves a mix of algorithmic screening that uses machine learning to identify problematic material and human reviewing of material either before it is made public or after it is flagged. It also involves responding to harassment and trolling, developing rules and procedures for making decisions about suspending or banning users from a platform. For more information about these practices, see Sarah Jeong’s *The Internet of Garbage* and Tarleton Gillespie’s *Custodians of the Internet*.

PLATFORM – in computing, platform traditionally referred to a combination of hardware and operating system software, such as Windows for PCs or iOS for Macs; now it has extended to sites (such as Facebook) that provide proprietary software that runs on the internet and may allow third party developers to create new applications specific to that site.

PROPAGANDA – communications designed to influence a population so it will form beliefs and behave in ways that are consistent with the propagandist’s political and social objectives. Disinformation is a technique often employed for propagandistic purposes. In some definitions, propaganda is intentionally aimed at a specific audience with a political aim in mind, distinguishing it from commercial marketing, though both may use similar persuasion techniques and technologies. In the early 20th century propaganda was associated with the new field of public relations and was used extensively to recruit support for involvement in World War I, but the word began to have a negative connotation thereafter as anti-democratic and misleading. In their book *Manufacturing Consent*, Noam Chomsky and Edward S. Herman used the phrase “corporate propaganda” to mean efforts to protect corporate power against political or democratic intervention.

RED PILL – inspired by the film *The Matrix*, in which a character is offered a blue pill (which will allow them to live comfortably in a world that is an illusion) or a red pill (where they will experience the truth and therefore freedom), this phrase indicates a revelation that what people generally accept as true is completely false. It’s often used as a sort of meta-conspiracy theory that feminism, the mainstream media, the economic system, and the existence of racism are false narratives that are woven together to oppress the gullible masses and those who are “red-pilled” have broken free. It’s generally a term adopted by the far right, particularly white men on the far right, except when used to describe those who claim to have taken the red pill. In the context of this course, it’s significant in that no amount of fact-checking or argument can persuade a person who believes “common reality” is a delusion, or rather that their reality is the only true reality and most people have been seduced by an illusion.

SJW – acronym for “social justice warrior,” a term of opprobrium for feminists and those who express concern about social justice, particularly if it threatens aspects of culture that were traditionally male and white such as comics, science fiction, or gaming. The term became popularized during “gamergate” in which angry gamers conducted a harassment campaign against woman who created or wrote about games with progressive themes. Those who use the term claim those who express progressive views in these cultural arenas do so only for self-aggrandizement to discount the validity of their views.

SURVEILLANCE CAPITALISM – a concept developed by Shoshana Zuboff (most thoroughly in her book *The Age of Surveillance Capitalism*) meaning the monetization of massive amounts of personally-identifiable data in order to predict and influence human behavior for profit. Zuboff considers the development of surveillance systems that constantly capture intimate details of human life at a global scale an “expropriation of critical human rights that is best understood as a coup from above” and “an overthrow of the people’s sovereignty” because this process appropriates human experience as free raw material for building proprietary

systems of prediction and control. Initially seen as a way of selling targeted advertising, this form of capitalism is now being built into phones that we carry everywhere with us, cars, home appliances, smart homes, even smart cities with the data used for more than advertising – for example, to allocate benefits, determine sentences, or to train machines to replace human labor. As Zuboff put it in an [interview](#), “Once we searched Google, but now Google searches us. Once we thought of digital services as free, but now surveillance capitalists think of us as free.”

TROLL – a person, often operating in groups, who deliberately upset targets by sending them unsettling or offensive material, often in an attempt to damage their reputation or drive them from a platform. Originally trolling was purposeless other than “for the lulz” – a warped sense of humorous mischief. More recently the term describes anyone who engages in offensive or destructive attacks online. Used as a verb it often means coordinated and frequent attacks in disputes about social, cultural, or political issues or the practice of using various strategies to derail or disrupt a discussion. Trolls employ a winning strategy because they tend to either attract shocked attention (a win) or to force those they attack to leave the argument or platform (also a win). For a full ethnographic analysis, see [This is Why We Can't Have Nice Things](#) by Whitney Phillips.

9.3: Checking Emotions

In addition to the moves, there's a habit to cultivate: *Check your emotions*.

When you feel strong emotion – happiness, anger, pride, vindication – and that emotion pushes you to assume something is true and share a “fact” with others, stop and think. These are *exactly* the claims that you must fact-check.

Why? Because you're already predisposed to analyze things that put you an intellectual frame of mind. But things that make you angry or overjoyed, well... our record as humans is not good when it comes to being influenced by our emotions.

Our normal inclination is to agree with content that we already feel is correct. (Psychologists call this “confirmation bias.” We are inclined to accept things that align with what we already believe and reject or ignore things that don't.) Moreover, researchers have found that content that causes strong emotions (both positive and negative) spreads the fastest through our social networks. This shouldn't surprise us; social media platforms are designed to maximize “stickiness.” They do everything they can to keep users engaged, because engagement is profitable. Savvy activists, advocates, and marketers take advantage of platform design and human psychology, getting past our filters by posting material that goes straight to our hearts.

Not only that, but whoever writes a headline is likely trying to catch your attention, and that can distort the meaning of a story. “Clickbait” is designed to provoke an emotion so it can spread. Resist the urge to share something based only on a headline. If you read the story – even if you simply skim it quickly – you will have a better sense of what it's really about and whether it's something you want to share. (Incidentally, authors of news stories usually don't write their own headlines, so don't blame them if they are ridiculously off base.)

Use your emotions as a checkpoint. Strong emotions should become a trigger for your new fact-checking habit. Every time content you want to share makes you feel rage, laughter, ridicule, or even a heartwarming buzz, spend 30 seconds fact-checking. You might avoid misleading others and embarrassing yourself by passing along something that's simply not true.

In some cases an emotionally-charged piece of news may be factually true, but more complicated than it appears at first. By learning the context and the complexities through a more nuanced source of information, you can share valuable information without all the emotional baggage. You might even help cool down an over-heated argument.

9.4: Finding Already-Checked Facts

When you see a factual claim circulating on the internet that you want to check, someone may have already done the work for you. Particularly in the realm of current political news, there are a number of organizations that routinely examine claims made by public figures. Viral content online, too, is often fact-checked. Here are some prominent fact-checking sites:

- [PolitiFact](#)
- [Factcheck.org](#)
- [Washington Post Fact Checker](#)
- [Snopes](#)
- [Truth be Told](#)
- [NPR Fact-Check](#)
- [Detector de Mentiras](#) (Univision, Spanish language)
- [Guardian Reality Check](#) (UK)
- [BBC Reality Check](#) (UK)

Rather than prowl through these sites one by one, there's a nifty search trick you can use. Pull together key words, phrases, or concepts from the claim you want to check and put them into a search bar, adding **site:** and the url of a fact-check site. Better yet, try two sites and compare them. For example, search:

George Soros paid caravan site:snopes.com

or George Soros paid caravan site:politifact.com

Because these fact-checking sites tend to focus on current political news, they have limited use when fact-checking something that isn't headline news or a notorious viral hoax. The next chapter will offer more tricks and tips for strategically learning about a site.

9.5: Handy Tricks for Fact-Checkers

In addition to the four moves and a habit, these shortcuts will help you evaluate sources and check facts efficiently.

Quickly grab key phrases: highlight the text, right click, and select a search engine. If the information you're examining is time-sensitive, click on "news" to get the latest.

Search for a source by name but exclude the source itself from a search: by adding to a search a minus sign and URL, you can search for sites that mention the source. For example:

daily caller -site:<https://dailycaller.com/>

youtube algorithm extremism -site:<https://youtube.com>

(However, this will include any social media sites maintained by the site, such as Facebook or Twitter.)

Find out when a site was registered – and possibly who is behind it: go to <https://whois.com> and paste in a URL (the part up to the first /). Every time a website is created, the creator has to provide contact and technical information to a central registry. Sometimes the information is detailed; quite often, though, a registrar will hide the details under a proxy. In that case, the only useful information you will find is the date it was registered and when it is up for renewal. There are several sites where you can run whois searches. This one works well if you ignore their advertising for domain registration and internet hosting.

Track down an image using a reverse-image search: Go to <https://images.google.com> and either paste in the image URL or upload a copy of the image. This won't necessarily lead you to the original; you'll likely find multiple copies of a viral image. Scan through the links to see what source seems most likely to include useful information. You might also find it useful, if looking for an older image, to use the "tools" option to limit by date. [TinEye](#) is another reverse image search if you want an alternative to Google.

Find the original source using a date limiter: In a Google search, clicking under Tools and Anytime will give you a chance to limit a search by date. Using the custom date range option, start some time ago – say up until 2009 – and, if that fails to locate the source, reset your date limiter adding a year or two.

Find the original source using place as a clue: Sometimes a site will relate news without telling you who originally reported it. Try searching for a news source from the place where the item reported in the news happened by searching the city and "newspaper" or "local affiliate" for television news. Then search on the site of a local news outlet to see how it was first reported locally. Chances are the story got a little garbled in the retelling.

Find a previous version by using the Wayback Machine: Sometimes you may want to see how a page has changed over time. The [Internet Archive has saved billions of websites](#) over the years, so you can type in an address and see how a site looked in the past. Some pages or parts of pages may be missing and whether a page is archived will often depend on if a page was heavily linked to in the past, or if the site owner wanted it excluded from the archive.

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9.6: What If I'm Not Sure About a Source's Reliability?

Authority and reliability are tricky to evaluate. Whether we admit it or not, most of us would like to ascribe authority to sites and authors who seem to support our viewpoints and approach publications that disagree with our worldview with skepticism.

How do we escape our own prejudices? Try applying [Wikipedia's guidelines](#) for determining the reliability of publications. These guidelines were developed to help people with diametrically opposed positions argue in dispassionate ways about the reliability of sources using common criteria. For Wikipedians, reliable sources are defined by *process*, *expertise*, and *aim*.

Process

Above all, a reliable source for facts should have a process in place for encouraging accuracy, verifying facts, and correcting mistakes. Note that reputation and process might be apart from issues of bias. The editorial pages of the *New York Times* have a center-left bias, while those of the *Wall Street Journal* a center-right bias. The stories they choose to cover are also influenced by editors deciding what is important for their readership and role. Yet fact-checkers of all political stripes are happy to be able to track a fact down to one of these publications since they have reputations for a high degree of accuracy and issue corrections when they get facts wrong.

The same thing applies to peer-reviewed publications. While there is much debate about the inherent flaws of peer review, peer review does mean there are many eyes on data and results. This process helps to keep many obviously flawed results out of publication. If a peer-reviewed journal has a large following of experts, that provides even more eyes on the article, and more chances to spot flaws. Since one's reputation for research is on the line in front of one's peers, it also provides incentives to be precise in claims and careful in analysis in a way that other forms of communication might not.

Expertise

According to Wikipedians, researchers and certain classes of professionals have expertise, and their usefulness is defined by that expertise. For example, we would expect a marine biologist to have a more informed opinion about the impact of global warming on marine life than the average person, particularly if the biologist has done research in that area. Professional knowledge matters too: we'd expect a health inspector to have a reasonably good knowledge of health code violations, even if they are not a published scholar of the area. And while we often think researchers are more knowledgeable than professionals, this is not always the case. For a range of issues, professionals in a given area might have more nuanced and up-to-date insight than many researchers, especially where question deal with common practice.

Reporters, on the other hand, often have no domain expertise, but may strive to accurately summarize and convey the views of experts, professionals, and event participants. Reporters who write in a niche area (their "beat") over many years (e.g. science or education policy) may acquire expertise themselves. Nevertheless, they will seek out experts for information when working on a story.

Aim

Aim is defined by what the publication, author, or media source is attempting to accomplish. Aims are complex. Respected scientific journals, for example, aim for prestige within the scientific community by publishing important new research, but must also have a business model to fund their publishing operation. *The New York Times* relies on subscriptions and ad revenue but is also dependent on maintaining a reputation for accuracy and even-handedness, so it maintains an organizational separation between the staff whose job is to bring in money and the editors and journalists whose job is to report news.

One way to think about aim is to ask what incentives an article or author has to get things right. An opinion column that gets a fact or two wrong won't cause its author much trouble, whereas an article in a newspaper that gets facts wrong may damage the reputation of the reporter. On the far ends of the spectrum, a single bad or retracted article by a scientist can ruin a career, whereas an advocacy blog site or a YouTube celebrity can twist facts daily with few consequences.

Policy think tanks, such as the Cato Institute and the Center for American Progress, are interesting hybrid cases. To maintain their funding, they must continue to promote aims that have a particular bias. At the same time, their prestige depends on them

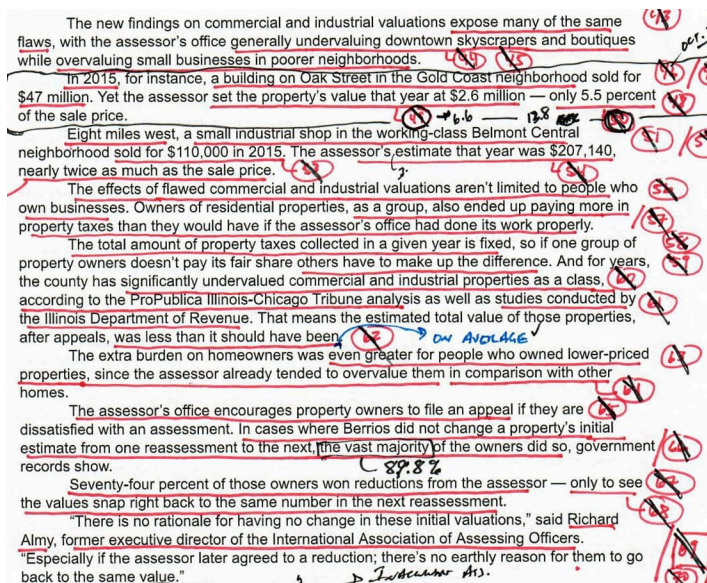
promoting these aims (and being clear about their mission) while maintaining some level of factual integrity.

Bottom line: look for publications that have strong incentives to get things right, as shown by both authorial intent and business model, reputational incentives, and mission.

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9.7: Sorting News From Opinion

Traditional news organizations publish different kinds of articles in sections that have different expectations for writers and different editors selecting and shaping articles. Newsroom staff gather and report news (and newsrooms also publish stories by “stringers” or freelance journalists who are not on staff but are real, live journalists committed to the same values and practices as staffers). Some newsroom journalists don’t focus on “hard news” – they write features about style or business or the arts or sports. They also may publish analysis or in-depth investigative articles about things that aren’t breaking news of the day but help readers understand the complexities of newsworthy issues. A reporter may spend months looking into why kids in a particular neighborhood have high rates of asthma. Another may analyze why voters found a particular candidate appealing or why a policy decision in the US Congress is being held up. Those articles are not straight news reporting, but they aren’t opinion, either. Sources are provided, facts are checked. In fact, this example of fact-checking an investigative piece shows just how much work is involved to get the story right.



The new findings on commercial and industrial valuations expose many of the same flaws, with the assessor's office generally undervaluing downtown skyscrapers and boutiques while overvaluing small businesses in poorer neighborhoods.

In 2015, for instance, a building on Oak Street in the Gold Coast neighborhood sold for \$47 million. Yet the assessor set the property's value that year at \$2.6 million — only 5.5 percent of the sale price.

Eight miles west, a small industrial shop in the working-class Belmont Central neighborhood sold for \$110,000 in 2015. The assessor's estimate that year was \$207,140, nearly twice as much as the sale price.

The effects of flawed commercial and industrial valuations aren't limited to people who own businesses. Owners of residential properties, as a group, also ended up paying more in property taxes than they would have if the assessor's office had done its work properly.

The total amount of property taxes collected in a given year is fixed, so if one group of property owners doesn't pay its fair share others have to make up the difference. And for years, the county has significantly undervalued commercial and industrial properties as a class, according to the ProPublica Illinois-Chicago Tribune analysis as well as studies conducted by the Illinois Department of Revenue. That means the estimated total value of those properties, after appeals, was less than it should have been.

The extra burden on homeowners was even greater for people who owned lower-priced properties, since the assessor already tended to overvalue them in comparison with other homes.

The assessor's office encourages property owners to file an appeal if they are dissatisfied with an assessment. In cases where Berrios did not change a property's initial estimate from one reassessment to the next, the vast majority of the owners did so, government records show.

Seventy-four percent of those owners won reductions from the assessor — only to see the values snap right back to the same number in the next reassessment.

"There is no rationale for having no change in these initial valuations," said Richard Almy, former executive director of the International Association of Assessing Officers.

"Especially if the assessor later agreed to a reduction; there's no earthly reason for them to go back to the same value."

Source: Louise Kiernan, “[Calculating the Work Behind Our Work](#),” *ProPublica Illinois*, December 29, 2017.

News stories usually don’t get as extensive a treatment; there’s just not enough time to retrace every step before the story goes out. However, editors will look for weaknesses and demand key facts be checked if they seem wobbly. There should be confirmation of any factual claim a source has made. Nothing should be taken at face value. There’s an old saying among journalists: if your mother says she loves you, check it out.

Opinion pieces and editorials (op/ed for short) are different. An editorial, strictly speaking, expresses the opinion of an editorial board. The board of the *Wall Street Journal* may write an article stating “we should do this” but their reporters would get in trouble if they tried to sneak that opinion into their reporting. An opinion piece is written by someone who presumably has both expertise and a point they want to make.

Opinion pieces make arguments. They recommend or persuade or simply make people think in a different way. Some opinion pieces are written by writers who are hired to share their thoughts on a regular basis – columnists like Tom Friedman or Michelle Alexander who write for *The New York Times*. Others are written by guests to the publication. A good news organization will not publish an argument that relies on lies or has no evidence for claims, but they go out of their way to publish arguments that their editorial board disagrees with so readers will encounter a range of approaches to ideas.

That’s how traditional news organizations make distinctions. There are also mixed sources such as *The New Yorker* which publishes different types of content, including fiction, reviews, essays, and satire, as well as thoroughly-sourced news stories and analysis. New media publications that have a less formal presentation – *Quartz*, *Vice*, *Buzzfeed* and the like – blur these distinctions more than traditional news organizations do. It’s harder to tell what’s news and what’s opinion, though sometimes these upstarts break a major news story. Likewise, on cable news it can be hard to distinguish a statement by a talk show host or

an assertion by a pundit brought in for commentary from a statement made by a reporter. But they are distinctions that matter. Ask yourself: Who said that? What job were they doing when they said it?

When thinking about the information we get through networks, it's worthwhile thinking about what kind of information it is. Is it news reporting? Is it opinion? Is it an advertisement dressed up to fool you into thinking it's news? Is it disinformation camouflaged as news? Always take a moment to know what type of information you're dealing with before you run with it.

When in doubt about a particular news source, see if Wikipedia has an article about it that describes its focus and reputation. If you want to see behind the scenes, click on the Talk tab to see if Wikipedians have argued about how to describe that source.

9.8: Understanding Media and Information Quality in an Age of Artificial Intelligence, Automation, Algorithms and Machine Learning

By Yochai Benkler, Robert Faris, Hal Roberts, and Nikki Bourassa

Reprinted from the [Berkman Klein Center](#) on [Medium](#), July 9, 2018. This article is licensed under a CC-BY-NC license.

This post looks at some of the lessons we've learned over the last year in our work as part of the Ethics and Governance of AI Initiative, a collaboration of the Berkman Klein Center and the MIT Media Lab. [Learn more](#).

Democracy is under stress that would have been unimaginable a decade or two ago. The victory of Donald Trump in the U.S. presidential campaign and the successful “Leave” campaign in the UK Brexit referendum led the Oxford English Dictionary to select “post-truth” as word of the year for 2016. Since then, anti-elite populism across the North Atlantic has continued to gain victories, chief among them the 2018 victory of the Five Star Movement in Italy. As governments, foundations, academics, political activists, journalists, and civil society in democratic societies struggled to understand the overwhelming political results alongside the apparent information disorder, most observers’ eyes fell on technology. Social media, bots, hyper-targeted behavioral marketing—all have been seen as culprits or at least catalysts in public conversations. Technology has altered the foundations of news and media, and as trust in media continues to decline, artificial intelligence, machine learning, and algorithms have come to play a critical role not only as threats to the integrity and quality of media, but also as a source of potential solutions.

The core threats to information quality associated with AI include:

- **Algorithmic curation.** Most commonly known as the “filter bubble” concern, algorithms designed by platforms to keep users engaged produce ever-more refined rabbit holes down which users can go in a dynamic of reinforcement learning that leads them to ever-more extreme versions of their beliefs and opinions.
- **Bots.** Improvements in automation allow bots to become ever-more-effective simulations of human participants, thereby permitting propagandists to mount large-scale influence campaigns on social media by simulating larger and harder-to-detect armies of automated accounts.
- **Fake reports and videos.** Improving automated news reporting and manipulation of video and audio may enable the creation of seemingly authentic videos of political actors that will irrevocably harm their reputations and become high-powered vectors for false reporting.
- **Targeted behavioral marketing powered by algorithms and machine-learning.** Here, the concern is that the vast amounts of individually-identifiable data about users will allow ever-improving algorithms to refine the stream of content that individuals receive so as to manipulate their political opinions and behaviors.

Our approach to this set of issues is through the analysis of very large datasets, covering millions of stories, tweets, and Facebook shares, across diverse platforms reflecting national presidential politics in America from April 2015 to the present. The results of our work suggest that emphasizing the particular and technological, rather than the interaction of technology, institutions, and culture in a particular historical context, may lead to systematic overstating of the importance of technology, both positive and negative. Many studies do not attempt to address the impact of AI and other technologically-mediated phenomena that they identify and measure, but rather are focused on identifying and describing observable practices. In our own work, we have repeatedly found bots, Russian influence campaigns, and “fake news” of the nihilistic political clickbait variety; in all these contexts, we have found these technologically-mediated phenomena to be background noise, rather than a major driver of the observed patterns of political communication. Excessive attention to these technology-centric phenomena risks masking the real political-cultural dynamics that have confounded American political communication.

Studying media ecosystems

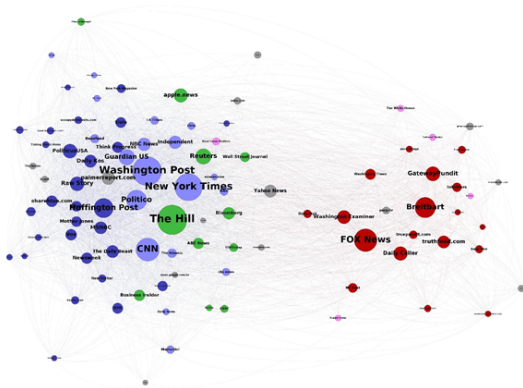
We study propaganda and disinformation in political communication through the lens of media ecosystems. The springboard for our research is a tool built in a decade-long collaboration between our Berkman Klein Center team and our colleagues at MIT Media Lab’s Center for Civic Media: [Media Cloud](#). Media Cloud enables us to discover media network structures that form around specific topics and to shed light on media frames, attention, and influence. Our early work centered on discrete legislative

and regulatory controversies, such as [net neutrality](#) and the [SOPA-PIPA bills](#). As election year approached in 2016 we turned our attention to the presidential race.

Initially, we analyzed the 18 months leading up to the November 8 vote. The [Columbia Journalism Review](#) published our preliminary findings in February 2017, and we followed with a more complete [analysis of pre-election media](#) in August of last year. Since then we have expanded our research to include analysis of the election's aftermath, and have combined the election-period study with a review of the first year of the Trump presidency into a book coming out with Oxford University Press in September 2018, entitled *Network Propaganda: Manipulation, Disinformation, and Radicalization in American Politics*. With the support of the [Ethics and Governance of Artificial Intelligence Fund](#), we focused attention on the impact of artificial intelligence and automation on political public media. This work is motivated by the need to better understand the character, scope, and origins of the issue as an essential element in crafting corrective measures. Here we summarize our preliminary conclusions as well as the work of a growing number of researchers investing in this space.

Disinformation problems are fundamentally political and social—not technological

Our research leads us to conclude that political and social factors, not technology, are at the root of current media and information quality problems in American political communication. We analyze the linking, tweeting, Facebook sharing, and text of four million stories related to presidential politics published over a period of nearly three years before and after the 2016 presidential election. Relying on this data, we mapped out media source networks in open web media (online news, blogs, etc.) and on Twitter to learn how media sources clumped together based on similar cross-media linking and sharing patterns. This revealed a startling finding: media sources are, as many have observed, deeply polarized; but they are aligned in a distinctly asymmetric pattern. There is, as it turns out, not a simple left-right division in American political media. Instead, the divide is between the right and the rest of the political media spectrum. Media sources ranging from those with editorial voices that lean towards the center-right, such as the Wall Street Journal, all the way to distinctly left voices such as Mother Jones or the Daily Kos, comprise a single interconnected media ecosystem. In this portion of the media spectrum, attention is normally distributed around a peak focus on mainstream professional journalism outlets and journalistic values and mainstream professional journalism continue to exercise significant constraint on the survivability and spread of falsehoods. By contrast, there is a large gap between media sources in this broad center to center-left to left cluster and media sources on the right. Moreover, attention on the right increases as one moves further from the center, and peaks around media sites that are exclusively right-wing.



■ Left ■ Center-Left ■ Center ■ Center-Right ■ Right

Network map based on Twitter media sharing from January 22, 2017, to January 21, 2018. Nodes are sized by number of Twitter shares.

When we took a closer look at the substance and practices of journalism from the center of the spectrum to its poles, we found major differences in behavior. Media sources on the left and right extremes of the spectrum are prone to sacrificing accuracy in favor of partisan messaging, making them also prone to the spread of disinformation. However, the accountability and fact-checking mechanisms in the media structures on the center and center-left provide a barrier against further propagation and a check on shoddy reporting from the left. Media outlets that strive for objectivity and balance are less susceptible to spreading disinformation.

The leading media in the right-wing cluster follow a distinctly different strategy, and repeatedly amplify and accredit, rather than dampen or correct, bias-confirming falsehoods and misleading framings of facts. We find that insular conservative media lack the will or capacity to adhere to objectivity and accuracy in their reporting. Infowars, Gateway Pundit, and conservative political clickbait are a problem, but a bigger problem is when Drudge Report, Breitbart, and Fox News—conservative media sources with much larger audiences—amplify conspiratorial and deceptive stories. This creates a significant gap in information quality for readers of conservative-leaning sources of news relative to those who consume media sources outside the right-wing ecosystem, including left-wing sites.

Algorithmic curation and filter bubbles

It is important to understand that if filter bubbles or algorithmic curation were the primary reason for polarization, we would expect to see symmetric patterns of attention clustering by populations of audiences and publisher—all of whom are at the same technological frontier. The stark asymmetry between the right and the rest strongly suggests that differences in political culture and, we argue in our book, institutionally-driven media history of right-wing media, particularly talk radio and Fox News, drove the right into a media dynamic we call the propaganda feedback loop. This occurred before major Internet sites developed; Internet sites adapted to that already-operative media dynamic, rather than causing it.

Indeed, when we compare the pre-election coverage and the post-election coverage, attention on the left has shifted more to the center, while attention on the right has remained as right-oriented. Fox News has become more prominent online relative to Breitbart, but at the price of becoming more purely focused on right-oriented content than it was during the election. Fox online has lost hyperlinks from the center-right and center even more than from the center-left and left, and gained links from the right. This pattern is not the simple product of algorithmic filter bubbles. Compared to influence metrics based on social media attention, weblinks are more insulated from platform-imposed algorithms as they reflect the judgment and linking decisions of web authors, rather than attention and sharing patterns of audiences. Nonetheless, the asymmetric polarization appears by this measure too, and it is by this measure that Fox itself has moved to the right since the 2016 election.

Bots

Over the course of the year we have developed our own versions of several of the most widely-used bot-detection algorithms. We reran all of our analyses after removing accounts that were identified as “bots” by various methods. Although we do in fact identify a good number of accounts that would be considered “bots” by many of these definitions, the overall architecture of communication we observe remains unchanged whether we include these accounts or not. Without stronger evidence that particular major communications dynamics have been swayed by bots, our macro-level observations leave us skeptical as to the importance of bots. Moreover, using micro-scale case studies, we observe bots as background noise rather than as impactful interventions.

Functional and structural differences

Today’s media ecosystems are of course inseparable from technology, but if technology was at the core of the disinformation problem, we would expect to see as much disinformation on one side of the spectrum as the other. And yet, that’s not the case. The asymmetry we observe in the structure and practices of media across the U.S. political spectrum is evidence that the dynamics and problems in modern day media cannot be explained by technology alone.

Our caution should not be taken as clear evidence that algorithms are unimportant. There is little doubt in our minds that algorithms and machine learning impact media manipulation and disinformation. In large-scale digital media platforms, algorithms serve a curatorial role and act as gatekeepers, and are subject to gaming and manipulation in ways that human editors are not. In our own research, we have seen, for example, that Twitter is littered with disinformation and false accounts, some of which are bots and others sockpuppets. Moreover, we observe that the spread of disinformation is worse on Facebook than on Twitter, and on Twitter than on the open web. Moreover, we observed that, as Facebook was making its algorithm changes over the year, certain of the worst offenders on both the left and the right lost prominence and attention, although new offenders quickly

took their place. In our current work we continue to monitor the differences across platforms and to find measures by which to assess the effectiveness of algorithm changes on Facebook or Twitter on the spread of disinformation and misinformation, and, perhaps most importantly, to assess the impact of these changes on the media ecosystem as a whole.

Diagnoses, conclusions, and interventions should be based on systemic observations of impact, rather than individual observations of “bad behavior”

The media manipulation problem and the public attention afforded it have created an environment of urgency. Insights and research are key to mitigating some of this pressure, but the temptation to leap to assumptions of impact from any observable phenomenon is hard to resist. We are naturally drawn to the novel: trolls, clickbait factories, social media algorithms, targeted advertising, psychographic profiling, and Russian interference captivate the imagination and compel question and inquiry. Identifying instances of such interventions is technically challenging, and when we see hard work bear fruit it is tempting to attribute high importance to these observations. Nonetheless, without a baseline against which to assess the impact of one or several of these phenomena, it is impossible to justify assigning them the importance that they currently receive, or to design interventions that properly address the actually important interventions rather than those that are observable and salient.

Putting these novelties into perspective is hampered by our ability to fully and accurately measure media consumption. Audiences reached by misleading and false articles and media sources is measured in the millions. As prolific as this sounds, as described previously this ultimately is a small portion of content and exposure. A second point of uncertainty relates to impact and persuasion—there is scant evidence that false media stories have any impact in changing behavior.

A prime example is Russian efforts to influence election-related discourse. Although information around the number of accounts, posts, and impressions seems to be updated regularly, current numbers draw into question the true significance of their reach. In October 2017, Facebook [revealed](#) that approximately 80,000 pieces of content published by the now infamous Russian-operated Internet Research Agency were introduced to 29 million people between January 2015 and August 2017. Their subsequent likes and shares increased the reach of the posts to 126 million Facebook users. This is indeed a big scary number. But what we don't know is how much user attention this content commanded among the many billions of stories and posts that comprised the news feeds of U.S. voters, or if it changed any minds or influenced voter behavior. For example, using one of the tools we developed for this project, we can track the appearance of a given string across Facebook public facing pages, Twitter, Reddit, Instagram, and the first few posts in 4chan discussions on a timeline down to the minute or second (depending on the platform). Using that utility, we tracked a particular story with strong indications of Russian influence (about John Podesta participating in satanic rituals), and compared all accounts to both the congressionally-released list of Russian Twitter accounts and an additional list of tens of thousands of accounts that are highly likely to be Russian bots or sockpuppets. While we did observe that 5–15% of the accounts were of such provenance at any given minute, the timing and pattern of their participation was unremarkable—a background presence of more-or-less stable existence, rather than a strategic intervention in either timing or in direction, and they therefore did not seem to play an important role in increasing the salience of the story in total or by tweeting it specifically at the major actors who were central in propagating the lie—Wikileaks, Infowars, or, ultimately, Sean Hannity.

It is critical not to confound the observation of a novel phenomenon with its actual impact in the world; newness is no proxy for impact. Indeed the discovery of such phenomena is important, but the messaging around the discovery should not be conflated with evidence that the discovered behavior in fact had impact.

The rapid advancement of technologies that digitally manipulate sound, images, and videos is a source of growing anxiety. It is too soon to predict whether synthetic media will exacerbate media disorder and epistemic crisis, but if fabricated media are shared, consumed, and interpreted in ways similar to the current versions of deceptive media, it will be spread or contained by the same influential social, political, and media entities. The fantastical nature of the claims that were widely believed by significant numbers of voters—nearly half of Trump voters gave some credence to rumors that someone associated with the Clinton campaign was running a pedophilia ring—suggests that social identity, much more than any technical indicia of truth, are the foundation for beliefs and attitudes about political matters.

Our work greatly benefits by consciously focusing on the disinformation forest, rather than on its individual trees. With an eye toward the long-term dynamics between institutions, culture, and technology, we look at algorithms and technology as a relatively new element integrated into the dynamics of broader media systems while keeping grasp of many more traditional vectors and structures. We look across media and across platforms, considering the enduring influence of radio and cable alongside broadcast television and social media platforms. Indeed, a combination of open web media publication and social media network mapping greatly enhances our understanding of the likely impact of bots, sockpuppets, political clickbait, foreign intervention,

and microtargeting. Although prolific in absolute terms, the role of these modern vectors of disinformation plays an important but modest role in the overall media ecosystem.

It doesn't look like AI is coming to the rescue anytime soon, if ever

There are a number of ways in which AI may help us to address information quality issues, including:

- Automated detection and flagging of false stories; algorithmic tools to point readers to corrections and fact-checking.
- Algorithmic tools to detect and defend against coordinated attacks by propagandists.
- Computational aids to “nudge” of readers and users to expose themselves to media and reporting outside of their echo chambers, thus opening their eyes to a broader range of viewpoints.

Despite the strong advances in the field, there is little indication at present that these tools will be able to serve as independent arbiters of truth, salience, or value. Repeatedly in our work, we have seen that stories built around a kernel of true facts, framed and interpreted in materially misleading ways are more important than stories made of clear falsifiable claims. Moreover, the meaning of stories often emerges from the network of stories and frames within which they are located. Stories and their interpretation—and misinterpretation—draw upon and act through existing social and political structures and narratives. As seen in existing applications, AI is effective at channeling and amplifying sentiments and interests of affinity groups, and helping people in ways that they want to be helped, but no present efforts appear to be able to diagnose the level of subtlety involved in the most important present disinformation campaigns we have been studying.

Systemic responses are required to address systemic issues

So what do we do about all of this? There is no silver bullet, but the best thing we can do is to continue to work toward systemic responses to the systemic problems undermining today's media ecosystem and information quality. We must continue to focus attention on rebuilding and strengthening the political and civic institutions that undergird a well functioning democracy. The insights described here draw primarily on research conducted in the United States, but we need ecosystem-based analyses of media systems in more countries to understand how the vulnerabilities, resilience, and dynamics differ across different political and cultural contexts.

Strengthening media accountability mechanisms is vital, and tamping down disinformation and media manipulation is an integral part of the everyday hard work of democracy and governance. But given the perils of placing constraints on political speech, taking a careful and cautious approach to regulation is essential. It is important to be similarly circumspect in what we require of social media companies in addressing disinformation.

Last but not far from least, there is still much work to be done in understanding the nature, reach, and impact of disinformation, as well as monitoring and evaluating targeted efforts to inoculate readers and inhibit the spread of disinformation. An area of particular concern is the increasing concentration of research capability and political outreach capability in a few private hands. We must continue efforts to bolster public interest research initiatives and develop and implement structures that allow researchers access to key sources of data with mechanisms in place to ensure robust and ethical research standards.

The development, application, and capabilities of AI-based systems are evolving rapidly, leaving largely unanswered a broad range of important short- and long-term questions related to the social impact, governance, and ethical implementations of these technologies and practices. Over the past year, the [Berkman Klein Center](#) and the [MIT Media Lab](#), as anchor institutions of the [Ethics and Governance of Artificial Intelligence Fund](#), have initiated projects in areas such as social and criminal justice, media and information quality, and global governance and inclusion, in order to provide guidance to decision-makers in the private and public sectors, and to engage in impact-oriented pilot projects to bolster the use of AI for the public good, while also building an institutional knowledge base on the ethics and governance of AI, fostering human capacity, and strengthening interfaces with industry and policy-makers. Over this initial year, we have learned a lot about the challenges and opportunities for impact. This snapshot provides a brief look at some of those lessons and how they inform our work going forward.

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9.9: Stupid News Tricks

Okay, this chapter heading is an example of clickbait: it's a misleading headline. In reality, this chapter is about things reputable newspapers and other news sources routinely do in the course of business that you should be aware of as a critical news consumer.

Native Advertising

When you're looking at an article on a reputable site, you might see content like this example from *Inside Higher Ed*:



Note the boxed news item. It has a label – “content sponsored and provided by Ellucian.” It looks like a news story, but it’s advertising. Here’s an example from *The New York Times*.



Here it's labeled PAID POST – but if you weren't paying attention, you might think it's a news story because the layout is identical to the surrounding news stories.

Even if this turn of events is sufficient to terrorize you into paying a disputed bill, there's no one at the IRS to accept your payment -- and of course, if you maintain that the bill isn't correct, there's no one to discuss it with.

The almost Kafka-esque situation, in which the IRS methodically moves forward with cash seizures and taxpayers struggle to find any-one available to stop them, is one of the more unique consequences of the government shutdown, which on Saturday became the largest in American history. The shutdown has hurt small businesses more directly through the halting of Small Business Administration loans. But potentially being whacked in tax disputes, seemingly without recourse, adds a twinge of unfairness into the mix.

Shuttered IRS Is Sending Automated Warnings of Asset Seizures, With No-body to Call to Stop Them [David Dayen/The Intercept]

SHARE / TWEET / 12 COMMENTS

GHOST SHIP / IRS / KAFKA / SHUTDOWN / USG

GET THE BOMB BOMB NEWSLETTER

Interesting For You



This example from BoingBoing makes advertising harder to identify. All of the links under “Interesting for You” are ads placed by a company that is only indicated by a logo that is barely visible. (Incidentally, this example illustrates another thing to bear in mind. BoingBoing mostly aggregates and summarizes news from other sources. In this case it's a summary of a story published in *The Intercept*. You would want to “go upstream” to *The Intercept* before took BoingBoing's word for it.)

Syndication

The previous example is from a site that mostly digests stories found elsewhere. Another way news sources incorporate news from other sources is syndication. Material from one site is published on another site (or in a print newspaper). Two prominent news agencies that aren't publications themselves but report news to be picked up by others are Reuters (headquartered in London) and The Associated Press or AP (headquartered in the New York). Another syndicated source you will frequently encounter is Agence France Press, the world's oldest news agency (headquartered in Paris). Additionally you might see in a local paper a story reprinted from *The New York Times* or *The Los Angeles Times* and many popular columnists are reprinted in multiple papers. Remember: it's worth going upstream and at least noting the original source. *The Mankato Free Press* will run articles about events in Washington D.C., but they don't have reporters working there. They syndicated that story from a news agency so Mankato residents will be informed.

In the following example, the source of this news story is not *The New York Times*, though it can be found on the *Times*' website.

The New York Times

On the Shop Floor, Workers Wonder What Brexit Will Bring

By The Associated Press

Jan. 18, 2019

LONDON — It's an understatement to say that Michael O'Brien is worried about Brexit.

O'Brien is a supervisor at Clarity-The Soap Co., which employs visually impaired adults at a factory in London. O'Brien has a manner so easy it sounds as if he is talking about the weather rather than an issue that bitterly divides British society — the country's looming departure from the European Union

If you have a beef with this article, it's not with reporting done by *TheNew York Times*. It's with journalists working for the Associated Press. You'll occasionally see people complaining about a story from *TheNew York Times*, claiming it is typically

biased, only to find the story was not even written by *The New York Times*, but by the Associated Press, Reuters, or some other syndicator.

This can also cause confusion because AP stories stay on the *Times*' site for a limited period of time. If someone is outraged by a *Times* story and then – what!? – it *disappears*, they might conclude something nefarious happened. Was it retracted? Was it censored? What's going on?

There's a good chance the article that disappeared is a syndicated article. *Associated Press* articles, for example, are displayed on the site for a few weeks, then “roll off” and disappear from the site. Why? Because *The New York Times* only pays the Associated Press to show them on the site for a few weeks.

9.10: Fake News and Fake Solutions- How Do We Build a Civics of Trust?

By Ivan Sigal, from Global Voices [AdVox](#), March 20, 2017. Licensed under a CC-BY license.

Posted 20 March 2017 16:37 GMT



Protesters fly a flag upside down as a signal of distress outside the offices of The Washington Post in Washington D.C. on Inauguration Day, January 20, 2017. Photo: Ivan Sigal.

In his recent [manifesto](#), Mark Zuckerberg asserts that the response to our dysfunctional and conflict-ridden politics is to build a stronger global community based on ubiquitous interconnection. We know of course that Facebook stands to profit from this utopian vision, and we should be skeptical of the motives underlying Zuck's position. But it's worth taking a second look at the idea of working on underlying economic and political issues in our societies, rather than focusing on the effects of online expression—particularly in the context of the moral panic over “fake news.”

The consternation about fake news from Western journalists, scholars of propaganda, and policymakers has inspired waves of stories and [talk-shops addressing](#) its growth as a threat to our public discourse, our journalism, and our systems of governance. And we see many attempts to understand, fix, or apportion blame. Yet many of the proposed fixes are deeply problematic because they advocate overly broad and vague restrictions on expression. Solutions that would limit suspected “fake” expression or strongly encourage private intermediaries to restrict some kinds of speech and prioritize or “whitelist” others are particularly troubling.

This week, Germany was the latest country to [introduce](#) a plan that would force social media companies to monitor and censor some kinds of online expression. Justice minister Heiko Maas [wants](#) to put regulatory pressure on social media companies, and especially Facebook and Twitter, to police expression, asserting that they have failed to do so voluntarily. Draft legislation proposes to fine social media companies up to €50 million for failure to quickly delete hate speech, fake news, and other types of misleading speech.

In this context, we can look to countries that have created regulatory regimes to control online expression — such as China — not as entirely “other”, but perhaps as cautionary examples. When posing solutions to fix fake news, we should be extremely careful not to build our own self-censorship machines.

“Fake” news and the role of states

Many recent false news stories have come from groups not affiliated with states, but examples from Russia, China, Iran and many other countries should remind us that the biggest threat to our public discourse is false information used by and to the advantage of governments. Governments, after all, have the authority to couple shifting narratives of truth to state mechanisms of control. We ought to be especially attuned to states that restrict the “false” expression of their citizens, while at the same time creating misleading narratives and stories about themselves. When states attempt to control narratives, it’s time to start looking for signs of tyranny.

For the past 20 years, we have seen states or their affiliates use Internet-based false news and disinformation as part of broader agendas to shape public opinion for political ends. Well-researched examples include China’s [50 Cent Party](#), Russia’s [troll factories](#), and astroturfing [bot engines](#) contracted by the U.S. government, all of which are designed to flood Internet forums and social media with falsities and distractions.

At the same time, some states have [taken steps](#) to regulate, restrict and even criminalize “false” stories produced by citizens and journalists as a punitive method of controlling expression. In Bahrain, [China](#), Egypt, Turkey, Russia, Venezuela, Iran and elsewhere social media users have been arrested and prosecuted for sharing information deemed by governments to be false or misinformed. [New regulations](#) in China forbid the use of “unverified facts distributed via social media platforms” and prohibit websites “from quoting from unnamed or fake news sources and fabricating news based on hearsay, guesswork or imagination.”

A [recent declaration](#) issued by a group of intergovernmental organizations, including UN Rapporteur for Freedom of Expression [David Kaye](#), discusses these regulatory efforts from the perspective of international law and norms. They emphasize that international human rights doctrine explicitly protects expression that may differ from or counter governmental positions, even when it is factually inaccurate. Regulatory and technical approaches to reduce fake news should, they argue, continue to safeguard the diversity and abundance of speech. They write:

the human right to impart information and ideas is not limited to “correct” statements...the right also protects information and ideas that may shock, offend and disturb, and that prohibitions on disinformation may violate international human rights standards, while, at the same time, this does not justify the dissemination of knowingly or recklessly false statements by official or State actors...

What’s the problem, exactly?

The real-life consequences of fake news are unclear. A recent [study](#) by the MIT/Harvard research project [Media Cloud](#), (with which Global Voices is [affiliated](#)), led by [Yochai Benkler](#) and [Ethan Zuckerman](#), examines the effects of right-wing information sources in the U.S. It suggests that rather than wringing our hands over “fake news”, we should focus on disinformation networks that are insulated from mainstream public conversations. Benkler and his colleagues challenge the idea that “the internet as a *technology* is what fragments public discourse and polarizes opinions” and instead argue that “human choices and political campaigning, not one company’s algorithm” are the more likely factor to influence the construction and dissemination of disinformation.

Nevertheless, projects seeking to control fake news are running full steam ahead. These efforts have the potential to affect what information is easily available to publics, and if we aren’t careful, could even diminish our rights to expression. Approaches tend to fall into three broad categories:

- Fix online discourse by nudging technologies that control or censor some categories of speech
- Fix the public by making us better at distinguishing fact from fallacy
- Fix journalism, generally with massive cash transfers from the technology sector

Notably, these approaches all focus on mitigating effects rather than confronting the underlying economic or technical incentives in the structure of media, or the broader social, economic and political incentives that motivate speech.

Fix online discourse

In seeking to build systems to manage false news, technology companies will end up creating systems to monitor and police speech. We will quickly find that they need to use ever-more granular, vigilant and therefore continuously updated semantic analysis in order to find and restrict expression.

These proposed solutions to fake news would be in part technological, based on AI and natural language processing. They will automate the search for and flagging of certain terms, word associations, and linguistic formulations. But language is more malleable than algorithm, and we will find that people will invent alternative terms and locutions to express their ends.

The slipperiness of language could cause the hunt for “fake” or hurtful speech to become an end in itself. We have already seen this in the hunt for “toxic” language in a recent project called [Perspective](#), made by Google’s [Jigsaw](#), and other efforts will surely follow.

Companies are likely to supplement their automated processes with human monitoring — from social media platform users flagging suspect content to contractor armies interpreting those flags and implementing restrictions. Added to this, perhaps, will be ombudspersons, feedback loops, legal processes, and policy controls upon the censors. Those systems are [already in place](#) to deal with terrorism, extreme hate speech, extreme violence, child pornography, and nudity and sexual arousal. They can be further refined and expanded to police other types of expression.

Proposed solutions in this vein mostly fail to acknowledge that the technological incentives that encourage fake news are the same as the forces that currently finance the digital media industry — that is, advertising technology masquerading as editorial content.

The internet theorist Doc Searls calls this “[adtech](#)”, emphasizing that it is a form of direct marketing or spamming. The rise of fake news is driven in part by organizations seeking revenues or political influence by creating sensational and misleading stories packaged for highly polarized audiences. Producers of this content benefit from a system already [designed to segment](#) and mobilize audiences for commercial ends. That system includes the monitoring of consumer habits, targeted advertising, direct marketing and the creation of editorial products appealing to specific consumer segments. These forces coalesce in a dance of editorial and advertising incentives that leads to further polarization and segmentation.

Fix the public

The next approach — that we fix ourselves — relies on the Victorian idea that our media systems would work if only people behaved in ways expected of them by the builders of systems. [Media literacy](#) campaigns, public education, fact-checking, calling out and shaming tactics, media diets, whitelists of approved media: these solutions require that we blame ourselves for failing to curb our appetites. It is not wrong to suggest that we are susceptible to the allure of the media’s endorphin-injection strategy to hook us on the sensational and trivial, or that education is important for a healthy civics. To focus blame primarily on individuals, however, is victim-blaming of a sort.

Fix journalism

The third approach — devoting more resources to better journalism, is an example of the journalism community jumping on the current moment to reassert their expertise and value. While a more proactive, better-resourced media is definitely vital for the long-term health of our civic life, conversations about journalism need to start with the [trust deficit](#) many journalistic outfits have accumulated over the past decades. That deficit exists precisely because of ever-more sensational and facile reporting, news as entertainment, and the corporate drive to maximise profits over the interests of audiences and readers.

Given that the business model of the liberal, capitalist media is primarily to sell eyeballs to advertisers, they should not be surprised to find those of us being sold becoming wise to the approach. And while efforts to strengthen journalism and public trust in the media are important and much-needed, they will not make fake news go away.

So what are we really talking about?

The technological and the human-based approaches to controlling inaccurate online speech proposed to date for the most part do not address the underlying social, political or communal causes of hateful or false expression. Instead, they seek to restrict behaviors and control effects, and they rely on the good offices of our technology intermediaries for that service. They do not ask us to look more closely at the social and political construction of our communities. They do not examine and propose solutions to address hate, discrimination and bias in our societies, in issues such as income disparity, urban planning, educational opportunity, or, in fact, our structures of governance.

Frustratingly, we have seen these approaches before, in [efforts](#) to reduce online “extremism”, and also with [dubious](#) results.

Countering violent extremism (CVE) projects suffer from similar [definitional flaws](#) about the nature of the problem, but that doesn't stop governments from creating misguided responses. For examples, look to the many 'counter-narrative' [projects](#) such as "[Welcome to ISIS Land](#)" funded by the U.S. State Department. These projects, supported by [governments](#), [international organizations](#), and [companies](#), seek an array of technical, communications and policy-based approaches to controlling extremism.

[A video originally embedded here from YouTube is no longer available.]

David Kaye, in an earlier joint declaration on CVE, [notes](#) the "fail[ure] to provide definitions for key terms, such as 'extremism' or 'radicalization'". "In the absence of a clear definition, these terms can be used to restrict a wide range of lawful expression," but still [inflict collateral damage](#), with pervasive surveillance and tracking that triggers the self-censor in all of us, resulting in the reduction of civic participation and dialogue.

How do we begin to tackle the larger challenges, those beyond simple technological fixes or self-blame? There are no easy solutions for the economic and social inequities that create divisions, and the technological and economic incentives that underpin our current information ecosystem are deeply entrenched. Yet we need to find a way to start serious conversations about these systemic challenges, rather than tinkering with their effects or simply assigning responsibility to the newest players on the field.

Sir Tim Berners-Lee, the inventor of the internet, has [urged](#) that we reform the systems and business models we have created to fund our online lives. He points, for example, to the use of personal data by companies as the driver for the creation of surveillance societies, which exerts chilling effects on free expression. He suggests seeking alternatives to the concentration of attention and power in the hands of a small number of social media companies that derive profit from showing us content that is "surprising, shocking, or designed to appeal to our biases." He's concerned by the use of these same tactics in political advertising, and its effect on our systems of electoral politics.

Confronting our social and economic inequities is even harder. It is the challenge of our time to find the language to conduct honest and frank debate about how we construct our economies and our states, how we apportion benefits, and which values guide us. Building civic communities that are rooted in trust, both online and off, is the ongoing and vital work necessary for public conversations about our collective future.

It is no small irony that the communications systems that we built to support such debate are imperiled, both by those who would explode the social norms of civic discourse for their ideological ends, and through resultant attempts to control extreme or misleading expression. It is easy to find fault with the technologies that facilitate our collective civic life. It is much more difficult to look at our civic life as a whole and determine whether and how it may be failing.

9.11: How Social Media Platforms Intersect With News

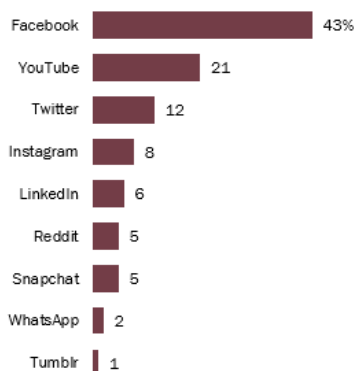
Take a moment to think about the last news item you read, heard, or watched. How did you encounter it? Were you looking for it or did it come looking for you? Were you visiting a news site online to see what's happening? Catch it on the radio while driving to work? Did you hear about it from a friend or teacher? Was it something that caught your eye when skimming a news app on your phone? Or while checking your favorite social media platform?

Information networks that don't create news are increasingly important discovery and distribution routes. Content created by news organizations spreads through social media when people share links and as the organizations promote their own content through Facebook, Snapchat, and elsewhere. This has benefits – news can reach people where they are and acquaintances can amplify the reach of a news story through a network of trust – but the downsides include organizations having to share dwindling ad revenue with the platforms and being at the whim of companies that can change their algorithms at any time without warning or consultation.

But social media is where news is at. A [survey](#) conducted by Pew Research in 2018 found two-thirds of American adults report getting news through social media, with Facebook and YouTube leading other platforms.

Social media sites as pathways to news

% of U.S. adults who get news on each social media site

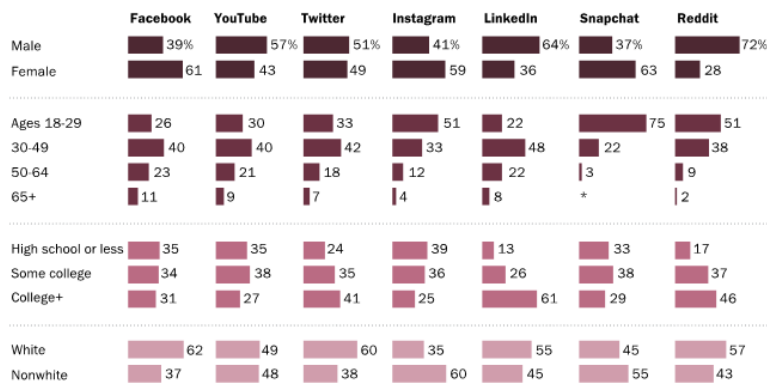


Source: Survey conducted July 30-Aug. 12, 2018.
"News Use Across Social Media Platforms 2018"

PEW RESEARCH CENTER

Profiles of social media news consumers

% of each social media site's news consumers who are ...



Note: Tumblr and WhatsApp not shown. Nonwhite includes all racial and ethnic groups, except non-Hispanic white.

Source: Survey conducted July 30-Aug. 12, 2018.

"News Use Across Social Media Platforms 2018"

PEW RESEARCH CENTER

Another study by Project Information Literacy involving nearly 6,000 college students at 11 institutions found nearly 90 percent of students got news through social media, second only to hearing about it from friends face-to-face or through online channels. A large majority said journalism is necessary for democracy but most find it hard to keep up and half weren't confident they could identify whether a news story was fake or not. Over a third doubted the credibility of *all* news.

Alternative News, Alternative Facts

But it's not all about how journalism travels. Social platforms enable the creation of new information channels that challenge the dominance of traditional news organizations. That's not all bad. New players can provide valuable alternative viewpoints and cover news ignored by the mainstream, but it also enables the creation and spread of misinformation, disinformation, and propaganda. The incentives built into social networks promote the use of emotional appeals and reward "influencers" who engage large audiences by any means necessary. The more outrageous, the more they are richly rewarded. While reputations matter in these new information channels, they are not dependent on old-school journalistic values or practices. For example, a conspiracy theory about murders of South African farmers that circulated in white supremacist circles for years [broke into the mainstream](#) when a claim by a "citizen journalist" on YouTube was repeated by Tucker Carlson and then by the president in a Tweet.

Social platforms, meeting with new criticism, want to avoid taking responsibility for what appears on their platforms. While they will take material down if it violates their terms of use or is illegal (child pornography or copyright violations, for example), they rely on [a provision](#) of the Telecommunications Act of 1996 that immunizes internet providers.

No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.

Of course, this law predates the social platforms we use today and their meteoric rise to the top of the list of the world's most valuable corporations. Lawmakers in 1996 had no way of knowing billions of people would be using and contributing material through the internet, that we would be accessing volumes of information through our phones. They might have had reservations if they imagined a world where 300 hours of video would be uploaded to a single website every minute, that messages could rocket around the world instantly, that governments could be toppled or could undermine one another covertly through disinformation campaigns. Section 230 of the Act gave entrepreneurs the freedom to create new things. It also let them off the hook for the problems we're dealing with today. The consequences of this laissez-faire attitude are becoming more clear by the day, and platforms are scrambling to balance the ability of anyone to publish and share anything with the political and social fallout.

If you want to understand information, it's important to understand how information networks operate. Profiles of major social platforms will be presented in Part Three of this book.

9.12: 3 Ways Facebook and Other Social Media Companies Could Clean Up Their Acts – If They Wanted To

Reprinted from *The Conversation*, December 7, 2018.



Under fire, but not without options.

AP Photo/Francois Mori

Anthony M. Nadler, *Ursinus College* and Matthew Crain, *Miami University*

Facebook is in crisis mode, but the company can take major steps to fix itself – and the [global community](#) it says it wants to promote. Facebook founder, CEO and majority shareholder Mark Zuckerberg need not wait for [governments to impose regulations](#). If he and other industry leaders wanted to, they could make meaningful changes fairly quickly.

It wouldn't be painless, but Facebook in particular is in a world of hurt already, facing criticism for [contributing to civil unrest](#) and [sectarian turmoil](#) around the world, delayed responses to [disinformation campaigns](#), [misleading users](#) about [data-handling policies](#), and [efforts to discredit critics](#) – not to mention a [budding employee revolt](#).

Facebook, Twitter, Google and other social media companies are causing [society-wide damage](#). But they tend to describe the problems as much smaller, resulting from [rogue individuals and groups](#) hijacking their systems for nefarious purposes. Our [research](#) into how social media can be exploited by manipulative political operatives, conducted with Joan Donovan at the [Data & Society](#) research institute, suggests the real problem is much larger than these companies admit.

We believe the roots lie in their [extremely profitable advertising systems](#), which need a major overhaul. We have identified some key changes that these giant powerhouses could make right away. These moves could reduce opportunities for political manipulation and limit the [harm to democratic societies](#) around the world.

Users' minds in the crosshairs

Facebook, Google, Twitter and other social media companies have built an enormous [digital influence machine](#) powered by user tracking, targeting, testing and automated decision-making to make advertising more effective and efficient. While building this supercharged surveillance system, companies have [promised users](#) and [regulators](#) that targeted advertising is mutually beneficial for both consumers and advertisers.

In this bargain, users are supposed to receive more relevant ads. Facebook, for instance, explains that its “interest-based

advertising” serves users who “[want to see ads that relate to things they care about](#).” It’s true that these methods can identify ads that connect with users’ actual interests. But the very same data-driven techniques that tell a surfer about a new board design can also identify strategic points where people are [most vulnerable to influence](#).

In particular, the leading social media advertising systems let political operatives [experiment with different ads](#) to see which are the most effective. They can use these tools not only to see if certain issues resonate with particular targets but also test for fears or prejudices that can be invoked to influence political behavior.



This misleading ad impersonated racial justice activists to urge black Americans not to vote for Hillary Clinton. [U.S. House of Representatives Subcommittee on Intelligence – Democrats](#)

One key way to do this is to make people feel that someone else represents an emotionally charged [threat to their identity](#). In 2016, for instance, Russia-linked operatives bought [thousands of Facebook ads](#) targeted to specific audiences suggesting Hillary Clinton had insulted their group’s dignity or threatened their safety. Some ads alleged [Clinton espoused disrespect](#) for specific occupations, like coal miners, or racial groups, like African-Americans. [Others claimed](#) she would confiscate guns or supported radical political movements seeking to overturn familiar ways of life.

Targeting political ads is not unique to online advertising, but the tools of digital ad systems are vastly more powerful than traditional mass media. Advertisers can try out [several versions of an ad simultaneously](#) and receive almost instant feedback on which ones most effectively drive specific audiences to share, like or comment on them. This [digital feedback loop](#) helps political operatives refine their tactics, probing for just the right images, words and emotions to influence very specific subgroups of citizens.

Move fast and fix things

Members of [Congress](#) and even some key [Silicon Valley figures](#) have begun discussing the need for tighter [government oversight](#) and [greater accountability](#) in digital advertising. Change need not wait for politics.

Based on our analysis, here are some steps companies could take right away – on their own. These moves may hurt the firms’ finances, but would demonstrate serious and lasting commitment to limiting their platforms’ usefulness in political manipulation campaigns.

As their first move, social media companies could stop allowing their ad services to be used as freewheeling experimental laboratories for examining their users’ psyches. Just as [marketers](#) and [academic researchers](#) must obtain permission from their test subjects, political advertisers that run online ad experiments could get [informed consent in advance](#) from every user who is involved. Companies should ask for users’ consent in specific notifications about ad experiments and not penalize users for opting out by limiting their access to services. We suspect many users would opt out of these tests if given the choice, but in any case this policy would help draw public attention to the hidden manipulation tools that platforms offer to their real customers: the political and commercial advertisers who pay the bills.

Make targeted political advertising transparent

To increase transparency and limit the ability of special interests to secretly influence politics, social media companies could refuse to work with so-called [dark money](#) groups. All political advertisers should be required to disclose their major donors in a format users can easily access.

A new policy banning dark money ads would respond to evidence that political operatives have used impersonation and manipulative ad tactics to [stir in-fighting or sow division](#) among coalitions of their adversaries. Impersonation clearly work best when ad sponsors are able to hide their identities and motives. Anonymous ads are also more likely to violate ethical standards simply because no one fears being held responsible for them.

Make platforms more democratic

A more significant change social media companies could make would be to introduce democratic oversight of how they collect and use people's data.

Facebook's Zuckerberg recently took an initial step in this direction, announcing that he will create [independent review panels](#) to handle users' appeals against the company's removal of content it judges inappropriate. He explained that he wanted to ensure "[these decisions are made](#) in the best interests of our community and not for commercial reasons."

Whatever you think about this plan – and it has been greeted with plenty of [skepticism](#) – Zuckerberg's reasoning acknowledges that because social platforms have become so central to democratic life, their own policies and design decisions require democratic accountability.

A more ambitious vision would let independent ethics panels representing diverse communities of users set enforceable policies for ethical political advertising. Similar sorts of groups are common in [medicine](#) and are emerging in [artificial intelligence](#), among other fields. The details of [how such committees operate](#) will be critical to their success. If these committees are set up in partnership with nonprofit organizations with proven records of advocating for [democratic communication](#) and [campaign finance transparency](#), perhaps they could help social media companies earn greater public trust by prioritizing democracy over maximizing their profits.

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9.13: Testing of Fake News Sources

There has always been fake news, but with the advent of social media, posted news does not have to go through any editorial board to be published. Anyone with a computer and an Internet connection can publish what they refer to as the “news,” and that “news” is easily passed along and eventually believed by many.

Facebook contributes to this as their algorithm records what you like or interact with and shows you more content that is related to your interest. If you like a meme showing how foolish a particular candidate supposedly is, then more, similar memes will appear on your Facebook site.

Because of the viral nature of these fake news reports, both Google and Facebook are attempting to reduce their impact by decreasing the amount of revenue these fake news sources can generate.

There are different types of misleading and false news as described below by AJ Willingham, CNN news:

Fake news These are the easiest to debunk and often come from known sham sites that are designed to look like real news outlets. They may include misleading photographs and headlines that, at first read, sound like they could be real.

Misleading news These are the hardest to debunk, because they often contain a kernel of truth: A fact, event or quote that has been taken out of context. Look for sensational headlines that aren't supported by the information in the article.

Highly partisan news A type of misleading news, this may be an interpretation of a real news event where the facts are manipulated to fit an agenda.

Clickbait The shocking or teasing headlines of these stories trick you into clicking for more information -- which may or may not live up to what was promised.

Satire This one is tough, because satire doesn't pretend to be real and serves a purpose as commentary or entertainment. But if people are not familiar with a satire site, they can share the news as if it is legitimate.¹

As Willingham described **click-bait**, The purpose of these sites is to get viewers because the owner then makes money with all the accompanying advertisements. The more people who view the site, the more money the owner makes.

And don't forget the problem with other countries posting on the web in order to spread propaganda and create dissension. We need to be on guard as other countries interfere with our internal affairs.

We need to be more skeptical. You may have seen a meme during the 2016 election that had a picture of a young Donald Trump with his alleged quote:

"If I were to run, I'd run as a Republican. They're the dumbest group of voters in the country. They believe anything on Fox News. I could lie and they'd still eat it up. bet my numbers would be terrific."

People who disliked Trump would re-post this in hopes of getting Republican voters to also dislike him and not vote for him. This quote was allegedly from a People Magazine interview in 1998. But looking through the People Magazine archives this quote is nowhere to be found. This statement was totally made up. Were you fooled by it?

The good news is that there are several, relatively simple steps we can take. The following are questions from both FactCheck.org and CNN you can ask to make sure you are not being manipulated by **Fake News**.

Does the story, article or meme originate from a strange looking web address? Check and see if the url has a **.co** or **.su**, or is hosted by a free web site like Weebly or Wordpress. It was reported on abcnews.com.co that President Obama had signed an order banning assault weapon sales. Now look at that url again and you will see the **.co** at the very end. This was a **“Fake New** story.

Does the article match the Headline? Often people will just read the headline and repost the article. By reading the article you might see a very different story. I once read a headline stating that Congress was going to impeach President Obama. But the article just said that one member of congress was thinking about filing the articles of impeachment.

Is the article recent or is it an old one that has been re-purposed. CNN once reported that “A blog called Viral Liberty recently reported that Ford had moved production of some of their trucks from Mexico to Ohio because of Donald Trump’s election win.” Actually, this had been done a year before and had nothing to do with the election.

Do the supporting videos and photos relate to the article? You want to verify that the picture actually relates to the article or is it taken out of context. After the 2016 Presidential election, many anti-Trump protests were staged. There was a picture of a person defecating in the street with the caption referring to the classlessness of liberals.

It turns out the picture was taken years earlier in an entirely different event. But it was reposted many times.

Does the article cite primary source? Check and see the actual source of a news article. Is it just the website who says so? Do they cite any credible sources? One fake news site, Now8News, is one of those fake sites that look real. As I am writing this, one of their lead stories is that Melania Trump is divorcing Donald Trump. Just because a site looks professional, doesn’t make the evidence accurate.

Can you Trace the Quotes you are reading? Often you will see a key figure making a quote that just does not sound believable. Check the quote. Put the quote in Google and see if it comes up somewhere else.

Are there any other news outlets reporting the story? Check to see if there are other, legitimate, news sources reporting the same story. Google the story and select the “News” option. You can see other sources, if there are any, for that story. And make sure they are legitimate. Remember, USAToday.com.co is not a legitimate source with that .co at the end.

Is your own personal bias getting in your way? This is a very big influential factor for the success of **Fake News**. As stated in FactCheck.org,

“We know this is difficult. Confirmation bias leads people to put more stock in information that confirms their beliefs and discount information that doesn’t. But the next time you’re automatically appalled at some Facebook post concerning, say, a politician you oppose, take a moment to check it out.”²

It is human nature. The more you hate a particular politician, let’s say, Hillary Clinton, the more you will want to believe negative stories about her, no matter how outrageous they may be. A critical thinker needs to fight that human urge.

Has the article been debunked by a reputable fact-checking organization? There are many fact-checking organizations around the world that will help you determine the validity and accuracy of news stories. One excellent website is the “International Fact- Checking Network.” On their website is a list of international fact-checking sites including the most popular ones in the Unites States³:

- Factcheck.org
- PolitiFact
- Snopes
- The Washington Post Fact Checker
- FactCheck Georgia

Is the web host of the article on a list of unreliable news websites? There are a couple of places that have lists of these dubious websites. One is at Snopes and another is a growing document titled “False, Misleading, Clickbait-y, and/or Satirical “news” Sources.”(Zimbardo, 2016) This is an extensive and growing document that describes hundreds of fake news sites and how to analyze them. The challenge with these sites is the determination of which ones are based on some factual information and which ones are total fiction made to sound like fact.

AJ Willingham from CNN urges us to “hone your fact-checking skills.” And she cites two experts in the field.

Alexios Mantzarlis trains fact-checkers for a living. He says it’s important to have a “*healthy amount of skepticism*” and to think, really think, before sharing a piece of news.

“If we were a little slower to share and re-tweet content purely based on the headline, we’d go a good way towards combating falsehoods,” he told CNN.

Melissa Zimdars, Communication Professor at Merrimack College, points out that even those who spend a lot of time online aren’t immune to fake content.

"People think this [thinking] applies only for older people," she told CNN. "I think even early education should be teaching about communication, media and the internet. Growing up with the internet doesn't necessarily mean you are internet savvy." ⁴

Facebook has become a major source of information for many people. Recently Facebook posted a list of strategies a person can use to analyze articles to see if they might be an example of false news.

Facebook states, *"We want to stop the spread of false news on Facebook. As we work to limit the spread, here are some tips on what to look out for"*:

Be skeptical of headlines. False news stories often have catchy headlines in all caps with exclamation points. If shocking claims in the headline sound unbelievable, they probably are.

Look closely at the URL. A phony or look-alike URL may be a warning sign of false news. Many false news sites mimic authentic news sources by making small changes to the URL. You can go to the site to compare the URL to established sources.

Investigate the source. Ensure that the story is written by a source that you trust with a reputation for accuracy. If the story comes from an unfamiliar organization, check their **"About"** section to learn more.

Watch for unusual formatting. Many false news sites have misspellings or awkward layouts. Read carefully if you see these signs.

Consider the photos. False news stories often contain manipulated images or videos. Sometimes the photo may be authentic, but taken out of context. You can search for the photo or image to verify where it came from.

Inspect the dates. False news stories may contain timelines that make no sense, or event dates that have been altered.

Check the evidence. Check the author's sources to confirm that they are accurate. Lack of evidence or reliance on unnamed experts may indicate a false news story.

Look at other reports. If no other news source is reporting the same story, it may indicate that the story is false. If the story is reported by multiple sources you trust, it's more likely to be true.

Is the story a joke? Sometimes false news stories can be hard to distinguish from humor or satire. Check whether the source is known for parody, and whether the story's details and tone suggest it may be just for fun.

Some stories are intentionally false. Think critically about the stories you read, and only share news that you know to be credible. ⁵ You can actually learn more about what Facebook is doing to reduce the spread of false news by going online and reading, *"Working to Stop Misinformation and False News."* ⁶ Evidence is one part of the advocate's process for proving his or her arguments in support of their stand on a claim.

Reporting a Fake News Story In Facebook

If you see a story in News Feed that you believe is false, you can report it to Facebook.

Click ▼ next to the post you'd like to mark as false

Click Report post

Click It's a false news story

Click Mark this post as false news

News stories that are reported as false by people on Facebook may be reviewed by independent, third-party, fact-checkers. A story may be marked as disputed if these fact-checkers find the story to be false.

Because of the importance of evidence as the supportive underpinning to arguments, it is important that the use of evidence be ethically based. Advocates must be careful in gathering, recording, and using evidence in an effort to sway the hearts and minds

of others. This is especially important because the free marketplace of commerce and ideas rests on the foundation of trying to persuade others fairly and honestly.

Persuasion is central to our political campaigns, social compliance, leadership, interpersonal relations, and consumer protections. The fabrication, misrepresentation, and distortion of evidence cannot be tolerated. Advocates, if not already held legally responsible, are certainly ethically responsible for the evidence they use in trying to gain audience adherence for their stand on a claim.

As Patterson and Zarefsky write in CONTEMPORARY DEBATE:

"All evidence originates from observations of perceived reality. Direct observation means experiencing a situation for ourselves, using one or more of our senses to gather the information. It is often unnecessary and, in fact, sometimes impossible to observe all the events and behavior we use as evidence for arguments. In some cases, we report what others said they observed as eyewitnesses. More often, however, we report generalizations others have drawn, because we do not have the time or the expertise to do the sampling ourselves."⁷(Patterson, 1983)

Finding quality evidence that you can use to support your claim is a crucial step in developing a successful argument. Discovering the weakness in the evidence that others use in their arguments is a great first step in clashing with their positions.

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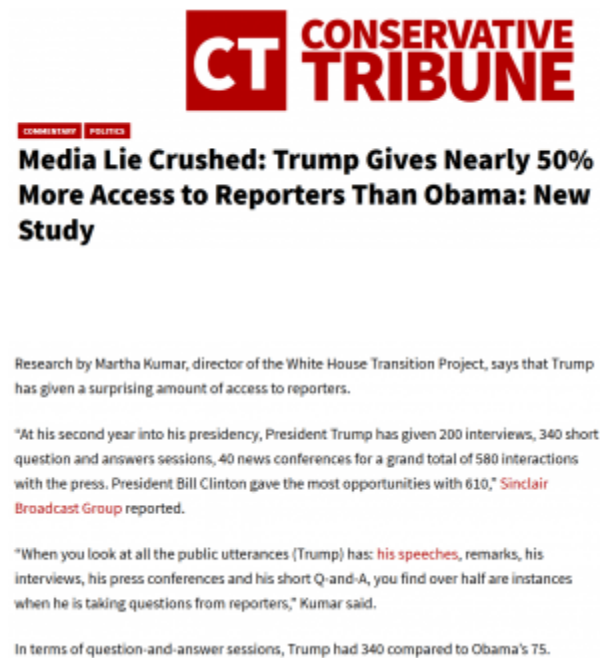
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9.14: When Going Upstream Is Hard Work

In the examples we've seen so far, going upstream is relatively easy. A reputable source includes information about its sources. Just as it's important for scholars to cite their sources, journalists need to tell their readers where their information comes from. Even when a source is not identified by name, it's typical practice to say why that person isn't named while also indicating why they are in a position to know something. For example, a story might quote an official who would be fired if his name was published or a police officer who was a witness to the event but was not an authorized press liaison. The *Times*, in the interest of transparency, has an [explanation](#) of their rules for these circumstances. Generally, though, sources are identified so readers can assess their credibility.

This is not just a journalistic standard, it's good internet citizenship. Articles on the web that repurpose other information or artifacts should state their sources, and, if possible, link to them. This matters to creators, because they deserve credit for their work. But it also matters to readers who need to check the credibility of the original sources. Unfortunately, many people on the web are not good citizens. This is particularly true with material that spreads quickly as hundreds or thousands of people share it – “viral” content.

When that information travels around a network, people often fail to link it to sources. For example, here is an interesting claim that President Trump is more accessible to the press than previous presidents, and that this fact contradicts a “media lie.”



[snip]

The [article](#) links to a [news broadcast](#) as its source. That source quotes a researcher, Martha Kumar, and the organization she's affiliated with, but doesn't link directly to her research. The next step is to see if the original research is available at her organization's site. This turns up [a report on how presidents communicated with the press](#), comparing their preferences in the first hundred days of their first and second years. It turns out the claim of “50% more access” relates to specific kinds of press interactions.

Where the presidents differ is the venues they choose to meet with the press, including press conferences, interviews, and short question and answer sessions. President Trump, for example, routinely responds to a few questions every day or two while President Obama favored long form interviews where he could discuss policy. . . . [Trump focuses] on those forums and strategies that help him establish a narrative for the day – Tweet in the morning for the opening narrative and expand on it later in the day – and get others to talk about policy. In a sense, it is a loop that has him begin in early morning by tweeting and then build his narrative in answers to reporters' questions at the beginning or end of White House meetings with officials and outside guests, such as corporate executives. (executive summary and p. 4)

In other words, he has had more informal, unscripted interactions than other presidents, including tweets, but fewer formal opportunities for reporters to question white house officials.

The process of going upstream – checking out the source – will also establish that Sinclair Broadcasting Group is [known for its right-wing editorial stance](#). But this isn't entirely a right-wing issue; an opinion piece in the [Washington Post](#) described the report differently, but didn't link to the original, either.

Another factor to consider when going upstream by following sources is [research](#) conducted by Yochai Benkler, Robert Faris, and Hal Roberts that found close network relationships among a group of right-wing publications, including Fox News, talk radio, and Breitbart. These outlets tend to draw on one another as sources, amplifying and confirming messages consistent with a partisan identity while also inducing distrust of media sources outside their circle. In contrast, consumers of left-wing partisan information sources also consume mainstream news sources that put a higher premium on performing objectivity and fact-checking, so the power of left-wing outlets to carry a strongly opinionated message is moderated by the more cautious mainstream.

Watch out for sources that primarily cite other sources that are within a particular partisan sphere. If, when you go upstream, all of the sources referred to fit within a partisan framework, take that into account.

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