English: Writing Skills

This chapter requires a companion activity book in which students respond to questions on text content. Answers are found in the *Teacher's Resource Kit*.



Chapter 3

WS 76008 Revision: 12022005-1

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Chapter 3

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"The power of words is immense. A well-chosen word has often sufficed to stop a flying army, to change defeat into victory, and to save an empire."

—Emile de Girardin



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Lesson 1

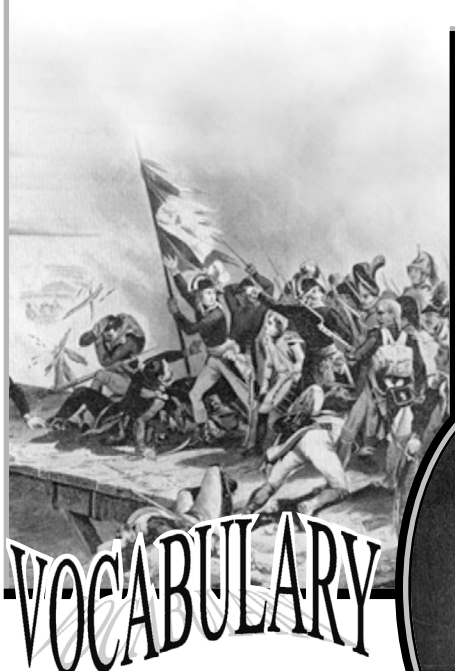
Critical Thinking

Chapter 3

Section 1

Lessons 1-5

THE BRILLIANT TYRANT



Brilliance in an evil man can be a curse; but in a good man, can be a blessing. Napoleon Bonaparte was one of the most brilliant military ***strategists*** in all of history. However, he chose to use that brilliance in a ***pernicious*** scheme to conquer the world. He wanted to create a legacy through which he would become immortal. He wanted ***posterity*** to remember him as "great."



The would-be ***demigod*** was born to Carlo and Letizia on August 15, 1769 on the French island of Corsica in the Mediterranean Sea. The fourth of eleven children, Napoleon spent his childhood on Corsica. As a teen, he and his older brother, Joseph, were sent to military school where Napoleon was nicknamed the "Little Corporal" because of his short stature (being only 5'6" tall). While in the military school, Napoleon did not distinguish himself as a military genius. He graduated 42nd out of a class of 58 cadets.

Napoleon began to work his way up through the French government and military to gain positions of power. He began to establish a reputation for being ambitious and perhaps even ruthless in obtaining his goals. In 1793, he joined the army as Commander of the Artillery. He soon distinguished himself as a military strategist by driving the British out of the French Port of Toulon, with his brilliant use of artillery. After that decisive and impressive victory, the French government awarded him the rank of Brigadier General. In 1796, he married a woman he had desired for quite some time—the beautiful widow, Josephine de Beauharnais. Rumors were whispered that Napoleon had arranged for her husband's death so she would be eligible for marriage.

The French Revolution (1789-1799) set the political environment for Napoleon to rise to power. The Revolution was a bloody, violent affair in which the common people of

VOCABULARY

Strategist: a person who plans or schemes large-scale maneuvers
Pernicious: deadly, destructive
Posterity: the next generation
Demigod: half god/half human
Coup d'e tat: a sudden overthrow of a government
Consul: a person appointed by the government to protect the interests of the country
Demise: ruin, failure, destruction
Abdicate: to surrender, to release, to give up
Asylum: government protection granted to a political fugitive from another government
Article: a written work such as a story, composition or essay

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France overthrew the monarchy, the nobility and the Catholic church in efforts to establish a republic. The people desired a government in which the common man was given power to govern himself and to own land. Previous to the Revolution, only nobility and the Catholic Church could own land or experience freedom in France. The common people were not permitted to own houses or land; they had to pay rent for their entire lives.

Napoleon observed the violent changes in his country and waited to see who would emerge the victor. The revolution succeeded in ridding France of its upper class, but the new government failed, and the people again wanted the "security" of an established ruler. Napoleon, through schemes and a ***coup d'e tat***, placed himself in a position to be chosen. In 1799, the French government appointed Napoleon the first ***consul*** of France. Before long, Napoleon became France's emperor.



Josephine

Although Napoleon and Josephine were married for many years, their union did not produce children. Napoleon desired an heir to his throne and someone to carry on his "legacy." He became disappointed with Josephine's inability to bear a son and divorced her. In a political alliance with Austria and for hopes of producing an heir, Napoleon married Marie-Louise, the daughter of the Emperor of Austria. Marie-Louise bore a son, Napoleon II, in 1811. This marriage did not keep peace between France and Austria, as Napoleon had hoped. The Emperor of Austria, Marie-Louise's father, soon declared war on France.

Napoleon had become very powerful in Europe. Soon, Austria, as well as all of Europe, fell to Napoleon. His goal was to conquer the entire world, and he tried, country by country. After conquering Europe and Egypt, Napoleon made an alliance with Emperor Alexander of Russia: Napoleon was to rule western and central Europe; Russia was to rule the East. However, Napoleon's insatiable ambition led to his downfall. To further his conquest, Napoleon instituted a policy called "The Continental System" which was a systematic blockade of all British merchant ships to the ports of Europe. Napoleon wanted to break the economy of Britain in order to control the tiny, but fierce island kingdom. Russia refused to honor the blockade, thus breaking the alliance and declaring itself France's enemy in 1808.

Meanwhile, Napoleon had placed Joseph Bonaparte, Napoleon's older brother, on the throne of Spain. The Spanish resisted Joseph as emperor, and with the help of the British, engaged Joseph and Napoleon in what are known as the Peninsular Wars, from 1808 to 1814. Napoleon's army had to divide its strength between Spain and Russia.



Marie-Louise

In the war against Russia, France lost most of its army (an army of almost 500,000 decreased to 10,000).

Napoleon's empire rapidly met its ***demise*** as former allies aligned themselves against Napoleon. At the Battle of Waterloo, he was finally defeated. In June of 1815, he returned to Paris to ***abdicate*** his throne. He attempted to flee to America, but instead, surrendered himself to the British in hopes of receiving ***asylum*** in England. Asylum was not granted. Napoleon was sent into exile on the island of St. Helena in the South Atlantic, 1,000 miles from the African coast. There, the one-time ruler of France spent the rest of his life and died of stomach cancer on May 5, 1821.

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After years of causing misery and terror, Napoleon failed in his goals: to glorify himself as immortal and to pass a legacy of greatness to the next generation. He was ultimately a failure politically, socially and morally. He cared not how many widows, orphans and shattered families were left in his wake. He did not honor his commitment of marriage to his wife, Josephine. He did not succeed in establishing a dynasty for his son. Napoleon Bonaparte is not remembered for his greatness, but rather for his tyranny and abuse of power. ■

CRITICAL THINKING SKILLS



In the course of daily life, we often do a special kind of thinking called critical thinking. *Critical thinking* means "looking beneath the surface to a deeper meaning." Critical thinking requires a curious and inquiring mind. People who exercise critical thinking are not gullible, but question what they see, hear and read to be sure it is true. Thinking critically about what is read and spoken helps to prove whether or not the source of that information is accurate and reliable. By thinking critically and verifying facts, people avoid furthering false statements, evidence or faulty logic.

Recognizing Facts

Recognizing facts is an important critical thinking skill. Often, students confuse facts with opinions. An *opinion* is a statement not supported by proof. A *fact* is a statement that can be verified or proven. Facts are verified when they can be measured by standards. Standards help you organize and make sense of the world around you. These standards include time, size, quantity, identification and location. Each of these measures can be found in today's vignette, "The Brilliant Tyrant."

TIME: Napoleon was appointed First Consul to France in 1799.
- The year of his appointment can be verified by history and library reference books and historical documents.

SIZE: Napoleon was only 5'6" tall.
- Napoleon's height can be verified.

QUANTITY: Napoleon's army decreased from 500,000 to 10,000 in his campaign against Russia.
- The size of Napoleon's army that invaded Russia and the number of returning soldiers is well documented.

LOCATION: In June of 1815, Napoleon returned to Paris to abdicate his throne.
- Paris as the location of Napoleon's abdication is well documented.

IDENTIFICATION: The body was identified as that of Napoleon Bonaparte.
- Napoleon Bonaparte was very recognizable by his physical features, so identification was easily established.

Understanding Relevance

When an author uses facts in an ***article***, the facts should be relevant to the meaning of the article. If an author uses facts that are irrelevant, then the facts are like static on a radio—irritating, undesirable and useless. Relevant facts support the main idea of the article. If you are the author of an article and are trying to determine which facts are relevant, ask yourself, "If this fact were omitted, would my article lose some meaning?" or "Does this fact add to the meaning of the article?"

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The following is a list of dates pertaining to the time period of Napoleon. Notice that the author of the vignette took the facts that mattered most to the article and omitted facts that did not have a connection or did not strengthen what the writer was trying to communicate. The author had to utilize his or her critical thinking skills to discriminate between relevant and irrelevant facts.

1763: Josephine Tascher (future wife of Napoleon) was born.
1768: Corsica was annexed by France.
1769: Napoleon was born on the island of Corsica.
1774: Louis XVI was coronated as King.
1780s: Napoleon graduated from military school.
1792: Mobs in France broke into jails and killed hundreds of Royalists.
1793: Public education was divided into three ranks—primary, secondary, and higher.
1793: Napoleon became the Commander of the Artillery after the battle of Toulon.
1794: Robespierre was arrested and guillotined.
1795: Napoleon shot a cannon into an angry mob, killing many.
1796: Napoleon married Josephine.
1799: Napoleon was appointed the first consul of France.
1808: Napoleon was at war with Russia.
1809: The Baccalaureate exam was established.
1810: Napoleon married Marie-Louis of Austria.
1810: The French government established a monopoly on tobacco.
1810: Russia banned all importation of silk.
1811: War between Napoleon and his father-in-law erupted.
1812: The Battle of Borodino occurred.
1808-1814: The Peninsular Wars
1813: The Battle of Lutzen
1815: Napoleon abdicated his throne.
1821: Napoleon died of stomach cancer.
1840: Napoleon's remains were entombed in Paris.
1940: Adolph Hitler ordered the remains of Napoleon II to be removed to Paris to rest beside the remains of Napoleon's father.

Continue to the Activities.

LIFE PRINCIPLE

"Tyrants . . . . in mimicking the god dwindle into the brute."

—William Hazlitt



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Lesson 2

Critical Thinking

Chapter 3

CHOOSING FRIENDS WISELY

Section 1

Lessons 1-5





(1) Frederick, a clean shaven philosopher, and William, an imaginative, fatherless young man, were walking along the seashore enjoying the crash of the waves and the ***pungent*** odor of salt air. As they walked, Frederick asked William, "What do you think of friendship?"

(2) "Oh, I like friends!" replied William without hesitation.

(3) Frederick agreed saying, "I have no argument to that, but what do you like about friends?" he asked.

(4) "I think everyone needs friends in order to be happy." replied William.

(5) "I am not sure a person requires friends in order to be happy," said Frederick, "but I do think that good friends are important in times of crises."

(6) "Real friends are the ones who hang around when you are going through a hard time," said William.

(7) "A friend in need, is a friend indeed," agreed Frederick. After some contemplation, he continued, "New friends do not appear everyday. If you have one person you can truly call a friend in a lifetime, then that is a gift; to have two friends, then you are blessed; and if you have three true friends, in the course of a lifetime, you are blessed with a triple measure. Good friends are some of the most important blessings in our lives, and some that we often take the least care in acquiring," ***mused*** Frederick.

(8) William agreed with Frederick and said, "People should be careful where they go looking for friends. Some people make the mistake of searching the Internet for friends."

VOCABULARY

Pungent: sharp taste or smell
Muse: to consider or say thoughtfully
Self-imposed: brought upon by self; the cause of your own actions
Isolation: the condition of being by yourself without the company of others
Enthuse: to cause excitement or interest
Elaborate: to express at greater length or in greater detail
Conducive: that which leads to a desired result

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(9) "The Internet is the worst place to find genuine friendship," said Frederick with a concerned frown. "The police have well documented that the Internet has multitudes of predators who look for young people who seek friendship. Because of great loneliness, some young people use the Internet to seek friendship and a sense of community."

(10) "I am amazed when I hear from friends that they have given their real names, telephone numbers and addresses to strangers over the Internet! My friends know the rules of Internet safety, but some choose to ignore the rules because of ***self-imposed isolation***," said William.

(11) "Surfing the web is a poor substitute for being with your family and making good friends face to face," ***enthused*** Frederick. "I would like to ***elaborate*** on your thoughts about Internet friends. They are not ***conducive*** to building lifelong bonds of friendship, nor do they ***alleviate*** the pain of loneliness."

(12) "A ***kindred*** spirit or heart is what you want in friendship," agreed William.

(13) Frederick continued, "A true friend will sympathize with you while helping you make the right choices. Finding someone with strong beliefs, morals and values rings like music to the heart of a kindred spirit."

(14) "Your friendship inspires me," confessed William. "To have a friend with whom I can talk about anything without fear, is such a blessing."

(15) "Yes, feeling safe with a friend when sharing your thoughts and feelings is an ***inexpressible*** comfort," agreed Frederick. "Sorrow hurts and stings less when shared with a friend. Joy, like a ray of sunshine, reflects back with greater ***ardor***, when mirrored from the heart of someone who truly enjoys your company and who has your best interests at heart."

(16) "You are ***waxing*** poetic, Frederick!" grinned William.

(17) As the friends walked back toward home, the sun was just beginning to set across the waves. Frederick and William ambled slowly, savoring the companionship that comes with heartfelt conversation; each realizing what a ***boon*** true friendship really is. ■

VOCABULARY

Alleviate: to provide physical relief, as from pain
Kindred: having similar or related origin, nature or character
Inexpressible: not capable of expression or utterance in language
Ardor: strong enthusiasm or devotion; zeal
Waxing: passing from one state to another; becoming
Boon: a timely blessing or benefit

CRITICAL THINKING SKILLS: RECOGNIZING OPINIONS

Writers often use facts and opinions to make points or persuade readers. *Opinions* are statements not supportable by proof. Having opinions is natural and healthy. Expressing an opinion can be done sincerely and reasonably—without losing friends or temper. Well-expressed opinions are often received well and are not offensive. Opinions may be expressed in various ways such as in statements of personal preference, statements of belief and statements of argument.



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Statement of Personal Preference

A *statement of personal preference* is a statement expressing whether you like or dislike a particular item or situation. For example, William might say, "I like sunsets on the beach." A friend could not reasonably claim that William did not like sunsets on the beach. If William were to say, "I like sea shells," his personal preference for sea shells is clear. A statement of personal preference stands alone and needs no support.

Statement of Belief

A *statement of belief* begins with an expression such as "I believe," "I think," "I feel" or "In my opinion." William's statement, "I think everyone needs friends in order to be happy," is a statement of belief.

A statement of belief requires careful wording and support. A critical thinker may take the statement, analyze it and refute it, as Frederick did, when he said, "I am not sure a person requires friends in order to be happy."

Wording a statement of belief, in such a way that it is reasonably supportable, is important. If you, as the writer or speaker, are unwilling or unable to support your statement of belief, you will not be persuasive. Your statement will seem invalid. Instead, make a statement that is supportable, such as Frederick's statement, ". . . I do think that good friends are important in times of crises."

Statement of Argument

A *statement of argument* is much like a statement of belief, except that the statement does not contain the personal pronouns "I," "me" or "mine." Frederick's statement, "The Internet is the worst place to find genuine friendship," is a statement of argument.

A statement of argument may be neither right nor wrong, but must be supported by facts, opinions and reasons that are accurate and persuasive. Frederick's statement is open to argument. A critical thinker could consider the statement and either disagree or agree with Frederick.

You are doing well. Continue to the Activities.

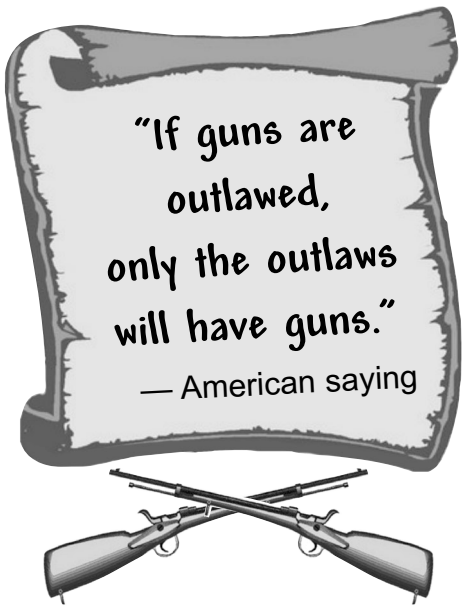
Life Principle



"A true friend helps you make right choices."

—Anonymous

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Lesson 3

Critical Thinking

Chapter 3

Section 1

Lessons 1-5

FREEDOM OF PROTECTION





VOCABULARY

Perversion: an act of turning from truth or right
Converse: reversed, as in position, order or action; contrary
Restrictions: something that regulates or limits
Common law: laws originated and developed through common practice rather than statutes
Jurist: a person who has extensive knowledge and experience of law
Innocuous: having no adverse effect; harmless

The following interview is between a representative of the magazine *America's 1st Freedom* and Professor Malcolm of Bentley College. The interview was printed with this introduction:

"A history professor at Bentley College in Waltham, Massachusetts, Joyce Lee Malcolm, has shaken up the gun debate with a new book, *Guns and Violence: The English Experience*, that explores the history of the relationship between guns and violent crime in England. Here, she joins *America's First Freedom* (AFF) for a look at the British origins of our Second Amendment and how the ***perversion*** of those principles has paved the way for criminals to turn England into one of the world's most violent nations."

AFF: *Since the mid-20th century, as England has restricted the right to arms and the right to self-defense, crime has steadily increased. But you also found that for centuries, the* ***converse*** *was also true—that increased gun ownership correlated with a decrease in crime, didn't you?*

Malcolm: Yes, I started my book [with research from] the Middle Ages, so I got a sense of what crime was like before guns were available. For about 400 years, as guns became more and more common, interpersonal violence went down and it continued to go down until the middle of the 20th century. Up until 1920, guns were freely available but were very seldom used in crimes. At the end of the 19th century, the average number of armed robberies in London was about three or four per year—and at that time, London was the largest city in the world.

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The British government did a study of handgun homicides over a three year period at the end of the 19th century and there was only one per year over the three years they studied, and that was in a population of 30 million. What's odd is that they did the study as part of an effort to get Parliament to pass gun ***restrictions***, so they were clearly not trying to minimize the numbers.

AFF: *Last year, in* Reason *magazine, you wrote that your chances of being mugged in London are now six times greater than in New York City, and you seemed to suggest that this is due to a "sea change" in government policy representing a "reversal of centuries of common law." What do you mean by that?*

Malcolm: Under ***common law***, it was felt that everyone had a right to defend themselves and that, in fact, it was the first of your great and primary rights, the right to personal security. Blackstone, the great British ***jurist***, said that no government could take away from the people the right to protect themselves because no government could protect an individual in his moment of need. But from the middle of the 20th century onward—at just about the time that the trajectory in crime went up—the government took the line that people don't need to protect themselves, that society will protect them, and that if you carry any item to protect yourself, that represents a social danger.

AFF: *And people have been prosecuted for carrying some pretty* ***innocuous*** *items, have they not?*

Malcolm: Yes, a stone, a drum of pepper (pepper shaker), a sandbag, a penknife. Anything that you can carry for the purpose of protecting yourself in England is now automatically considered an "offensive weapon." . . . The other side of common law tradition that they've changed is that, at one time, not only were you expected to protect yourself, but you were also actually obliged to protect someone else if you saw they were in danger. Now that's all changed. Now the British government insists that you should "walk on by" if you see a crime being committed, and simply call the police . . . . In fact, the British Broadcasting Company gave some advice about self-defense several months ago, and they said that if you were attacked, you should shout, "Call the police!" instead of shouting "Help!" —which would be the first instinct—and I realized the reason you are not supposed to shout "Help!" is because no one is expected to help you.

AFF: *In your research on the English predecessors to the Second Amendment, didn't you find the right was intended not just as a defense against tyranny, but also against crime?*

Malcolm: Yes, in fact the primary reason for passing it [the right to arms in England's 1689 Bill of Rights] was to protect individual defense, and it was only later, in the late 18th century, that Blackstone added the notion that people who are armed can protect their other rights if the government ever becomes tyrannical . . . .

AFF: *Your books seem to suggest that, as Britons increasingly rely on government to*

VOCABULARY

Socialist: a person who promotes government control and involvement to force community rather than individual responsibility
Mandated: commanded
Guidance: direction or advice for a decision or course of action
Constitutional: consistent with, sanctioned by, or permissible according to a constitution
Extraordinary: beyond what is ordinary or usual

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protect them from crime, they also tend to depend on government to take care of them in other ways. In other words, this movement away from self-defense and toward reliance on the police in England has paralleled a similar movement, away from personal responsibility and individual freedom, and toward the ***socialist*** *European model.*

Malcolm: Yes, Actually I think it was the other way around. I think the welfare state came in first, and that this may have been an unintended consequence of that same sort of thinking . . . . the government took over a lot of functions and added a lot of social programs—health insurance, all kinds of social welfare benefits and so on.

But these laws [against having any weapon for self-defense] that were supposed to be aimed only at criminals or potential offenders have been vigorously enforced against lawful, honest people. And as people have been disarmed, there is less and less of a deterrent to stop criminals. The deterrent factor is almost absent from England today. Now the attitude seems to be that if you defend yourself vigorously, that is vigilantism, and you are taking the law into your own hands.

AFF: *In a nutshell, how did such a radical reversal happen, and do you think it could ever happen here?*

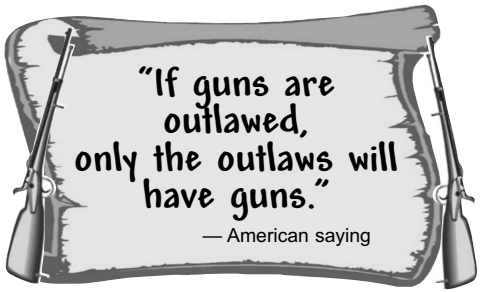
Malcolm: One of the ways it happened was through the first real gun restriction in England, the Firearms Act of 1920. This act ***mandated*** that if you wanted to get a gun, you had to get a certificate from the local police chief, who had to determine that you were a fit person to have a gun and had a good reason to have a gun . . . . Over the years, through a series of secret ***guidances*** to the police from the Home Office (which is in charge of all local police in England), . . . they continued to narrow what was a "good reason" to the point where, in the 1960s they simply said it was never a "good reason" to have a gun to protect yourself or your home, or even for banks to protect large sums of money.

As far as the British Home Office was concerned—and this is something your readers should be aware of—the only good reason to own a gun was for sport (hunting and target shooting). I have a letter that was a response from a Crown secretary about the extent of the right to be armed in Britain, and he pointed out that, of course, sport is not constitutionally protected.

That's something Americans should be aware of, because people who support gun control often say, "Well, we don't want to interfere with your hunting." But the thing is, hunting doesn't rise to the level of a ***constitutional*** right. It is a sport.

That's one lesson. The other lesson is that the 1920 law in England seemed perfectly reasonable at first. But, over time, even though the language of the law didn't change, the way the terms in the law were defined did change. There was never any public debate about it; it was always just bureaucrats narrowing criteria or adding restrictions without public knowledge. Even the judges did not know. So what started out as a seemingly reasonable law ended up ***extraordinarily*** restrictive. ■

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EVIDENCE USED EFFECTIVELY



Evidence is information that supports a claim, proves a point and leads to a conclusion. Evidence is a very important part of presenting an argument or attempting to persuade someone. Evidence is a vital key in convincing your reader to agree with you. Just having a point of view or an opinion is not sufficient. In a debate or composition, you must be able to support your point of view. Notice how the professor in the interview effectively provided evidence to support her claim.

> **Claim:** Gun ownership by responsible citizens deters crime.
> **Supporting evidence:** Four hundred years of gun ownership in England have been chronicled showing a decrease in personal violence with the increase in personal gun ownership, and vice versa.

CHARACTERISTICS OF EVIDENCE

Effective evidence has one or more of these characteristics:

Plentiful: (abundant) A claim that is supported by too *much* evidence is more convincing than a claim supported by too *little* evidence.

Personal experience: This is often the best evidence. For example, a writer claiming that the best vacation places are the North Pole and the Sahara Desert would be convincing only if he related positive experiences in those places, thus giving *supporting evidence*.

Expert opinion: Evidence presented by an expert in a particular subject. For example, if you were writing about space travel, you would seek information from known authorities in space travel and exploration, such as the National Aeronautics and Space Administration (NASA).

Accurate: Be accurate. Information can be misconstrued and insinuate a meaning that is not accurate. For example, a poll disclosed that one hundred convicts who learned to read in jail had fewer repeat offenses than one hundred convicts who did not learn to read while in jail. Closer examination revealed that other factors influenced the convicts' behavior: family background, religious faith and previous education. So, the statement *learning to read while in jail deters the recidivism rate* is not completely accurate because it does not include the influences of social factors experienced by the convicts.

Relevant: (appropriate or fitting) Be sure your information is relevant. Irrelevant information is data that does not relate to the conclusion. For example, the same convicts studied in the case above all ate fruit for breakfast, sandwiches for lunch and chicken for supper; however, such evidence did not affect the criminal behavior of the inmates. To include information about food would be irrelevant to the impact of learning to read in prison.

Not limiting: When stating a claim, *avoid* the words *always, all, most* or *never.* These words weaken your argument, because exceptions can usually be found. A better way to state a claim is to use the words *usually, often, sometimes* and *many.*

In the Activities, you will analyze Professor Malcolm's use of evidence.

Keep learning and working hard!

Life Principle



"Nations begin to dig their own graves when men talk more of human rights and less of human duties." —William J. H. Boetcker

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Critical Thinking

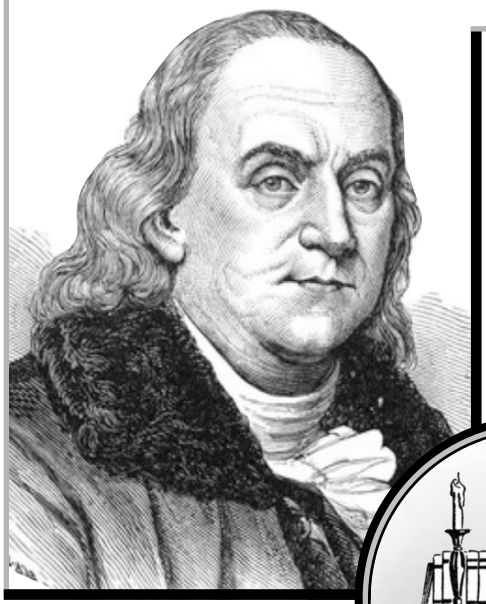
Lesson 4

Chapter 3

Section 1

Lessons 1-5

BEN FRANKLIN'S INSPIRATION



Below is a letter written to Samuel Mather on May 12, 1784, by Benjamin Franklin:

I received your kind letter, with your excellent advice to the people of the United States, which I read with great pleasure and hope it will be duly regarded. Such writings, though they may be lightly passed over by many readers, yet if they make a deep impression on one active mind in a hundred the effects may be considerable. Permit me to mention one little instance which, though it relates to myself, will not be quite uninteresting to you.



When I was a boy I met with a book entitled "Essays to Do Good," which I think was written by your father. It had been so little regarded by a former ***possessor*** *that several leaves of it were torn out; but the remainder gave me such a turn of thinking as to have an influence on my conduct through life, for I have always set a greater value on the character of the doer of good than on any other kind of reputation; and if I have been as you seem to think, a useful citizen, the public owes the advantage of it to that book.*

You mention your being in your seventy-eighth year. I am in my seventy-ninth year; we are growing old together. It is now more than sixty years since I left Boston, but I remember both your father and grandfather, having heard them both in the pulpit and seen them in their houses. The last time I saw your father was in the beginning of 1724, when I visited him after my first trip to Pennsylvania. He received me in his library, and on my taking leave showed me a shorter way out of the house through a narrow passage which was crossed by a beam overhead. We were still talking as I withdrew, he accompanying me behind, and I turning partly toward him, when he said ***hastily****, "Stop, stop!" I did not understand him*

VOCABULARY

Possessor: a person who owns or has something
Hastily: with speed or quickness
Stoop: to bend forward and down from the waist
Respectively: as referred to in order
Influential: having an effect
Slothfulness: a state of being inactive; sluggish; lazy; idle
Extols: to praise highly; exalt
Provocations: actions that cause effects
Adhered: devoted, supported

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till I felt my head hit against the beam. He was a man that never missed any occasion of giving instruction, and upon this he said to me: "You are young and have the world before you; ***stoop*** *as you go through it, and you will miss many hard thumps." This advice, thus beat into my head, has frequently been of use to me; and I often think of it when I see pride mortified and misfortunes brought upon people by their carrying their heads too high.*

Yours with esteem, B. Franklin ■

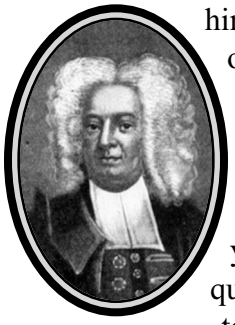
Benjamin Franklin's letter to Samuel Mather made reference to Cotton Mather. Increase Mather and Cotton Mather were Samuel Mather's grandfather and father, ***respectively***. Increase was the minister of Old North Church in Boston, Massachusetts and was one of the most ***influential*** religious leaders in the Colonies. His son, Cotton Mather, eventually became the minister for Old North Church as well.



Increase Mather

Cotton Mather was a prolific writer of essays, books and pamphlets. In these writings he was always trying to get his readers to understand that their actions in life had the ability to change the world and history by their individual, daily choices.

Mather wrote, "The censure of others upbraids me that I have done so much; my own conscience condemns me that I have done so little. The good God forgive my ***slothfulness***."



Cotton Mather

Today, many American values can be traced back to Cotton Mather's Puritan origins. Mather opened the door for the humble "little man" to act and emphasized that much good can be done by a "Do-Good" individual. Mather asserted that "the general improvement of society depends on individual effort." Mather's belief in the power of the individual could have earned him the title "Father of the American Dream."

Benjamin Franklin had a bleak beginning. Math was apparently a weak area for Franklin, and he flunked out of Brownell's school. Franklin then had to go to work in his father's shop. His thirst for knowledge did not cease with the end of his formal education. At the celebration of the two-hundred and fiftieth anniversary of Franklin's birth, his many accomplishments were acknowledged in: science, invention and engineering; statesmanship; education and the study of nature; finance, insurance, commerce and industry; mass communications; printing, advertising and graphic arts; religion, fraternal organizations and the humanities; medicine and public health; agriculture; music and recreation.

Franklin's tireless drive to better himself is what distinguished him from others. That drive was the gift of Cotton Mather's book *Essays to do Good*. Mather said, "Our opportunities to do good are our talents." Mather suggested asking of yourself personal responsibility questions like: "What good may I do today?" and "What good have I done this day?" Mather also ***extols*** the benefit of self-possession. Instead of becoming angry at criticism Mather suggested, "My friend, make it only a ***provocation*** to do good works."

Franklin ***adhered*** throughout his life to the principles and virtues outlined in that essay. He was known to have been unafraid of making enemies because of commitment to principles. He used reproach and criticism to

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improve himself. This "turn-the-other-cheek" attitude was very useful when Franklin received a chilly reception on his trip to France. The people of France viewed Franklin as a "simple, wild man from the frontier" and made fun of him wearing his spectacles (glasses) in public. However, by his unassuming, modest nature, Franklin earned the trust of the French, and wearing spectacles became the fashion.

Franklin gives the credit for the shaping of his character and his very successful life to a writing by a Puritan preacher. At eleven years old, an education flunk out, Franklin's future, by most standards, certainly did not look bright until he read the concepts of Cotton Mather who helped establish one of America's greatest ***tenets***—all one need do in order to achieve greatness in America is *try*. ■



CAUSE—EFFECT THINKING

Being a critical thinker means that you analyze the probable outcome of an action. Throughout history, people have explained cause-effect relationships in different ways. In ancient Greece, for example, people used myths to explain every day events. Most people were uneducated, and myths were ways to explain the mysteries of the world, such as, what causes day to turn to night, why deserts exist, and how black skin came to be. The "mythical" answer to these mysteries was: *Light and dark were controlled by the sun which was actually a fiery chariot driven across the sky by the god, Apollo. One day, his son, Phaeton drove the chariot too close to the earth, burning the soil and turning it into deserts and turning white skin black.*

Such explanations are almost laughable for some of us today, but some people still believe such myths. When people become educated and learn to think critically, they learn that many "mysteries" of the world can be explained clearly, logically and scientifically in cause-effect relationships.

Writers use the cause-effect relationship to form a connection between two pieces of evidence or information. Read the statements below and notice the connection the writer made between the causes and the effects.

Example #1: Education enhances employment. If you drop out of school, you will be less employable and less able to support a family as an adult. However, if you stay in school, you will be more employable and able to earn more money and make a better living.

Example #2: Application of work ethic enhances opportunities for success. Ben Franklin's dedication to self-education and hard work enabled him to become one of America's greatest inventors and scientists.

As you adopt the cause-effect habit of thinking, remember that a cause may not bring about the same effect every time. For example, Ben Franklin proved by flying a kite with a key attached that electricity was attracted to metal. However, a critical thinker would analyze whether all metal objects would be struck by lightning in every storm.

Another important point to remember about cause-effect thinking is that many effects may proceed from one cause. For example, Benjamin Franklin took to heart Mather's command to "give thyself unto reading" and read Mather's book (cause). The book changed Ben Franklin's perspective on life (effect). He could have spent the rest of his life cutting wicks at his father's candle shop, but he adhered to Mather's dictates and was continuously

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driven by the desire to improve himself (effect). He earned honorary degrees from both Harvard and Yale (effect). He studied and improved upon application of heat, light, sound, magnetism, chemistry, geology, physiology, and oceanography (effects). Many of his applications led to modern conveniences for us today and improved the level of education (effect).

Faulty Cause-Effect Relationships

Do not be persuaded by arguments based on faulty cause-effect relationships. When checking for logic, ask the question: *Has this author presented a faulty cause-effect relationship?* Keep in mind that just because someone in a newspaper, magazine or Internet site presents himself as an authority, he may not be correct at all. In fact, he may have erroneous information and may just be trying to further a cause or make money. His argument may not stand up under your critical thinking (analysis, scrutiny). Many Internet sites, books and magazines available to youth today present information that could potentially harm young people. Two such examples are the issues of abortion among young women and use of marijuana by teens.

Scenario 1

Below is a transcribed question/answer time between a teenager and a representative of an organization that helps young women plan their pregnancies. [NOTE: Due to the controversial nature of this portion of the lesson, students are encouraged to read the entire lesson before drawing conclusions about the content.]



Student: Will having an abortion affect me when I want children later in my marriage?
Answer: Abortion is a very safe procedure. It is much safer than giving birth. Early abortions, with no complications, have no harmful health effects for the woman and do not increase the possibility of future miscarriages, ectopic pregnancies, birth defects, or low infant birth weight. Even if a woman has more than one early abortion, her ability to carry a later pregnancy to term is not endangered.

Student: How will abortion affect me emotionally?
Answer: Abortion poses little danger to a woman's emotional and mental health. Some women may feel remorse, but most women simply feel relief that the pregnancy has been terminated, thereby removing the real cause of their stress.

Analyzing the Information

Now, as a critical thinker, analyze the claims by the representative, then use further research to be sure you get the correct answers to the questions about abortion.

CLAIM:
Abortion is safer than giving birth. Early abortions, with no complications, have no harmful health effects for the woman and do not increase the possibility of future miscarriages, ectopic pregnancies, birth defects, or low infant birth weight. Even if a woman has more than one early abortion, her ability to carry a later pregnancy to term is not endangered.

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MORE RESEARCH:

- In Why Can't We Love Them Both, Dr. and Mrs. J.C. Willke discovered 90% of abortions are done in free-standing, for-profit abortion facilities and that, typically, an abortion mill rarely reports any complications.

- The U.S Center for Disease Control has been shown consistently to under-report the complications of aborting while over-exaggerating complications of pregnancy and delivery, according to M. Crutcher, author of Exploited by Choice.

- A study of 11,057 pregnancies in Jerusalem, of whom 752 had had previous abortions, showed that those with abortions were more likely to report bleeding in the first 3 months of the second pregnancy, less able to have a normal delivery, and more needed manual removal of the placenta or other intervention in the third stage of labor. There was a significant increase in low birth weight, a 3 to 4 times increase in neonatal deaths, and an increase in fetal malformations. (S. Harlap et al., Late Sequelae of Induced Abortion, Am. J. of Epid. (1975) 102, p. 217)

- It is concluded that a relationship . . . exists between an induced abortion and a second . . . pregnancy . . . increase in prematurity. (Puyenbeck and Stolte, Relationship Between Spontaneous and Induced Abortion, and Second Trimester Abortion Subsequently, Europe. J. OB-GYN, Reprod. Biol. 14, 1983, 299-309.)

- The relative risk of secondary infertility among women with at least one induced abortion and no spontaneous miscarriages was 3-4 times that among non-abortive women. (D. Trichopoulos et al, Induced Abortion & Secondary Infertility, British Jour. OB/GYN, vol. 83, Aug. 1976, pp. 645-650)

- In 1974 Dr. Bohumil Stipal, Czechoslovakia's deputy minister of health, stated: "Roughly 25% of the women who interrupt their first pregnancy have remained permanently childless."

- Women who had one induced abortion had a 17.5% miscarriage rate in subsequent pregnancies, as compared to a 7.5% rate in a non-aborted group. (Richardson & Dickson, Effects of Legal Termination on Subsequent Pregnancy, British Med. Jour., vol. 1, 1976, pp. 1303-4)

- There has been a 600% increase in ectopic (or tubal) pregnancies in the U.S. since abortion was legalized. In 1970 the incidence was 4.8 per 1,000 live births. By 1980 it was 14.5 per 1,000 births. By 1992 it was 19.7 for a total of 108,800, and 28 women died. (Center for Disease Cont: AP/NY Times, Jan. 27, '95)

CLAIM:

Abortion poses little danger to a woman's emotional and mental health. Some women may feel regret or remorse, but most women simply feel relieved that the pregnancy has been terminated, thereby removing the real cause of their stress.

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MORE RESEARCH:

• The After Abortion Internet site tries to help women who are suffering mentally after an abortion. The representatives from this site recognize the following symptoms as effects of abortions.

• During the three months after the abortion these symptoms may appear:

- Self-harm, strong suicidal thoughts or suicide attempts
- Increase in dangerous and/or unhealthy activities (alcohol/drug abuse, anorexia/bulimia,
- compulsive over-eating, cutting, casual and indifferent sex and other inappropriate risk-taking behaviors)
- Depression that is stronger than just 'a little sadness or the blues'
- Inability to perform normal self-care activities (hygiene and basic health)
- Inability to function normally in her job or in school
- Inability to take care of or relate to her existing children or function normally in her other relationships (i.e. with a spouse, partner, other family member or friends)
- A desire to get pregnant immediately and 'replace' the baby that was aborted, even when all the circumstances that led her to 'choose abortion' the first time are still in place.

• Other long term problems are:

- anxiety and panic disorder
- addictions of all kinds
- difficulty sleeping and sleeping problems
- disturbing dreams and/or nightmares
- problems with phobias, or increase in severity of existing phobias
- "atonement marriage" where the woman marries the father of the aborted baby to help justify the abortion
- distress at the sight of other pregnant women, other babies and children
- inability to deal with or socialize with other pregnant women, other babies and children
- co-dependence and inability to make decisions easily
- problems with severe and disproportionate anger
- distress and problems with later pregnancy
- added emotional issues and problems when dealing with future infertility or other physical complications resulting from the abortion.
- unhealthy obsessions with perfection, very hard and demanding on self

The Statistical Analysis Unit of Finland's National Research and Development Center for Welfare and Health, did a study that involved maternal post-abortion deaths of 9,192 Finnish women, aged 15-49, during the period of 1987-1994. The researchers pulled death certificates and reproductive health records and then narrowed the study to women who had a pregnancy related event (birth, miscarriage, abortion) in the twelve months prior to their deaths. The deaths included suicide, accidental death, homicide and natural causes.

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The results are startling. A woman's risk of dying within a year after an abortion was four times higher than the risk of dying after miscarriage or childbirth, according to the study.

Results of Critical Thinking

After reading claims regarding a certain topic, (i.e. abortion), ask yourself: *Who is making these claims and why?* Keep in mind that the claims may be valid, yet they may also be invalid. Some sources publish erroneous information for various reasons: one reason could be that the people who publish the information make lots of money by exploiting vulnerable teens and young adults. Another reason could be that the people themselves are deceived and are simply perpetuating a lie but are unaware they are doing it. Another reason could be that they believe in a cause but are careless about how that cause affects readers who take the words to heart and act upon them. Lying about the effects of an action is very wrong yet, unfortunately, common among organizations that make money from the ignorance of others; however, teens who research valid sources and study the question critically will not be deceived.

Scenario 2



Below is a question/answer time between a student and a representative of an organization that promotes use of marijuana. Below each question/answer is the results of more research on the topic.

Student: How does marijuana affect your health?
Answer/Claim: Over 100 years of studies have been done on marijuana. The only proven health problem from smoking it is that it may be linked to bronchitis.

MORE RESEARCH:

- According to the American Family Physician, marijuana . . . intoxication lasts two to three hours. The active ingredient in marijuana, delta-9-tetrahydrocanniabinol, accumulates in fatty tissues, including the brain and reproductive organs.

Student: Does it affect my reproductive system?
Answer: No.

MORE RESEARCH:

- Potential adverse effects of marijuana on the reproductive system: reduced testicular size; lower testosterone levels; decreased libido; menstrual abnormalities; impotence; change in sperm morphology/motility; infertility; gynecomastia; abnormal ova; fetal exposure; prolonged childbirth; reduced fertility in offspring. Maternal exposure to marijuana during pregnancy may reduce the size of the fetus and the birth weight. A ten-fold increase in the risk of nonlymphoblastic leukemia in children whose mothers used marijuana before or during gestation has been reported. Marijuana may also increase the risk of chromosomal damage (including breakage and translocation), but this damage seems to be confined to somatic cells.

(John R. Hubbard, M.D., PH.D., Sharone E. Franco, M.D., and Emmanuel S. Onaivi, PH.D. Vanderbilt University School of Medicine, Nashville, TN; American Family Physician, Dec. 1999)

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Student: Is it addictive?
Answer: No. You cannot get addicted to marijuana.

MORE RESEARCH:

- An estimated 100,000 people in the United States seek treatment for marijuana addiction every year. (Anonymous source)

Student: Does marijuana make you lose interest in important things in life?
Answer: If you are responsible, you will carry on with your life like you are supposed to.

MORE RESEARCH:

- American Family Physician reports that users of marijuana often spend less time on homework, have lower grades and more delinquency, significantly higher rates of motor vehicle crashes, use of alcohol, nicotine and tranquilizers, use of sex as a coping mechanism, violent dreams, sleeplessness and psychiatric problems than non-users.

Understanding cause-effect relationships is very important. Think critically when reading material about things that may seem harmless but are quite otherwise in the light of more research. You are doing well and learning important critical thinking skills.

Continue to the Activities.

LIFE PRINCIPLE

"Knowledge is useless unless it is used."

—Anonymous



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Lesson 5

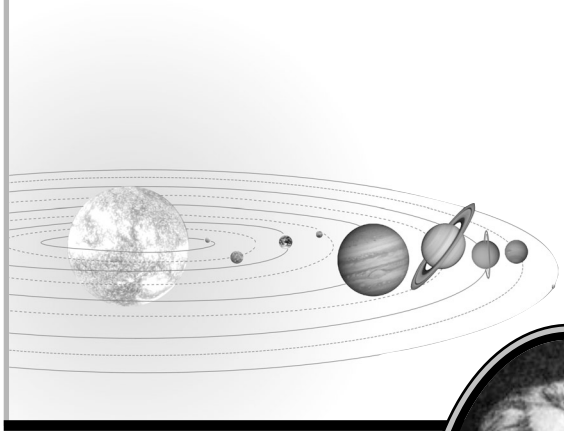
Critical Thinking

Chapter 3

JOHANNES KEPLER'S WAR WITH MARS

Section 1

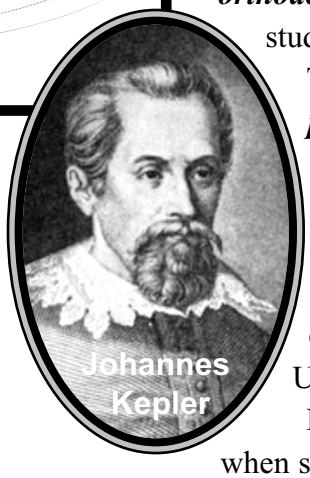
Lessons 1-5



VOCABULARY

Bastion: a well-fortified position
Lutheran orthodoxy: a system of belief based on grace from God rather than on actions of men
Astronomy: the scientific study of matter in outer space
Profoundly: in a manner of great depth or involvement
Solar system: the sun together with the planets and all other celestial bodies that orbit the sun
Circular: of or relating to a circle
Elliptical: oval or oblong in shape
Induce: to lead or move
Hypothesis: a proposal intended to explain certain facts
Disheveled: disorderly, messy
Plausible: having the impression of truth

Johannes Kepler (1571-1630) was born in Weil der Stadt, in the Holy Roman Empire that is now Germany. Kepler's early education was in a local school, then at a nearby seminary. Then, intending to become an ordained minister, the young man enrolled in the University of Tübingen, a ***bastion*** of ***Lutheran orthodoxy***. At Tübingen, Kepler began his study of ***astronomy***.



Johannes Kepler

Throughout his life, Kepler was a ***profoundly*** religious man. His writings contain numerous references to God. Kepler believed that his Christian duty was to understand the Universe as God created it. Moreover, Kepler was convinced that God had made the Universe according to a mathematical plan.

Kepler studied astronomy during a time when science scholars believed in the Ptotelmaic system, which was an incorrect conclusion about the ***Solar System***. The Ptotelmaic system was based on the conclusions of Aristotle and Ptolemy—that all seven planets (the moon, Mercury, Venus, Sun, Mars, Jupiter and Saturn) moved around the Earth.

An Earth-centered universe had been taught for 2000 years, until, in the 16th century, a Polish astronomer by the name of Nicolai Copernicus proposed that the Sun, rather than the Earth, was the center of the Solar System. At that time, scientists believed that the orbits of planets around the earth were ***circular*** (round) in pattern. Even though the Copernican System discounted the Earth as the center of the

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Solar System, Copernicus still held to the belief that the planets traveled in circular paths around the Sun.

Through inductive thinking and observations, Kepler was able to make many changes in what was believed to be scientific truth. Kepler's observations (or laws) have been proven accurate through modern knowledge and technology.

Kepler went to work for the renowned Danish astronomer, Tycho Brahe. The two did not get along well. As a result, Brahe gave Kepler the difficult task of understanding the orbit of the planet Mars. Some scholars believe that Brahe's motivation for giving the Mars project to Kepler was to occupy Kepler with an impossible task while Brahe worked on his theories of the Solar System. In a supreme irony, Kepler's observation of Mars led him to formulate the correct laws of planetary motion, which eventually allowed him to surpass Brahe in science history and notoriety.



Tycho Brahe

Kepler firmly believed in a Sun-centered orbit. He noted the position of the planet Mars during several points along its orbit. [The actual process of calculating mathematically the orbit of Mars was enormous; more than 1000 sheets of mathematical equations are still in existence. Kepler termed his years of observation "his war with Mars."] Through his dedication, he determined that planets move in ***elliptical*** orbits, rather than in circles, around the Sun, which we now know as Kepler's First Law.

In addition to establishing the Laws of Planetary Motion, Kepler's observations led him to determine that only six planets, rather than seven, were in the universe. He gave a new word to the world of astronomy by showing the Moon not to be a planet. He gave the moon the term "satellite," meaning "attendant." No one, thus far, has ever discovered a planet that did not follow "Kepler's Law" of planetary orbit. Through his observations, he identified a reoccurring pattern; that pattern drew him to conclusions that would shake the foundations of astronomy in the 1600s and set a course for science to which scientists still adhere. ■

INDUCTIVE REASONING

Inductive reasoning and *deductive* reasoning are used for basically the same purposes: to think through situations, to solve problems and to reach valid conclusions. When used correctly, both inductive and deductive reasoning can be powerful and persuasive in courtrooms, political debates, and in just about any situation where accurate decisions must be made. Although the two reasoning styles share the same purpose, they differ in procedure.



Inductive reasoning is the process of gathering facts and clues that ***induce*** you to reach a conclusion. Inductive thinking starts with a specific observation, then detects a pattern of regularity (or deviation from a pattern), then formulates a ***hypothesis*** and draws or formulates a conclusion. Inductive thinking includes the following elements: observation, pattern or lack of pattern, hypothesis and conclusion.

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Example #1:

Observation: You toss a rock into the air. The rock does not stay in the air; the rock falls back to earth.

Pattern: You now repeatedly toss the rock into the air; the rock repeatedly falls back to the ground.

Hypothesis: An unseen force pulls the rock back to earth.

Conclusion: Everything that goes up, must come down. (Newton's Law of Gravity)

Example #2:

Observations: 1. John usually arrives at school early.
2. John's appearance has always been important to him, especially his hair.
3. His clothes are usually freshly pressed.

Lack of pattern: 1. Today, John came to school late.
2. John's hair was uncombed.
3. His clothing was ***disheveled***.

Hypothesis: Some event caused John not to prepare as usual for school.

Conclusion: John overslept.

Adequate Proof for Your Conclusion

Critical thinking requires you to determine if your observations and experiences are reliable so that you may be able to draw valid conclusions. A valid conclusion is based upon a substantial amount of evidence. If your parents raised Siamese cats, and the only cats you had ever seen were Siamese, you might induce that all cats are Siamese. Even though you would have followed the guidelines for inductive thinking (*observation, pattern, hypothesis, conclusion*), the lack of inductive proof or evidence would have caused you to draw an invalid conclusion. Even though the only types of cats you had seen were Siamese, other types of cats do indeed exist. In order to reach a valid conclusion, you would need to conduct further research and investigation to produce more evidence other than your own experience. When looking for inductive proof, avoid the following errors:

- hasty generalizations (a general statement based on observations about specific members of a group, i.e. *all scientists study planets*)
- exclusion (not including important pieces of evidence, i.e. *not researching the works of other scientists, such as biologists, zoologists, chemists and archaeologists*)
- inductive leaps (a specific observation used as the basis for a general conclusion, i.e. *an unusual light in the sky proves UFOs exist*)

Such errors could cause your inductive conclusion not to be ***plausible***. Think how many years of research, calculations and experiments were needed to substantiate Johannes Kepler's claim that planetary orbits were elliptical rather than circular. Kepler did not generalize or exclude evidence, neither did he leap to conclusions. He carefully and meticulously gathered and examined his evidence.

You are doing well. Read the Life Principle on the next page, then continue to the Activities.

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LIFE PRINCIPLE



"He that will not reason is a bigot; he that cannot reason is a fool; and he that dares not reason is a slave."

—Sir William

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Lesson 6

Critical Thinking

Chapter 3

COURT IS IN SESSION

Section 2

Lessons 6-10



Nine-year-old Sally Orford banged her ***gavel***, which was really a stick, on the box that served as the judge's stand. "Facts are all we need to solve cases," said Judge Orford. "We have the facts. This case can be solved. Proceed, Mr. ***Prosecutor*** in the case of The People versus Morgan."

"Thank you, Your Honor," said nine-year-old Henry Oakley as he rose from his chair. He approached the jury panel and cleared his throat.

"Ladies and gentlemen. I will be brief. The evidence in this case points ***overwhelmingly*** to the ***accused***, Mr. Jonathan P. Morgan."

The six boys and girls ***comprising*** the jury looked at each other and nodded. Jonathan Morgan, age 5, with brown curly hair, and glasses, blushed and squatted a little lower behind the cardboard box which served as the desk for his defense attorney, Bruce Emerson.

"Your Honor, the case is clear," continued Henry. "While I have nothing personal against the accused, a wrong has been committed, and I therefore must proceed according to the ***dictates*** of my conscience."

"Please proceed, Mr. Oakley," Judge Orford broke in. "We don't have all day."

"Yes, Your Honor," Henry relied. "Ladies and gentlemen of the jury, a theft occurred in my mom's kitchen. She had made a batch of peanut butter cookies for the Senior Citizens Home. The bag, filled with those cookies less than two hours ago, is missing! Less than an hour ago the accused, Jonathan Morgan, was found under a chestnut tree, in his backyard, eating those very cookies."

VOCABULARY

Gavel: a small stick with a flattened knob on the end used by a judge, auctioneer or presiding officer to signal for attention or order or to signify the finality of a transaction
Prosecutor: an attorney who pursues court action against a defendant
Overwhelmingly: relentlessly, irresistibly
Accuse: charge, lay blame against someone
Comprise: contain, include
Dictate: rule, guideline
Logic: reasoned thinking
Interrupt: disturb, hinder

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"But they were mine!" Jonathan insisted.

"No more outbursts like that in my courtroom, Jonathan!" reprimanded Judge Orford with a frown. "All courtrooms require orderly, respectful behavior. You are in a courtroom. Your behavior will reflect that respect."

"The ***logic*** in this case is simple," Henry continued. "Mom's cookies were intended for the Senior Citizens Home. Jonathan was found eating the cookies. He obviously took them without permission. In other words, he stole them. Open and shut case. That is all, Your Honor."

"But Your Honorfulness," objected Jonathan. "I . . . Henry's Mom . . . she . . ."

"Jonathan, if you ***interrupt*** again, I shall have you removed from the courtroom!" Judge Sally turned to the defense attorney. "Your turn, Counselor."

Attorney Bruce Emerson, eight years old, rose to his feet and addressed the jury. "Ladies and gentlemen of the jury, the logic of my ***learned*** friend and ***colleague***, Mr. Henry Oakley, is completely off base. Yes, cookies, from Henry's Mom's kitchen, intended for the Senior Citizens Home, appear to be missing. Jonathan was discovered eating cookies. My conclusion is that they were given to him."

The jury broke into laughter. Henry Oakley ***scoffed***. Jonathan blushed. Judge Orford banged her stick gavel on the cardboard box. "Silence!" she cried. "Proceed, Mr. Emerson!"

"You see, ladies and gentlemen of the jury . . ." began Bruce.

"Excuse me, Your Honor," a voice broke in. "I think I can explain everything."

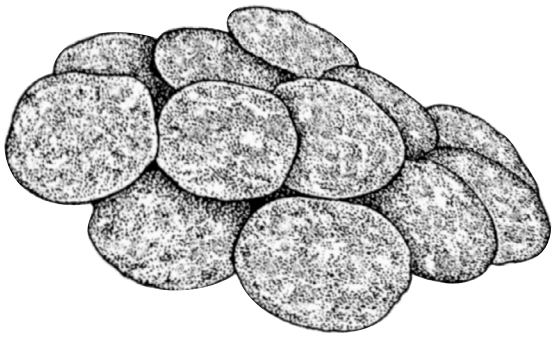
Everyone turned and saw Henry's mother, smiling, her arms folded, standing with two elderly ladies, munching peanut butter cookies.

"I heard both of your arguments, boys, and you, son, are incorrect in your conclusion. The facts are these: Whoever helped me bake the cookies was allowed to have some to eat. Jonathan helped me bake the cookies, so I gave him some. As to the other missing cookies . . ." Mrs. Oakley shrugged and looked at her elderly companions, each chomping on freshly baked cookies.

The jury was stunned. Henry was speechless. Jonathan beamed. Judge Sally broke the silence. "Jonathan, this court finds you not guilty of the charge of cookie theft." Judge Sally slammed the gavel onto the cardboard box. In a loud, authoritative voice, she proclaimed, "Case ***dismissed***!" ■

VOCABULARY

Learned: a person who is considered wise or well educated
Colleague: partner, co-worker
Scoff: mock, laugh at
Dismiss: send away, let go, release



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DEDUCTIVE REASONING

In the previous lesson, you learned that inductive reasoning draws conclusions from gathered evidence. Deductive reasoning draws conclusions through syllogisms. A *syllogism* is a three-part logical formula consisting of two premises and one conclusion.

In a syllogism, the first premise is a general statement that applies to all situations. The second premise is a statement that applies to a specific situation. The conclusion is a logical statement deduced from the two premises. The premises and conclusion proceed in a step-by-step logical relationship. If the premises are logically related, then the conclusion is valid. A valid syllogism will follow this formula:

A=B (first premise)

C=A (second premise)

C=B (conclusion)

The first premise is a general statement for all situations.

- All courtrooms (A) require orderly, respectfully behavior (B). (A=B)

The second premise is a specific statement applying to this situation.

- You (C) are in a courtroom (A). (C=A)

The conclusion is deduced from the two premises.

- You (C) will be orderly and respectful (B). (C=B)

Keep practicing!

1st premise: All men (A) are mortal (B). (general statement about all men) (A=B)
2nd premise: Socrates (C) was a man (A). (specific statement about one man) (C=A)
Conclusion: Socrates (C) was mortal (B). (based on the two premises) (C=B)

1st premise: Dogs (A) are predators (B). (general statement about all dogs) (A=B)
2nd premise: Rusty (C) is a dog (A). (specific statement about one dog) (C=A)
Conclusion: Rusty (C) is a predator (B). (based on the two premises) (C=B)

Now, see if you can spot a faulty syllogism (one that does not follow the formula).

1st premise: The cookies (A) were for the Senior Citizens Home (B).
2nd premise: Jonathan (C) was eating (D) the cookies (A).
Conclusion: Jonathan (C) did not have permission (E) to eat (D) the cookies (A).

This syllogism has too many factors to follow the correct formula. The factors are:

- the cookies
- the Senior Citizens Home
- Jonathan
- eating the cookies
- permission

The formula (A=B), (C=A), (C=B) does not apply. The conclusion is invalid because the syllogism does not logically follow the formula and has extra factors (D) and (E). If you have a situation like this, with too many factors to deduce a logical conclusion, investigate the situation further, before "jumping" to a conclusion.

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Read the next syllogism and try to spot its faults.

1st premise: Moms (A) deserve respect (B). (general statement about all moms) (A=B)
2nd premise: Mrs. Tsu (C) deserves respect (B). (specific statement about one woman) (C=B)
Conclusion: Mrs. Tsu (C) is a mom (A). (based on the two premises) (C=A)

Uh, oh! the syllogism has some problems. First, examine whether it follows the correct formula.

Formula of the above syllogism

A=B (first premise)

C=B (second premise)

C=A (conclusion)

No, the syllogism does not follow the correct formula. So, the invalid conclusion is that Mrs. Tsu is a mom; however, Mrs. Tsu may not have any children at all! Let's correct the syllogism.

1st premise: Moms (A) deserve respect (B). (general statement about all moms) (A=B)
2nd premise: Mrs. Tsu (C) is a mom (A). (specific statement about one woman) (C=A)
Conclusion: Mrs. Tsu (C) deserves respect (B). (based on the two premises) (C=B)

Now the syllogism is correct!

Correct formula

A=B (first premise)

C=A (second premise)

C=B (conclusion)

Let's practice again with another faulty syllogism.

1st premise: My dad (A) works with lawyers (B). (A=B)
2nd premise: Mrs. Tsu (C) is a lawyer (B). (C=B)
Conclusion: My dad (A) works with Mrs. Tsu (C). (A=C)

The syllogism has an invalid conclusion because the syllogism does not follow the formula. Further investigation would have to be done to verify if in fact, my dad does work with Mrs. Tsu; however, my dad may not know Mrs. Tsu at all!

Learning how to deduce will help you become a critical thinker and an effective communicator. This skill will also help you to perceive faulty syllogisms in other people's arguments.

You are doing well.
Continue to the Activities.

Life Principle

"A prudent question is one-half of wisdom."

—Francis Bacon



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Lesson 7

Critical Thinking

Chapter 3

Section 2

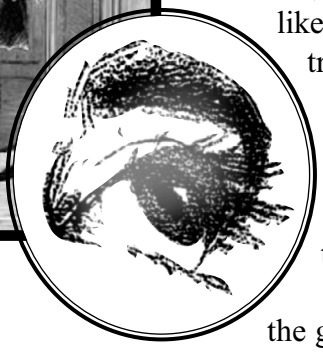
Lessons 6-10

THE BLIND MAN WHO CAUGHT THE DOCTOR



A well-to-do gentleman woke up one morning to discover that he had become blind overnight. In alarm, he ***summoned*** an ***ophthalmologist***. The particular doctor who was summoned was not only a man of great ***renown***, but also of ***unscrupulous*** character.

"Because you are a healer of great renown," said the sightless gentlemen, "I would like to strike a bargain with you. If your treatment restores my eyesight, then a most handsome reward is yours. But if my ***malady*** still remains after a reasonable amount of time, then you receive nothing. What do you think of this arrangement?"



The ophthalmologist considered the gentleman's offer and looked around his home. "The gent is comfortably well off," the doctor thought to himself, "and he has many goodly possessions. If my dealings are crafty enough, then a comfortable future is in store for me."

"If you are completely content with the terms," he said to the gent kindly, "then I accept them with honor."

"Excellent!" replied the gentleman. "A deal that is profitable for both parties is a good deal. So then, our arrangement is concluded."

The two men shook hands and bid one another good day. Leaving the house, the ophthalmologist smiled slyly to himself and thought, "I have no idea as to the cause of his blindness. If he thinks my cure is sure, then he is going to be in for a surprise."

The ophthalmologist soon began to call regularly at the gentleman's house. But he only pretended to treat the man's eyes. Meanwhile, each time the ophthalmologist left the house, he carried off a piece of the gentleman's goods, bit by bit.

VOCABULARY

Summoned: called, requested the presence of
Ophthalmologist: a doctor who treats eyes
Renown: well known, notable
Unscrupulous: dishonorable, full of vices, dishonest
Malady: an illness or sickness
Absolute: not limited by exceptions

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After a time, whatever had been causing the gentleman's blindness disappeared, and he found his sight once again. Thereupon, the ophthalmologist demanded the stipulated fee. But discovering that nearly all of his possessions had disappeared since the coming of the ophthalmologist, the patient kept putting him off with excuses. At length, the ophthalmologist grew impatient and had his patient summoned before a judge.

"Come and present your case, sir," the judge said to the gentleman, "A man who is innocent of the charge has nothing to fear."

Stepping forward, the man said: "What the ophthalmologist says is true, sure enough. If my sight was restored, then he was to receive a handsome reward. If my eyes remained blind, then he was to receive nothing. Now, then, he says that I am cured, but it cannot be true. For before my malady came upon me I could see all sorts of furniture and goods in my house. But now I cannot see a single stick, yet he tells me that he has restored my sight!" ■

(Aesop's Fable)

CONDITIONAL STATEMENTS



A *conditional statement* is a statement that may or may not be ***absolute*** and is proven by using inductive thinking. A conditional statement is often written in an *If/Then* formula. The *If* part is the hypothesis; the *Then* part is the conclusion.

If/Then formula: If your treatment restores my eyesight, then you will be rewarded.
Hypothesis: Your treatment will restore my eyesight.
Conclusion: You will be rewarded.

If/Then formula: If I call a doctor, then he will help me see again.
Hypothesis: I will call a doctor.
Conclusion: He will help me see again.

The words *if* and *then* do not have to be present for a sentence to be a conditional statement. For example, the sentence: *<u>If</u> a person has an eye problem, <u>then</u> he is treated by an ophthalmologist* could easily be written as: *A person with an eye problem is treated by an ophthalmologist.* Notice that the If/Then was dropped, and the sentence did not lose its meaning.

A conditional statement may be proven as absolute or not. If an exception can be found to the conditional statement, then it is not absolute. An exception is called a *counter example*.

THE COUNTER EXAMPLE

A *counter example* is a statement that provides an exception or alternative to the original conditional statement. If a counter example can be found for the original conditional statement, then the original conditional statement is not absolute.

Conditional Statement: A person with an eye problem (hypothesis) is treated by an <u>ophthalmologist</u> (conclusion).

Counter Example: A person with an eye problem (hypothesis) is treated by an <u>optometrist</u> (conclusion).

•Both *optometrists* and *ophthalmologists* treat people with eye problems. The optometrist is an alternative to the ophthalmologist, and therefore proves that the conditional statement is not absolute.

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The Converse

To write the converse of a statement, switch the hypothesis and the conclusion. Often, a conditional statement may be absolute, but the converse may not be absolute, and vice versa. You may determine if the conditional statement or its converse is absolute by whether or not a counter example can be found for either.

Conditional Statement #1: If a person has an eye problem (hypothesis), then he is treated by an ophthalmologist (conclusion).

Converse (switch the hypothesis and the conclusion): If a person is treated by an ophthalmologist (conclusion), then the person has an eye problem (hypothesis).

- The original conditional statement is not absolute; however, the converse of the original statement is absolute because it has no counter example. Ophthalmologists treat only people with eye problems. A person would not go to an ophthalmologist unless the person had an eye problem.

Conditional Statement #2: If a person steals (hypothesis), then he is dishonest (conclusion).

Converse (switch the hypothesis and the conclusion): If a person is dishonest (conclusion), he steals (hypothesis).

- The original conditional statement is absolute; however, the converse is not absolute: a dishonest person may not steal, he may lie instead, or even cheat (a counter example).

The Inverse

To write the inverse of a conditional statement, change the hypothesis and conclusion from negative to positive or vice versa. In the original statement, if both the hypothesis and the conclusion are negative, the inverse will result in both being positive. In the original statement, if both the hypothesis and the conclusion are positive, the inverse will result in both being negative. In the original statement, if the hypothesis or the conclusion is positive or negative, the inverse will make them the opposite.

Conditional Statement #1: A person with an eye problem (hypothesis) is treated by an ophthalmologist (conclusion).
- Notice that both the hypothesis and the conclusion are positive.

Inverse: A person who does *not* have an eye problem (hypothesis) is *not* treated by an ophthalmologist (conclusion).
- Notice that the word *not* was inserted into both the hypothesis and the conclusion to make them both negative.

Conditional Statement #2: If a person is not dishonest, he will not steal.
- Notice that both the hypothesis and the conclusion are negative.

Inverse: If a person is dishonest, he will steal.
- Notice that the word *not* was removed from both the hypothesis and the conclusion, making them both positive.

Conditional Statement #3: If you are blind, you cannot see.
- Notice that the hypothesis is positive, but the conclusion is negative.

Inverse: If you are *not* blind, then you *can* see.
- Notice that the hypothesis is now negative, but the conclusion is positive.

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THE CONTRAPOSITIVE

Get ready to stretch your brain! This is heavy thinking, but you can do it! The *contrapositive* is the negative of the converse form. To write the contrapositive of a conditional statement, insert the word *not* into the hypothesis and conclusion of the converse form.

Conditional Statement #1: A person with an eye problem (hypothesis) is treated by an ophthalmologist (conclusion).

Converse (switch the hypothesis and the conclusion): A person is treated by an ophthalmologist (conclusion) if the person has an eye problem (hypothesis).

Contrapositive (insert the word <u>not</u> into both the hypothesis and the conclusion): A person is <u>not</u> treated by an ophthalmologist (conclusion) if the person does <u>not</u> have an eye problem (hypothesis).

Conditional Statement #2: If a violin teacher is exceptional (hypothesis), his students must be excellent violinists (conclusion).

Converse (switch the hypothesis and the conclusion): If the violin students are excellent (conclusion), then the violin teacher must be exceptional (hypothesis).

Contrapositive (insert the word <u>not</u> into both the hypothesis and the conclusion): If the violin students are <u>not</u> excellent (conclusion), then the violin teacher must <u>not</u> be exceptional (hypothesis).

A conditional statement should be equivalent to its contrapositive form. *Equivalent* means that the conditional statement and its contrapositive form are both absolute or both not absolute.

Conditional Statement #1: If a violin teacher is exceptional, his students must be excellent violinists.

Converse: If the violin students are excellent, then the teacher must be exceptional.

Contrapositive: If the violin students are <u>not</u> excellent, then the teacher must <u>not</u> be exceptional.

- All three statements are not absolute: The teacher may be exceptional, but excellent violin playing requires practice. If a student is not an excellent violinist, the teacher may not be to blame. Also, if a student is an exceptional violinist, the teacher may or may not be exceptional. Many students perform beyond the teacher's abilities or expectations.

Conditional Statement #2: If a substance is water, then its chemical formula is H_2O. (absolute)

Converse: If a chemical's formula is H_2O, then it is water. (absolute)

Contrapositive: If a chemical's formula is not H_2O, then it is not water. (absolute)

- The conditional statement is equivalent to its contrapositive form: both are absolute.

Wow! What a brain work out!
You are performing marvelously!
Continue to the Activities.

Life Principle



"Abilities wither under fault-finding; blossom under encouragement."

—Donald Laird

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Lesson 8

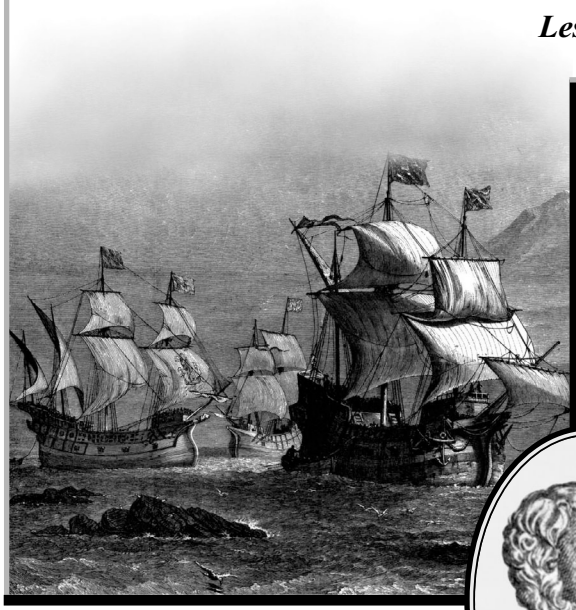
Critical Thinking

Chapter 3

MAGELLAN GOES WEST TO REACH EAST

Section 2

Lessons 6-10





In the year AD 1480, the Magellan family of Sabrosa, Portugal announced the birth of a new son, Ferdinand. The Magellan's were ***well to do***, so Ferdinand was privileged to spend much of his boyhood as a ***page*** in the ***court*** of the Portuguese royal family. The court at that time was abuzz with tales of conquest and exploration. Ferdinand was influenced by those tales, and in his twenties ***embarked*** upon his own career of adventure.

The adventures began in 1506 with a voyage eastward to the far distant Portuguese East Indies. He served there as a soldier and explorer for 6 years, then returned with the rank of captain. He resumed duties in the North African land of Morocco, but while there, he received wounds that left him permanently lame. However, neither lameness nor any other ***obstacle*** could ***quell*** his adventurous spirit.

Returning to Portugal, Ferdinand urged the king to support the idea of reaching the Portuguese East Indies by sailing west. Portugal was already prospering from its control of the eastern trade route to the East Indies, so the king rejected Ferdinand's plan. Furthermore, the king rejected Ferdinand's request for a larger ***pension*** due to his lameness. In frustration, Ferdinand sought the support of Charles I, King of Spain. Ferdinand's idea interested the Spanish monarch because it would give Spain a new route to the riches of the East.

In the autumn of 1519, Captain Magellan led an expedition of five ships across the Atlantic Ocean. The ocean crossing went well, but soon the ***indomitable*** captain faced great obstacles. One ship was wrecked, ***mutiny*** flared, and a second ship abandoned the mission. Nonetheless, Magellan

VOCABULARY

Well to do: slang meaning moderately wealthy
Page: boy servant
Court: the area in which a governing monarch lives, presides or inhabits
Embark: to set out, to begin a journey
Obstacle: a barrier that keeps a person from obtaining his goal
Quell: subdue, suppress
Pension: a sum of money paid regularly
Indomitable: unyielding, unconquerable
Mutiny: rebellion on a ship

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conquered those obstacles and pressed on, entering a vast body of water that was so calm Ferdinand named it the Pacific, or peaceful one. Three full months of westward sailing severely tested the explorer's ***resolve***, but, at last, a large ***archipelago*** appeared. Clearly, the expedition had reached the East Indies!

Some of history's ***notable*** events are begun by one person and finished by another. This was the case with the Magellan expedition. Regrettably, Magellan was killed in the Philippine islands while fighting the enemies of a chief with whom Ferdinand had formed an ***alliance***. The officers and crew of the remaining two ships managed to sail further west to the Spice Islands. Ten months later, with a rich cargo of spices, one of the ships, the *Victoria*, finally reached Spain.

The Magellan expedition proved to be a financial success for Spain. The *Victoria's* rich cargo was the beginning of a long and prosperous trade between Spain and the Philippine islands. The adventurers had followed the westward bearing of the compass needle for many thousands of miles and had ended up where they had started. In the minds of geographers, scientists and many other people, such a voyage left only one possible conclusion—the Earth was round—and ships could sail west to reach east! ■

COROLLARY STATEMENTS



A *corollary* is a statement that does not require proof because it is based on a theorem already proven. A *theorem* is a statement that is proven or presumed to be true. For example, scientists have proven the theorem that lead is heavier than water. The corollary statement *when a piece of lead is dropped into a pool of water, the lead will sink* is presumed to be true because the theorem that *lead is heavier than water* has been proven to be true.

The theorem *the Earth is round* was proven hundreds of years ago. The statement *the East Indies can be reached by sailing west from Spain* is a corollary statement. This statement does not need to be proven because the theorem upon which the statement is based has already been proven. Because the Earth is round, you can indeed end up in the East by sailing west.

Probably one of the most well known corollary statements was made by Abraham Lincoln on the issue of slavery. He said, "A house divided against itself cannot stand. . . . This government cannot permanently endure half slave and half free." Lincoln stated the theorem first: *a house divided against itself cannot stand*. Based on that theorem, Lincoln's next statement: *this government cannot permanently endure half slave and half free* can be considered as true, because the theorem was true.

Recognizing and making corollary statements requires practice and focus. Carefully read the next several examples. The more you expose yourself to this level of critical thinking, the more comfortable you will be with corollary statements.

VOCABULARY

Resolve: determination, strength of purpose
Archipelago: group (usually large) of islands
Notable: worthy of being given attention or notice
Alliance: association of people united for a common purpose

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Theorem: Cars require oil to operate.

Corollary: Without oil, your car will not operate.

Explanation: Cars have been proven to require oil to operate. Therefore, the natural consequence of the car being out of oil is that it will not operate.

Theorem: Humans require air for life.

Corollary: Without air, humans will die.

Explanation: Humans have been proven to require air to live. Therefore, the natural consequence of humans not having air is death.

Theorem: Plants grow when watered.

Corollary: Without water, plants will not grow.

Theorem: Muscles expand when exercised.

Corollary: If you lift weights, you will become stronger.

Theorem: Gravity causes objects to move downward.

Corollary: If you fall overboard, you will drop into the sea.

Theorem: Paper is combustible.

Corollary: If you drop a book into a fire, the book will be destroyed.

Continue to the Activities.

Life Principle



"Many a good man has failed because he had his wishbone where his backbone should have been."

—(HB)

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Lesson 9

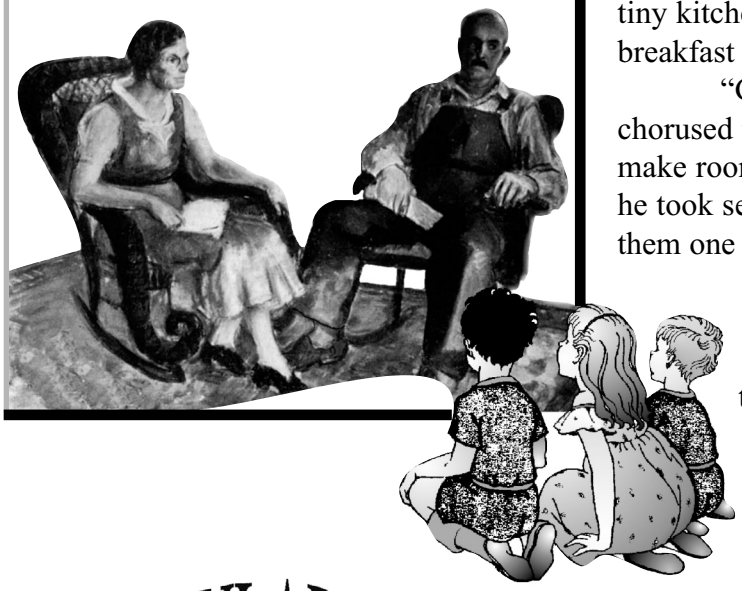
Critical Thinking

Chapter 3

Section 2

Lessons 6-10

GOOD DAYS WITH POP POP AND MOM MOM



"Good morning!" The words seemed to come out of nowhere, their singsong tone adding warmth and joy to the tiny kitchen where six children sat munching breakfast cereal.

"Good morning, Pop Pop!" The children chorused then ***scooted*** their chairs together to make room for their grandfather. Sitting down, he took several vitamin pills and swallowed them one at a time with water from a plastic cup.

At a nearby counter, Mom Mom poured boiling water over the instant coffee crystals at the bottom of a mug that had been Pop Pop's favorite for the past twenty years. Stirring the steaming liquid, Mom Mom placed the cup on the table, and, as if on ***cue***, asked, "Are you ready for the paper?"

Pop Pop nodded, and Mom Mom sent the youngsters ***bustling*** away to find their father, leaving Pop Pop and Mom Mom to enjoy a few quiet moments together. Pop Pop had *macular degeneration*, an eye condition that causes near blindness. Each morning, while Pop Pop sipped his coffee and ate his cereal, Mom Mom read articles from the *Philadelphia Inquirer*, the newspaper that was delivered each morning to their home in the northeast side of the city.

"Let's start with the Phillie's," Pop Pop said to his wife sitting across the table. "Yesterday was Opening Day."

The Phillie's had lost the previous day, but Pop Pop always enjoyed the sports writer's version of the game:

Opening Day was a pitcher's nightmare as the Philadelphia Phillie's and Los Angeles Dodger's combined for dozens of hits, including a fistful of home runs, in a Dodger victory before the sell-out crowd in Philadelphia.

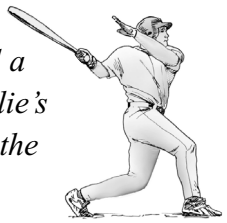
VOCABULARY

Scoot: move, shift
Cue: preplanned signal
Bustling: busy, active
Caress: gently touch
Drama: conflict, tense excitement
Proposal: idea, notion
Impromptu: spontaneous, unprepared
Embellishments: added "frills" for attractiveness
Redressing: setting right, correcting

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"Oh brother!" Pop Pop interrupted. "I hope this season is better than last year!" Mom Mom nodded and continued reading:

*Warm sunshine and gentle winds **caressed** the 45,310 baseball fans who plunked down an average of 25 dollars apiece (price included parking, a hot dog, and a soda) to watch the Phillie's and the Dodger's open the 1982 National League baseball season at noon on Wednesday. Yes, the hometown fans came away with a disappointing 9-8 loss, but surely the **drama** and firepower of the game made it all worthwhile. In a game that lasted 3 and one-half hours, a total of 13 pitchers visited the mound, giving up a total of 32 hits, including 10 doubles, 3 triples and 8 home runs.*



"Okay, Helen," Pop Pop sighed. "I've heard enough. What was President Reagan up to yesterday?"

Mom Mom turned to the front section of the paper, spotted an article on page one, and began reading:

*The majority Democrats in Congress were in an uproar on Wednesday over the latest White House tax-cut **proposal**.*

At that moment, Pop Pop's brother, Ottie, entered the room. "It's our money!" he declared. "They always raise a ruckus. Whenever the president tries to help the public and let people handle their own money, the big spenders holler!" Ottie, whose real name was Elwood, was a retired pharmacist, who read both Philadelphia newspapers each day and several books a month. Mom Mom continued to read:

*President Reagan yesterday returned from throwing the first pitch at Veteran Stadium in Philadelphia and delivered a briefly-worded, but hard-hitting message on the White House lawn. The message came in an **impromptu** gathering of no more than a dozen reporters.*

Looking relaxed and confident, the President called on the Hill to put its trust in the American system by quickly passing his new tax-cut bill. He went on to declare his certainty that the tax cuts would bring enormous progress as the United States recovers from the turmoil of the post-Watergate era. The Democratic majority whip could not be reached for comment, but his spokesman called the President's words an attack that would not go unanswered.

"Okay," said Pop Pop. "That's enough! You're going shopping with Ottie, and I'd better go and see what those kids are up to."

Pop Pop slowly stood and felt for the posts of the kitchen door. He walked uncertainly into the living room where his grandchildren were playing. He could feel their energy, and he thrived on it. ■

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SUMMARIZING



To *summarize* is to state in a concise form. When a person summarizes a story, the person tells the story in a short, quick version. A summary does not provide all of the details, just the main facts. A summary of the main facts of any story, article or event can be learned by asking these key questions:

Who: The main actors
What: The main events
Where: The main locations
When: The main times

Notice how the answers to these questions produce a summary of the vignette:

Who: Pop Pop and Mom Mom (husband and wife and grandparents to the children), Ottie (Pop Pop's brother) and the children
What: family discussion (Mom Mom reads the story of the Opening Day game and an article about President Reagan to Pop Pop; Ottie listens and responds to the article about President Reagan)
Where: kitchen dining table at the home of Pop Pop and Mom Mom in Philadelphia
When: spring morning at the beginning of the major league baseball season

Now, putting all of this information together, the story can be summarized concisely. The information in the summary does not have to appear in the order of the questions.

One spring morning (when)*, Pop Pop and his wife, Mom Mom* (who)*, sat at the kitchen dining table in their home in Philadelphia* (where)*. Pop Pop was greatly interested in the major league baseball season which had begun the day before. Pop Pop was partially blind, so Mom Mom read aloud the newspaper articles about baseball's Opening Day game and about President Reagan* (what)*. Ottie, Pop Pop's brother* (who)*, joins the pair and comments on the articles* (what)*.*

Remember, a good summary is brief and includes the most important information: who, what, where and when. In the vignette, a few newspaper articles were included. Notice how the writer did not include all possible information about the game or about the president. The writer included just enough information to cover the basics and to interest the readers.
Read the following story about Elizabeth Fry. In the Activities, you will summarize it.

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ELIZABETH FRY (1780–1845)

Elizabeth Gurney Fry was born May 21, 1780, in Norwich, England. She had two older sisters. Her father was a wealthy Quaker who was a manufacturer. However, the Gurney family was not "typically" Quaker.

Members of this religious group were referred to as "plain Quakers," because most wore simple clothing of plain colors, with no ***embellishments*** of any kind. The Gurney sisters, however, stood out because of their bright clothes, ribbons, and their fashionable manners. Their vivid colors and silk gowns were shocking enough, but furthermore, the Gurney sisters did not always attend all the meetings the way others thought the sisters should.



Elizabeth Fry

Throughout her life, Elizabeth (Betsy) kept a diary. From it we know that she admired and adored her mother, Catherine Gurney, who was the greatest influence in Betsy's life. In a day when only boys received a formal education, Betsy's mother believed that her daughters should be educated, as well. Unlike most of the girls of the time, Betsy learned history, geography, French, and Latin. Mrs. Gurney also taught her children from the Bible.

From her mother, Betsy learned to care for less fortunate people. When Mrs. Gurney visited sick and poor neighbors, Elizabeth often tagged along. These visits made lasting impressions on the young girl's heart.

When Betsy was twelve years of age, she was devastated by her mother's death. Within a few years, Betsy's life began to change, and she began to take her faith more seriously. She wrote in her diary of going to a church service (wearing purple boots with scarlet laces) where she heard William Savery, an American Quaker, speak. After the church service, the Gurneys and Mr. Savery dined at Betsy's uncle's house. Betsy was deeply impressed by Mr. Savery. She wrote in her journal, "He is a truly good man. I have felt there is a God."

Betsy found herself enjoying the theater and opera less and less, and enjoying the simple life of the plain Quakers more and more. For the Quakers, spending time with family and friends provided ample entertainment, and the Quakers happily gave their free time to meet the needs of their neighbors.

Betsy began to dress and speak like the plain Quakers (using "thee" and "thou"). As others saw the changes in Betsy's life, they realized that things other than "having fun" had become more important to her. As a result, Betsy's friends stopped inviting her to social events.

Betsy quietly accepted the "snobbing" by her friends and went about her business of helping others. She started a Sunday school where she invested significant time teaching students to read and write. These were poor children who were called by some, "Betsy's imps."

In 1799, at the age of 19, Betsy met Joseph Fry who was impressed with Betsy. Soon, Joseph proposed marriage. At first, Joseph was boring; but over time, Betsy came to love him. They married in August 1800, and Joseph turned out to be the best choice for Betsy. Joseph was supportive and encouraging of Betsy's many social projects, and their marriage was successful and happy. Over the next twenty years, Elizabeth gave birth to twelve children. With the help of servants and sisters, Betsy and most of her children remained healthy and strong.

Betsy soon became known for her charitable work, and in 1812 she met Stephen Grellet. He had become appalled at the conditions he had witnessed in the women's

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prison at Newgate. He appealed to Betsy for help, and she immediately went to see for herself.

What she saw was horrifying. Women slept on cold stone floors. Newborn babies had no clothing or diapers. Betsy observed two women stripping rags off a dead child in order to clothe another child. Betsy prayed with these women, who were greatly impressed with Betsy's love and concern for them. Betsy and her sister-in-law returned home to collect warm clothes and straw for beds to comfort the prisoners who were sick.



Elizabeth Fry teaching women in prison

On one of Betsy's visits, two women were entangled in a fight. The guards did not want to let Betsy inside, fearing for her safety. She insisted and was allowed entrance. Calmly, without fear, she began speaking to the inmates as a mother to children. She had recently lost her four-year-old daughter, and the women sensed Betsy's tenderness and sincerity. They began to listen. Betsy shared with them ways to improve their conditions. She suggested starting a school. One of the women volunteered to be the teacher. When Betsy returned the next day, the women had cleaned the prison and made detailed plans for a school.

Elizabeth sought and won the approval of the prison governor and other officials for the school. She organized twelve women into a committee called "The Association for the Improvement of the Female Prisoners in Newgate." Betsy arranged for a matron to supervise the women.

After the school began, materials were provided so the women could sew, knit, and make other goods to sell. With the income earned from selling their products, the prisoners could buy food, clothing, and bedding. Someone from the outside community was scheduled to visit each day to bring the women news and to take care of any concerns or answer any questions.

Another area that improved under the leadership of Elizabeth Fry was the transportation of prisoners to the penal colonies in Australia. The women were taken in open wagons to the waiting ships. Along the way, people threw rocks and shouted insults. Betsy arranged for prisoners to be transported in covered wagons, so the prisoners would not be exposed to the hostilities. The association provided each prisoner with a bag of useful items and warm quilts for the voyage from England to Australia. Mrs. Fry often made personal visits to the prison ships over the next twenty years.

Her compassion for downtrodden people led Mrs. Fry to establish libraries, set up a training school for nurses, and provide food and shelter for the homeless. News of her efforts to reform prison conditions led to similar efforts by other towns in England, Russia and other European countries. Queen Victoria of England donated money to Elizabeth's cause and gave her a royal audience. Mrs. Fry was invited by the royalty of other nations to visit and share ideas on social reform. The king of Prussia paid a visit to Mrs. Fry's own home and dined with her.

Elizabeth Fry's work was not without criticism. In 1823, the Prison Act was passed. It required communities to be more humanitarian in the prisons. Local officials complained about the need to spend more money. Some prisoners complained because they could no longer drink liquor, gamble, or

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read licentious books. Other people accused Betsy of neglecting her own family, although her children did not feel neglected.

Today the Council of Elizabeth Fry Societies of Ontario continues Elizabeth Fry's example of ***redressing*** injustice in the prison system. Certainly, the influence of Elizabeth Fry has vastly improved the lives of women prisoners. Her compassion for people in need would not allow her to sit and do nothing. Her courage compelled her to "take on" a system that was dominated by strong, fearless, and occasionally ruthless men. Her strength of character was stronger than, and prevailed over, the opposition.

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Continue to the Activities where you will summarize the story of Elizabeth Fry.

Life Principle

"Those who bring sunshine to the lives of others cannot keep it from themselves."

—(HB)



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Chapter 3

Lesson 10

Critical Thinking

Section 2

Lessons 6-10

THE FATE OF THE WORLD



"The end is near! The end of the world is near!" ***Passersby*** heard the man with the long gray hair and shaggy beard shout the words above the din of the busy street, but no one bothered to stop and ask for an explanation. The man had been there at the same time, the same place, with the same message, for months. In New York City, nothing seems to be new for more than five minutes . . . .



Yet, the scene seemed appropriate for the man standing outside the gleaming 50-story Holcroft Hotel in downtown New York City, which at that time was hosting several thousand ***futurists***.

Respect for futurists has grown in recent decades. Among the best sellers each year, futurist books and tapes announce what to expect near and far. They predict trends in technology, new jobs and careers in the coming decade. Dangerous developments in the environment are noted. ***Dire*** warnings about political and economic changes are among the topics of discussion. Of interest to all are suggestions about what new art, music and fashion are on the horizon in countries around the world. Many corporations, industries, governments and individuals include futurists' predictions in planning and decision making.

The convention was now in its third and final day, and the time had arrived for final statements from a ***panel*** of four leading members of the American Futurist Community (AFC): Alice Feather, professor of ***sociology*****;** Juliet Barzone, a self-appointed ***naturalist*****;** Oswald Geldorf, technology researcher; Xander Polyani, ***industrialist***.

As the panel members took their places behind the microphones, a hush fell over the hall. Professor Feather spoke

VOCABULARY

Passerby: a person who walks by
Futurist: person who studies trends that relate to the future
Dire: terrible, frightful
Panel: group of people chosen to comment on an issue
Sociology: study of society, human community
Naturalist: an expert on nature
Industrialist: a person who studies industry
Poll: survey, sampling
Dispel: to get rid of, to scatter
Recreational: for pleasure or fun
Stimulant: something that causes increased activity or interest
Purpose driven: living with a goal and purpose, not wasteful or unwise in actions
Impair: to hinder performance

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first. “America is aging. In the last ten years the percentage of people reaching retirement age has increased by more than 15%. The number of people under the age of 25 has decreased. These facts point to a rather disturbing trend of zero-population growth. By the year 2025, the U.S. population will have shrunk by 25%, leaving entire states with little more than a few thousand people . . . .”

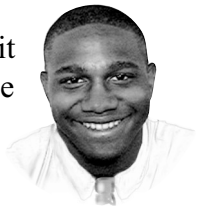
Mr. Geldorf stood and said: “Even as we speak, film technology is making great strides. Special effects and digital effects in the industry will exclude the need for live actors in five years. Viewers will not be able to tell the difference between the real and the digital . . . .”

Naturalist Juliet Barzone was next. “In ten years, no frogs will remain anywhere in the world. They will become extinct due to starvation. Too many people are using bug zappers and fly swatters, killing the bugs necessary to sustain frogs.”

Finally, Xander Polyani spoke. “In little more than ten years, America’s highways will be empty. Americans will be flying PHs (personal helicopters) to the mall, to work, to the ballpark. The copters will be electrically-powered. No more pollution!”

In a ***poll*** following the discussion, guests were asked to vote for the most convincing futurist. Professor Alice Feather received the most votes. ■

PREDICTION



To *predict* means to “say beforehand” or “say what is going to happen before it happens.” A *prediction* is an informed presumption based on information and evidence that can be understood and interpreted. A prediction is based on patterns. Many predictions are made daily in our culture: meteorologists predict what the weather will be tomorrow, next week, next month; economists predict what will take place in business, trade and the stock market; sociologists predict human behavior in communities and the kinds of laws and provisions that will be needed for protection and sustenance; sportscasters predict what teams will win the World Series, the Super Bowl, the Stanley Cup and who the key participants will be.

In the vignette, Professor Feather made a prediction: “In the last ten years the percentage of people reaching retirement age has increased by more than 15%. The number of people under the age of 25 has decreased. These facts point to a rather disturbing trend of zero-population growth. By the year 2025, the United States population will have shrunk by 25%, leaving entire states with little more than a few thousand people . . . .”

Professor Feather’s prediction of zero population growth was based on carefully presented evidence gathered from patterns in current population growth.

CONJECTURE

A *conjecture* is a statement based on incomplete evidence or guesswork. A conjecture is the result of imagination, a feeling or a “hunch,” but based on little or no valid evidence. A conjecture is often seen as “wacky” or invalid.

Mrs. Barzone made a conjecture: “In ten years, no frogs will remain anywhere in the world. They will become extinct due to starvation. Too many people are using bug zappers and fly swatters, killing the bugs necessary to sustain frogs.” Unlike Professor Feather, Mrs. Barzone presents no real evidence to support her ideas.

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Unlike predictions which mainly reflect future events, conjectures may reflect future, past or present situations. Mrs. Barzone's conjecture was about future events. An example of a present conjecture could be by someone who said, "Why are you sad?" and you said, "I am not sad. Why do you think that I am?" and the person said, "I thought you were sad because you look sad." The person made a conjecture based on little or no evidence that you were sad. He based his ideas only on a "hunch" that you looked sad. His imagination made him think that your facial expressions reflected sadness, when you were not actually sad.

An example of a conjecture about a situation in the past could be by someone who said that President George Washington liked marijuana because he grew hemp. Further research would easily ***dispel*** the conjecture. Since 8000 B.C., hemp has been woven into fabric to provide over 80% of all textiles and fabrics, including over 50% of the fabric called linen. Over 25,000 products are made from hemp, including hair products, soaps, rope, clothes, handbags, dynamite, polyvinylchloride (PVC) pipe, paint, medicine, lamp oil, tile, paper and canvas. The early American Colonies were so dependent on hemp to produce materials for survival, that in 1619, the Jamestown, Virginia Colony passed a law requiring all farmers to grow hemp. From 1763-1767, farmers could actually serve jail time for NOT growing hemp to contribute to the welfare of the Colonies. During the Revolutionary War, hemp was used to weave uniforms and clothes for the Continental Army under George Washington. Hemp was not used as a ***recreational stimulant*** for another hundred years (until after the Civil War in the 1880s). George Washington grew hemp for legitimate products, such as clothes for his army. His life was ***purpose driven***. ***Impairing*** his judgement by using intoxicating substances is out of character for a man such as George Washington.

You are learning so much! Continue to the Activities.

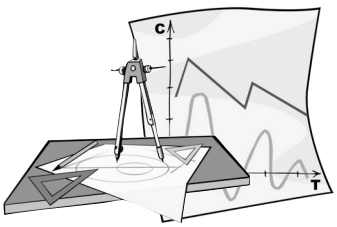
Life Principle

"All business proceeds on beliefs, or judgments of probabilities, and not on certainties."



—Charles W. Eliot

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Critical Thinking

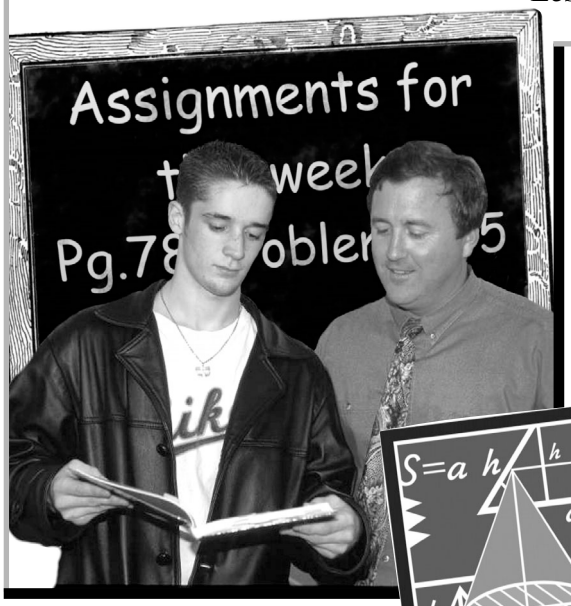
Lesson 11

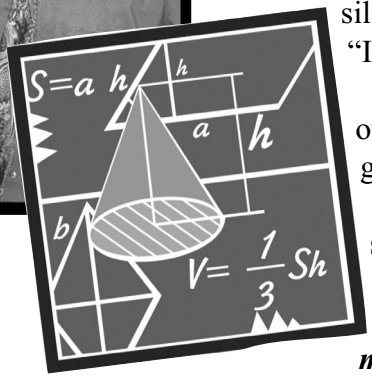
Chapter 3

CHARLIE'S STATE OF DENIAL

Section 3

Lessons 11-15





Buuuuzzzzzz! The bell startled Charlie Edmonds as he sat in his desk at Smithson High School. Today was the last day of school. In an instant, feet shuffled, and the excited ***din*** of eleventh-grade voices filled the air.

"Have a safe summer everyone!" Mr. Erskine called as he erased the chalkboard for the last time that year. Only seconds later, the room was silent.

"I hope to," sounded a ***solitary*** voice.

Mr. Erskine turned and looked over the thick lenses of his reading glasses.

"Hello, Charlie. Why are you still here? Your friends are probably sipping lemonade at Zak's by now."

"I know, sir," Charlie replied ***mournfully***.

"What is on your mind?" queried the teacher.

"Summer school," said Charlie walking slowly from his desk toward Mr. Erskine. "Sir, what I want to know is, why did I get such a low grade?" His lips pressed firmly, and his brow furrowed.

Mr. Erskine looked ***pensively*** at the young man and asked, "Did you complete all the assignments?"

"I was here every day of the semester," Charlie responded.

"That's great, Charlie, but did you complete the assignments?"

"I always ***participated*** in class, didn't I?"

"Yes, Charlie, you did. But once again, did you complete the assignments?"

Charlie huffed as he slowly left the room, "That's not the point! I worked hard and was here all the time!"

VOCABULARY

Din: loud noise, ruckus
Solitary: alone
Mournfully: with sadness
Pensively: thoughtfully
Participate: to be involved
Potential: ability, capacity
Intently: purposefully, firmly

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One hour later, in the Edmonds' family kitchen, Charlie's dad was rolling his eyes too. "*D* in geometry. What happened? Did you not complete the assignments?"

Charlie shrugged and looked sincerely at his Dad. "You know, Dad," he began, "Mr. Erskine seems to be a nice person and everything. I mean, we get along okay. But I don't know. He seemed to have enough time for everybody else and no time for me."

Mr. Edmonds looked doubtful. "We might look into that," he replied, "but did you do the assignments Mr. Erskine gave you?"

"Dad, think about last year," said Charlie. "Last year was some year, wasn't it? I mean, we both know from last year that I have great ***potential***, right?"

"Charlie, last year is over," his father began. "What about this year? How many assignments did you complete and return to Mr. Erskine?"

"Dad, I was there every day. I didn't miss a single day!" protested Charlie.

Dad looked ***intently*** at Charlie and asked, "Charlie, did you complete the assignments?" ■

ERRORS IN REASONING (PART 1)



In the next several lessons, you will learn some of the common errors in reasoning. Some of the errors are obvious; some are more subtle. At one time or another, you may be guilty of using them! The first type of reasoning error is called *ignoring the question*. This occurs when someone disregards the question or refuses to pay attention to the question. You may see this in courtroom dramas on television programs or in movies. A lawyer asks a question, and the witness replies with a long, rambling answer. Finally, the lawyer interrupts and says, "Please, Mr. Fields, just answer the question!"

IGNORING THE QUESTION

Three common methods of ignoring the question are *talking around the subject*, *referring to the "good old days"* and *attacking a person's character*. When someone "talks around the subject," he "dodges" the question like someone dodging a thrown ball. Usually, the person being questioned "dodges" and talks about something unrelated to the topic or slightly related—just enough to distract the person asking the questions, while still not answering the question. For example, when Mr. Erskine asked Charlie, "Did you complete all of the assignments?" Charlie replied, "I was here every day of the semester." Notice that Charlie's answer had very little to do with the question. He went "around" the subject and tried to imply that he deserved credit for good attendance; but, that response did not answer the question.

The "good old days" technique attempts to avoid a negative situation in the present by replacing it with pleasurable memories from the past. For example, when Charlie's dad asked if Charlie had completed all of the assignments, he said, "Last year was some year, wasn't it? I mean, we both know from last year that I have great potential."

When someone attacks a person's character, he points out faults in the other person in an effort to take negative attention off himself. Often, a person will attack someone else's character in an effort to blame that person for failure on the part of the attacker. For example, Charlie tried to get his dad's attention off Charlie's failure by attacking the teacher's character

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and blaming him for the low grade in math. Charlie's dad asked again, "Did you complete all of the assignments?" Charlie replied, "He always had time for everybody else and no time for me." By using this technique, Charlie was implying that Mr. Erskine failed in his responsibility to Charlie; that Charlie was not at fault for performing poorly in class. Clearly, Charlie was trying not to accept responsibility for his poor grade.

Now that you understand these reasoning errors, you should not be fooled by excuses from others! Neither should you resort to such excuses yourself.

Continue to the Activities to test your new knowledge!

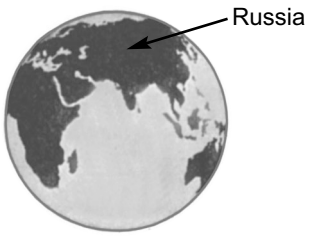
Life Principle



"A person who is wise will change his mind in the presence of facts."

—Anonymous

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Lesson 12

Critical Thinking

Chapter 3

Section 3

Lessons 11-15

THE COMRADE'S RHETORIC



The men were obviously Grishkov's henchmen. They were tense, standing stiffly on the platform; their mean eyes penetratingly glowered at the crowd, looking, always looking for a suspicious expression, a furtive movement, anyone who seemed oddly out of place.

Comrade Alexander Grishkov had all the confidence and intensity of a ***predator*** moving in for the kill. The crowd sensed this and urged him on. His ***rhetoric*** elevated to a feverish pitch.

"Hear me, comrades!" he shouted. "Our nation is in grave danger! While we labor together to build a just and ***equitable*** society, the treacherous United States is conspiring against us."

"Ahhhh! Shame!" hissed the crowd.

"The ***corrupt*** United States is our enemy. It must be destroyed!" ***vociferated*** Grishkov, his neck veins bulging and his face reddening.

"Death to the United States!" a man in the front row screamed in a high shrill, shaking his fist.

Grishkov lowered his voice and with a ***leer*** croaked, "Among us are those who believe that what I am saying about the United States is not true. They say to me, 'Can you prove that the Americans are our enemy?' I say to them, 'Can you prove that the United States is not our enemy?' They are traitors who should not be tolerated! How dare they question agents of our government?"

The crowd fell into a mass of chaotic murmurs. Most of the listeners were ***illiterate*** peasants, so the logic, or lack thereof, passed cleanly over their heads. A voice here and there of agreement could be heard. "Seize the traitors. To death with them."

VOCABULARY

Predator: hunter
Rhetoric: speech
Equitable: fair, even
Corrupt: dishonest, debased, rotten
Vociferated: shouted with great energy and anger
Leer: sneer, grin wickedly
Illiterate: unable to read and write; uneducated

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"Hush, hush, my friends," Grishkov calmed the restless crowd. "Listen closely. The traitors in our midst say that we should practice democracy, not communism. Trust me. Democracy fails every time! Democracy always fails because it never succeeds! Are traitorous democratic ideas not dangerous? Are they not a threat to our glorious society?"

"Yes!" cried the hypnotized crowd.

"Then I must ask you this. Dare you associate with people who hold such traitorous thoughts? If you have friends or family who think that way, and you associate with them, then you, too, will be like them, act like them, think like them! You too will be a danger, a threat to our glorious society!"

Brows furrowed. Eyes darted back and forth as the peasants suddenly stared at each other suspiciously. Somewhere in the trees edging the town square, a mockingbird sang to its mate. No other sound was heard. Grishkov smiled to himself. He had the people where he wanted them. He stepped to the edge of the platform.

"Do not worry, comrades," Grishkov's oily voice soothed. "I am here for your protection. The Americans shall not harm you. Neither shall the traitors in our midst! Go now to your homes, and tell us tomorrow who among you must be watched." ■

ERRORS IN REASONING (PART 2)



In this lesson, you will learn three additional reasoning errors: assuming without proving, shifting the burden of proof and circular argument.

Assuming without Proving

To *assume* means to accept without question; to believe without proof or to "jump" to a conclusion. Often, this happens with a rumor we hear. We may assume the words to be true with little or no proof. The people in Grishkov's audience seemed to make such an error. They appeared to believe what Grishkov said about the United States of America. The audience did not require proof. When Grishkov stated: "A treacherous nation like the United States cannot be on our side. It is our enemy and must be destroyed," the people in the audience should have asked: "What proof do you have that the United States is treacherous?" Grishkov's speech was obviously driven by ignorance or by hatred and prejudice, and the crowd seemed to follow right along.

Shifting the Burden of Proof

Burden of proof is a phrase that refers to a situation in which someone is accused of an offense. Two people are involved: the *accuser* and the person being *accused*. In most cases, the person accusing another person must prove the accusation. This is the burden of proof. The accuser has the "burden" of proving his case. When someone shifts the burden of proof, the "burden" is shifted from the accuser to the person being accused. Now, the person being accused must prove that he is NOT guilty.

Alex Grishkov provided an example of shifting the burden of proof when he said: "Among us are those who believe that what I am saying about the United States is not true. They say to me, 'Can you prove that the Americans are our enemies'? I say to them, 'Can you prove that they are not?'" Instead of accepting the responsibility of proving that the Americans were the enemy, Grishkov shifted the burden of proof to anyone who would doubt his anti-American rhetoric. Grishkov was forcing his audience to prove that the Americans were NOT the enemy.

Shifting the burden of proof is a cowardly way of getting out of the responsibility of

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backing up your argument with facts or principles. People who use this technique often accuse someone of an offense, then force that person to prove his or her innocence. The accuser fails to take the responsibility of proving the guilt.

Circular Argument

Circular argument occurs in statements in which the conclusions are contained in the premises. Such statements have a circle-like pattern of thought and do not continue in a reasonable line of thought in which a premise leads to a valid conclusion.

Examples:
Beverly was sick (premise) because she was not feeling well (conclusion).
John was short (premise) because he was not very tall (conclusion).
John was not successful in track (premise) because he did not win any races (conclusion).
Edward loved his sister (premise) because his love for her was strong (conclusion).
- Notice how each conclusion circled back to the premise and did not continue in a valid line of thought.

Consider the famous argument of the French philosopher, René Descartes: "I think, therefore I am." When he said, "I think," he *already* implied "I am" (*how else could he think?*). This is an example of circular argument.

Grishkov used circular argument: *Democracy always fails because it never succeeds*!

Premise: Democracy always fails.
Conclusion: Democracy never succeeds.
- *Always fails* and *never succeeds* mean the same thing; therefore, this argument makes a circle, rather than a reasonable line of thought.

In a statement that has sound reasoning, the premise logically leads to a valid conclusion. Suppose Grishkov had made this statement: *Democracy is a failure because throughout history, democracy has proven to be a corrupt and ineffective political philosophy.*

Premise: Democracy is a failure.
Conclusion: Throughout history, democracy has proven to be a corrupt and ineffective political philosophy.
- Notice that the premise follows a continuing line of thought.
- Because democracy has proven to be a successful form of government, Grishkov was unable to denounce it legitimately. He therefore was reduced to hate speech and irrational rhetoric in an effort to persuade his audience.

You are nearing the end of this chapter!
Continue to the Activities.

Life Principle



"There is no better measure of a person than what he does when he is absolutely free to choose."
—Wilma Askinas

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Lesson 13

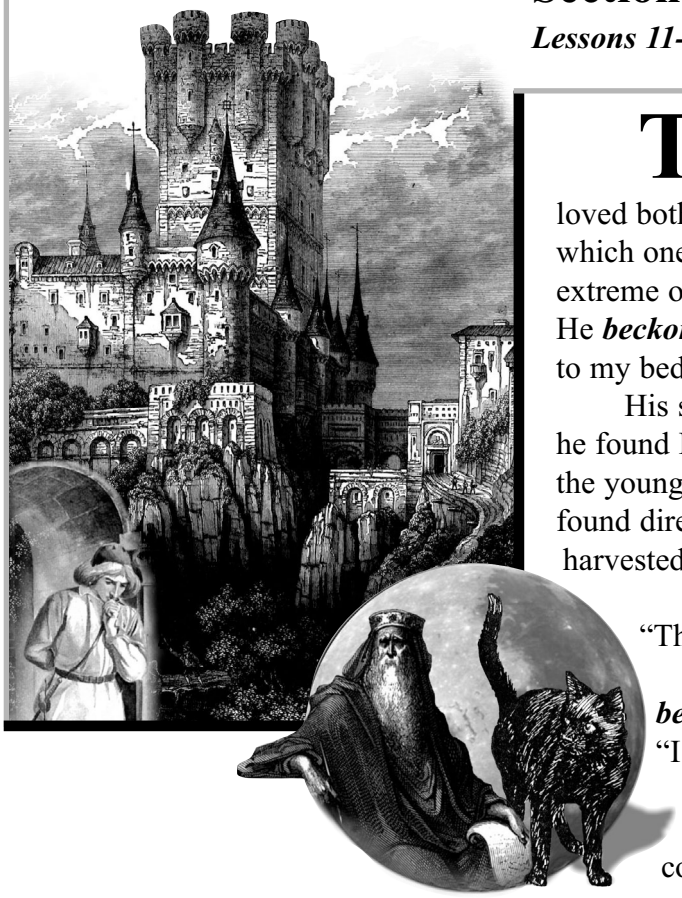
Critical Thinking

Chapter 3

Section 3

Lessons 11-15

WISE ADVICE WINS THE CROWN



The story is told of a king who had two sons, Romulus and Marcus. The King loved both sons dearly, but he could not decide which one should inherit the throne. Having reached extreme old age, the king knew he would die soon. He ***beckoned*** his servant and said, "Go. Call my sons to my bedside."

His servant ***hastened*** to the war chamber where he found Marcus crossing swords with his friends, the young nobles. The other son, Romulus, was found directing the work of the servants as they harvested the corn and wheat fields.

"Come! Come!" the servant told the sons, "The king requests your presence."

As the two sons entered the old king's ***bed chamber,*** he beckoned and said weakly, "I love you both, but must give my crown to him who is wiser. So, answer me these questions. By what sign may a king be confident of a victory on the morrow?"

Marcus, being a warrior, had a ready answer, "To the victor goes the spoils. Sailing is a wonderful way to see the sunset."

Romulus spoke up and said, "When the soldiers love their king, a king may rest, ***assured*** of victory."

"Of what should a general be ***wary*** before battle?" asked the king.

"I have heard," replied Marcus, "that a black cat once crossed the path of a general who was on the way to battle. His army was defeated, and he never had anything to do with cats after that."

"Father," said Romulus, "a general should be wary of self-confidence. The outcome is decided by the heavens. A leader should embrace humility."

VOCABULARY

Beckon: call, summon
Hasten: hurry, rush
Bedchamber: bedroom
Assured: confident
Wary: cautious, alert to danger
Deny: disagree, dispute, negate
Frustration: anger at defeat, disappointment

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"Wise advice, Romulus," said the king. "You shall be king!"

Hearing this, Marcus burst out, "He answers after listening to my answers—that is why he sounds wiser! He is only a farmer who spends his time in the fields. What does he know about battles and generals?"

"His answers are wise; that no one can ***deny***," replied the king, growing weaker.

"Everyone in the kingdom knows that I am best suited to be king," said Marcus in ***frustration***. "How can millions of people be wrong?"

"Ahhh," sighed the king, his voice fading. "They can and often have been. . . ."

"But father," protested Marcus, "the birthmark on my left shoulder predestined me to be king! I am the only one for this position!"

The king had heard enough. Ignoring Marcus, he turned to Romulus, and with his last breath said, "Reign wisely, Romulus. The battle is not to the mighty, but to the wise and humble." ■

ERRORS IN REASONING (PART 3)



Latin was spoken and written by the educated Romans. After the fall of the Roman Empire, Latin was preserved mostly by the Catholic Church. Occasionally, you will hear Latin expressions that have been adopted into the English language. One famous motto is that of the United States Marines—*Semper Fi* (Ever Faithful). Another is on the Great Seal of the United States—*E Pluribus Unum* (Out of the Many, One).

Latin expressions are also used to name errors in reasoning, such as *Non Sequitur* (Does Not Follow); *Post Hoc Ergo Propter Hoc* (After This, Therefore Because of This); *Argumentum Ad Hominem* (Argument to the Man); *Argumentum Ad Populum* (Argument to the People); *Argumentum Ad Ignorantiam* (Argument to Ignorance).

NON SEQUITUR (DOES NOT FOLLOW)

In this reasoning error, no logical connection exists between two statements. For example: *To the victor goes the spoils. Sailing is a wonderful way to see the kingdom.* No logical connection is established between keeping spoils and sailing.

POST HOC, ERGO PROPTER HOC (AFTER THIS, THEREFORE BECAUSE OF THIS)

This type of logic includes superstition. In *Post Hoc Ergo Propter Hoc,* a result is wrongly accredited to a cause. For example: *A black cat crossed the path of a general. The next day, the general's army was defeated in battle.* The defeat of the general's army is wrongly accredited to the encounter with the cat, simply because the encounter occurred before the battle. This is superstitious logic.

ARGUMENTUM AD HOMINEM (ARGUMENT TO THE MAN)

Argument to the Man is another error in reasoning. Argument to the Man is an attack upon a person's beliefs, character, abilities, etc. This often occurs when someone cannot legitimately criticize someone, so the accuser must stoop to something personal. For example: *He is only a farmer who spends all of his time in the fields. What does he know about battles and generals?* Marcus was unable to find a valid reason why his brother should not be king. Out of jealousy, Marcus criticized Romulus' personal choice to study and supervise the farms, even though the criticism had nothing to do with qualifications to be king.

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Argumentum Ad Populum (Argument to the People)

An Argument to the People is an error in reasoning that is expressed by appealing to large numbers: it is right because 'everyone' agrees it is or 'everyone' is doing it. For example: *Everyone in the whole kingdom knows that I am best suited to be king!* Marcus thought that because public opinion was in his favor that he should inherit the throne, regardless of his qualifications.

Argumentum Ad Ignorantiam (Argument to Ignorance)

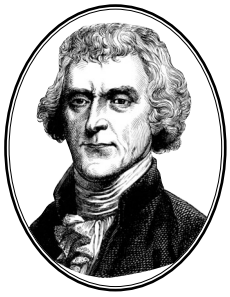
This type of logic appeals to ignorance. Something must be true, because it has not or cannot be proven false. Conversely, something must be false because it has not or cannot be proven true. For example: *The birthmark on my left shoulder predestined me to be king.* No one has evidence that the presence of the birthmark is NOT a sign of predestiny; therefore, Marcus could claim that the statement was true.

You are doing well. Continue to the Activities.

Life Principle

"Error of opinion may be tolerated where reason is left free to combat it."

—Thomas Jefferson



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Lesson 14

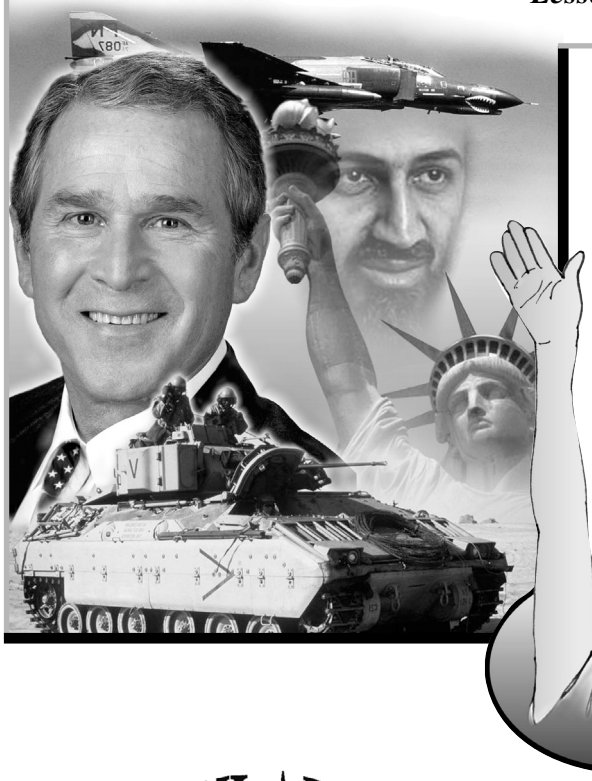
Critical Thinking

Chapter 3

THINKING THINGS THROUGH

Section 3

Lessons 11-15



Miss Applegate looked around her classroom. She began the session by saying, "Today we will play a 'reason' game. It will be a ***forum*** for ***debates*** among you. I will be the ***moderator***." She continued, "I will read a question and an answer. I want you to tell me if the answer is adequate for the question."

She looked at the faces before her. She was proud of her students and knew they would do well. "Okay, everyone, let us begin. Question: *What can be done to stop wars around the world*. Answer: *As the world's only superpower, the United States should model by example and* ***disarm***.



Class, do you think disarmament of the United States is the missing key to solving wars between other countries?" asked Miss Applegate. "Is this a reasonable solution?"

The room was silent; no one wanted to be the first to enter into this new game. Finally, from the back, Wes said, "I think that might be a good solution. Everyone should get rid of weapons of mass destruction."

"I agree, but how can we trust the other countries to disarm?" asked Chris. "Some countries have already demonstrated that they are willing to lie about the weapons they have."

Sally chimed in saying, "I think that getting rid of all the weapons is too simple of an answer. Look at how President Bush was able to stop the terrorist, Osama Bin Ladin, and the vicious dictator, Saddam Hussein, by using weapons and force. Terrorists simply don't tell the truth, and they don't respect anything less than force. You certainly can't talk them into surrendering or giving up their evil plans. It just doesn't work."

"I am going to agree with Sally," said Monty. "By the United States keeping a strong military, we can keep terroristic fanatics from taking over the world."

VOCABULARY

Forum: public place for debate
Debate: discussion of opposing points of view on a topic
Moderator: a person who acts as a "go between" in a debate
Disarm: to reduce one's arms or weapons; to become helpless
Diplomacy: negotiating international relations
Equivocation: use of ambiguous words, often with intent to deceive, mislead or avoid comment on issues

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Miss Applegate said, "I am very pleased with your critical thinking process on that question, now let us go to the next.

Question: *How should we view politicians?* Answer: *Politicians are either honest or corrupt.*"

By now the students understood what Miss Applegate wanted, so this time, no one hesitated to respond. Sally said, "Not everything is black and white. What may look like corruption, might be compromise for the good of everyone."

"I agree with Sally, Miss Applegate," stated Chris. "My dad is a farmer. He has experienced farm aid cutbacks. He understands that politicians cut some agricultural programs because of misfortune rather than corruption."

"Does anyone else have a view on this topic?" asked Miss Applegate as she peered around the room expectantly.

"Well, yes, actually," said Monica, who up to this point had been silent. "Because our system of government is a republic, we select our own rulers; we must carefully scrutinize their character and views on issues before putting them in a position of power. Really, politicians are at the mercy of the people. If voters don't want a politician, he is not elected. I think the reason we often have crooked politicians is because the people elected the politician on an emotional basis such as his smooth talk or physical appeal. Voters should evaluate the candidate's character and analyze whether or not he would uphold his position on issues with honor and integrity. We should be more responsible voters."



"Excellent, Monica!" enthused Miss Applegate. "You have really thought about that. Thank you for sharing your views."

Pleased with the participation of the class, Miss Applegate posed the next question: "Here is the final question: *Who do you think should be the next President?* Answer: *General Norman Schwartzkopf, now retired from the United States Army, was a great general, so naturally, he would make a great President.*"

The first student to speak was Monty. "I agree with that answer," said Monty. Chris chimed in saying, "I agree, too. Great leadership skills are necessary to lead an army, so General Schwartzkopf would naturally be a great leader of our country."

Wes said, "I am not sure I agree with them, Miss Applegate. Just because someone can lead an army does not mean he has the skills to lead a country!"

"Excellent reasoning, Wes," agreed Miss Applegate.

Wes continued, "The office of president requires a person capable of not only being the commander-in-chief of the military, but being capable of leading on domestic and foreign affairs, also."

"That's right, Wes," agreed Miss Applegate. "What other skills might a President need?" she asked.

"I've already thought about that," Wes said. "The president also requires ***diplomacy*** skills. We know General Schwartzkopf has very good decision making

VOCABULARY

Ambiguous: unclear, hazy, purposely not specific or direct

Abbott and Costello: one of the most popular comedy teams in the United States during the 1930s, '40s and '50s

Ideology: a system of thinking that motivates individuals, groups or nations to certain actions

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skills, but that does not necessarily mean he would be diplomatic. We would have to look at other areas of Mr. Schwartzkopf's life to know if he possessed diplomacy."

"I agree," said Miss Applegate. "I thank each of you for your participation. This has been an effective exercise. Perhaps we shall do it again sometime!"■

ERRORS IN REASONING (PART 4)



Many people try to solve problems by oversimplifying. Sometimes the real answer to a problem is deeply complex. Some readers are fooled and confused by ***equivocation***. In today's lesson, you will examine the two reasoning errors of oversimplification and equivocation.

OVERSIMPLIFICATION

Oversimplification occurs when someone tries to solve a big problem composed of many issues by applying a simple answer based on one issue. Oversimplification omits many important parts to the problem. Often, we may be tempted to look for a quick and easy solution; however, such answers rarely would actually solve the problem.

Problem #1: The United States has very low academic competency worldwide.

Oversimplified answer: Spend more money on education.

Analysis of answer: The United States already spends more money per student than any other nation, but still ranks among the lowest of industrialized countries and ranks even lower than many developing countries. Simply spending money does not solve problems in schools.

Problem #2: Unemployment of U.S. citizens is high in the United States.

Oversimplified answer: Deport illegal aliens that "take the jobs" of U.S. citizens.

Analysis of answer: The problem the United States has with illegal aliens is a very real problem; however, the employment rate cannot be attributed to an overrun of non-citizens entering the United States through illegal means. The employment rate and the number of illegal immigrants are two separate issues. Unemployment in the United States may be attributed to many issues such as:

- Seasonal unemployment: in the summer, thousands of college and high school students merge into the job market and register for employment.
- Too many jobs for a market: some industries are overstocked. For example, many people are skilled in computers; however, businesses have already hired the necessary technology experts; so, other people with computer skills are unable to find jobs, or companies downsize because of reduced sales or over production.
- Agriculture cycles: in certain times of year, agriculture produces more or less, needing more or fewer workers.
- Taxes or government regulations: some states excessively tax industries and force them to close or move to different states, therefore having to lay off workers.
- Influx of legal or illegal immigrants: some immigrant groups will fill jobs that U.S. citizens prefer not to perform.
- Welfare mentality: some people prefer to register for unemployment and receive a government check rather than hold a job that may not be preferred but at least would provide steady income to support the family.

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EQUIVOCATION

To *equivocate* is to use ***ambiguous*** language (words or phrases) in such a way that the listener may be confused. Equivocation is language that has double or unclear meaning.

Example: A motorist looking for a place to park is relieved to see a sign that reads: "Fine for Parking." An hour later, he returns to find a parking citation on the vehicle windshield. The "fine" was $35 dollars.

- In this example of equivocation, the word *fine* was ambiguous. Obviously, the driver thought "Fine for Parking" meant "Okay for Parking."

Equivocation is demonstrated very well in an old ***Abbott and Costello*** comedy routine. The name of a baseball player on first base is *Who*. Notice the exchange between Abbott and Costello and how ambiguity contributes to the confusion.

Costello: I mean the fellow's name!

Abbott: Who!

Costello: The guy on first!

Abbott: Who!

Costello: The first baseman!

Abbott: Who!

Costello: The guy playing first!

Abbott: Who is on first!

Costello: Now whaddya askin' me for?

Abbott: I'm telling you Who is on first.

Costello: Well, I'm asking YOU who's on first!

Abbott: That's the man's name.

Costello: That's who's name?

Abbott: Yes.

Costello: Well go ahead and tell me.

Abbott: Who.

Costello: The guy on first.

Abbott: Who!

Costello: The first baseman.

Abbott: Who is on first!



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Equivocation may be a deliberate twist of words with intent to mislead. Synonyms for *equivocation* are *evade, blur, fudge, hedge, "hood wink."* Some people purposely use equivocation to try to avoid responsibility, such as a criminal, who does not want to confess a crime.

Mohammed (Yasser) Arafat, the president of the Palestine Liberation Organization (PLO), is notorious for twisting words. Arafat often explains the terroristic actions of his followers as innocent acts of martyrdom and "self defense." A *martyr* is a victim of violence who may die or suffer torture in order to further a belief, cause or principle that is wholesome or good for mankind. In most cases, a martyr is killed or tormented by people who disagree with the martyr's beliefs. *Terrorism* is the use of violence by a person or an organized group against people or property with the intention of intimidating or coercing societies or governments, often for ideological or political reasons. Arafat uses equivocation to fog the truth of what he truly is . . . a terrorist. The PLO initiates terror as its primary policy. By describing his people as "martyrs," Arafat is using equivocation to twist the word *terrorist* into meaning a person who suffered or died at the hands of others for a good or wholesome cause.

Read the article below. As you read, evaluate the use of equivocation by the father.

A Father's Pride and Glory
by Daniel Pipes
Jerusalem Post
August 15, 2001

Hours after the killing of 15 Israelis in a Jerusalem restaurant last week, the brother of the 23-year-old suicide bomber delightedly announced that "this is a unique operation for its quality and success... Palestinians everywhere can now hold up their heads."

Likewise, after a 22-year-old suicide bomber two months earlier killed 21 Israelis at a Tel Aviv discotheque, his father announced: "I am very happy and proud of what my son did and, frankly, am a bit jealous... I wish I had done it myself."

And so it has been with nearly all suicide operations - family members rejoicing at the "martyrdom" of their brothers and children.



Some fathers even publicly announce a hope that their children will kill Israelis in suicide operations.

Puzzled by this apparent denial of the primal human urge to protect one's young, President George W. Bush has commented, "I just can't understand this." He is hardly alone.

Two main factors account for this bizarre behavior. The first concerns the Palestinian Authority drumming into impressionable youth the glory of suicidal death while killing Israelis.

PA television harps constantly on this message. On the Children's Club (a Sesame Street-like children's program), a young boy sings: "When I wander into Jerusalem, I will become a suicide bomber." A repeatedly shown television clip calls on children to "Drop your toys. Pick up rocks." In another, the words to a children's song go: "How pleasant is the smell of martyrs, how pleasant the smell of land, the land enriched by the blood, the blood pouring out of a fresh body."

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Ikrima Sabri, the PA's ranking religious leader, says, "The younger the martyr, the greater and the more I respect him," while praising mothers who "willingly sacrifice their offspring for the sake of freedom." PA schools indoctrinate pupils on the virtues and joys of martyrdom, then honor and celebrate suicide killers. Four summer camps are currently training eight- to 12-year-olds for suicide bombings. Organizations like Hamas promise to look after the killers' families' financial needs.

In all, notes Meyrav Wurmser, a Hudson Institute specialist on the indoctrination of pupils, the PA has developed "a state-run ***ideology*** that pushes [children] to their death." Why does this indoctrination work and why do Palestinian families enthusiastically send their children to die? What pressure could overcome the human instinct to protect one's beloved?

That pressure is not hard to locate, for it pervades Middle Eastern life. It is an unrelenting, compulsive preoccupation with family honor. . . .

The . . . honor (*sharaf* in Arabic) involves efforts to enhance the family's status by taking steps to win it praise and renown; and nothing can win a family as much glory as its willing sacrifice of a family member for a noble cause.

Thanks to PA propaganda, suicide bombing has become a highly honored act. Thus, the Tel Aviv bomber's father crowed about his son, "He has become a hero! Tell me, what more could a father ask?"

Combined, the monstrous social environment created by the PA and the families' preoccupation with social status goes far to explain why Palestinians glory in the destruction of their youth.

(used by permission of Daniel Pipes)

Notice how the Palestinian father used equivocation to "blur" the meanings of *honor, pride, noble, hero, martyr* and *glory*. Be prepared to answer those questions by using your critical thinking skills. Continue to the Activities.

Life Principle



"What is conceived well is expressed clearly, and the words to say it will arrive with ease."

—Nicolas Boileau

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Lesson 15

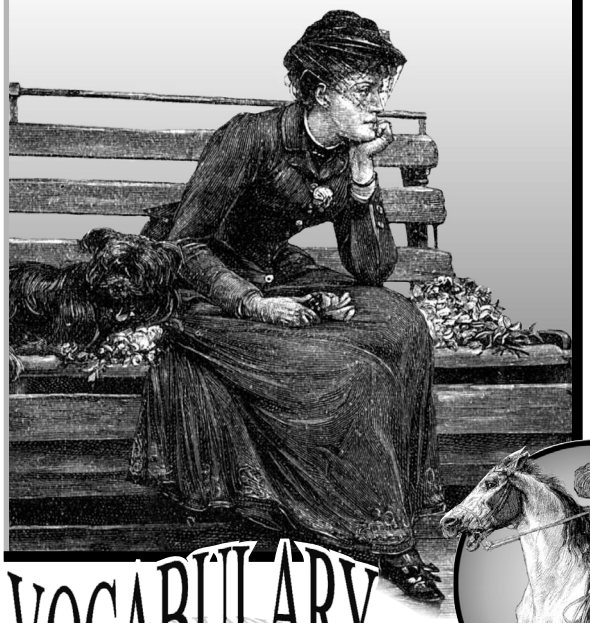
Critical Thinking

Chapter 3

Section 3

Lessons 11-15

THE CASE OF THE DEAD HUSBAND



I sat in my old chair beside the fireplace watching the ***embers*** die, realizing, as I mused, that I was hearing the sounds of a rider approaching fast. I grabbed my shotgun and slipped into the black shadows that hid the front door to my cabin. I watched the rider approach, waiting for him to identify himself. As he pulled his horse to a stop, he said loudly, "Anybody home?" The bright moonlight and the voice revealed the rider to be my good friend, Thomas Hardeman, sheriff of Galveston County. He was dressed in his usual getup—black, flat brimmed, felt hat, long sleeved, button up shirt with a collar, buckskin vest sporting his sheriff's badge, faded, black jeans held up by a heavy buckle, and low heeled, pointed cowboy boots.



"Howdy, Buck," said Hardeman, as he swung down from his sweaty Quarter horse gelding.

"Howdy back to ya, you old ***gadabout***!" I retorted, pleased to have company. Curious, I asked, "What brings you down my way?"

"I've been investigatin' a verra bewild'rin' case involving Randolph Jones!" explicated Hardeman as he hitched up his pants and stomped his feet to get the blood flowing.

"Randolph Jones, eh? He's quite a man. An excellent attorney," I commented. "Some say he'd make a good governor."

"Not anymore!" huffed Hardeman, twirling his handlebar mustache. "Randolph Jones is dead. He breathed his last two nights ago, during that ***gullywasher***."

VOCABULARY

Embers: small glowing pieces of wood left over from fire
Gadabout: a person who roams in search of social activity
Gullywasher: western slang for a storm with heavy rain
Heinous: grossly wicked
Impeccable: having no flaws; perfect
Bemoan: to express grief
Demise: death, ruin
Shanghai: to drug and kidnap a man to force him to work on a ship
Specter: ghost; spirit
Aneurysm: a sac-like widening of a blood vessel that causes a stroke in the brain

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"Dead!" I exclaimed. "Bewilderin', indeed! An accident?"

"Some say 'twas, and some say 'twasn't!" mused Hardeman, rocking back on his heels and placing his thumbs in his suspenders.

(1) "Well, it probably was an accident. Pigeons don't fly on rainy nights," I said in a knowing tone as I ushered my visitor inside.



Hardeman paid no attention to my comment and continued: "The veterinarian, Doc. Cabbage, said he was just leaving the horse stable in a down pour when he heard a terrible scream from the house. Doc hurried up the walkway in the rain and saw Mrs. Jones, pail as a ghost, shaking and muttering incomprehensible nonsense. The housekeeper, Mrs. Walker, was all in a flutter and wildly gesturing toward the front porch. Doc. Cabbage thought an intruder must be on the porch and was wondering where the mister was, when he suddenly saw Mr. Jones, crumpled under the bench, dead; a terrible look frozen on his face. The doc came and fetched me straightway. By the time I got there, Mrs. Jones and Mrs. Walker seem to have recovered. I asked Mrs. Jones what had happened. She said that she and Mr. Jones had been having coffee and pie and watching the storm from the back porch, when suddenly, Mr. Jones screamed, dropped his cup of coffee and pie and fell down dead. (2) Mrs. Jones said she didn't hear a gunshot or see anyone hit Randolph.

I looked around the place and gathered what clues I could, then thanked Mrs. Jones and left. I went right over to Mrs. Walker's home to ask her a few questions. 'Sheriff Hardeman,' she said, 'Mr. and Mrs. Jones argued on a regular basis! Sarah has such a frightful temper! Today they disagreed loudly, and Sarah seemed especially angry with her husband.' Then, Mrs. Walker leaned in and conspired, 'Mr. Jones died after he drank the coffee his wife gave him. I think that Randolph screamed when he realized what his wife had done to him!'

'What makes you think such a thing?' I asked her. She sputtered, 'Well . . . uh . . . well!' rolling her eyes, (3) 'Everybody says their marriage was unhappy!'" she huffed.

Here I broke into Hardeman's narrative and pronounced condescendingly, "Why, this 'mystery' is no mystery at all! (4) Mrs. Jones poisoned her husband. Sarah Jones must have been the one to commit the ***heinous*** crime," I blustered. (5) "Everyone knows that she has not been the most loving of wives. (6) She must be guilty. She cannot prove she is not guilty," I added. "What a shame. Randolph Jones was known to be a man of ***impeccable*** character and longsuff'rin'," I ***bemoaned***. (7) "I had a feeling that something bad might happen to him when he refused to throw salt over his shoulder after that wagon accident last year," I declared.

"Peterson!" Hardeman halted my runaway conclusions, "You've figured it wrong! Mrs. Jones was not responsible for the death of her husband." Hardeman glanced at his pocket watch. "Hmph. Well, I'd better be gettin' on the road," he grunted as he rose.

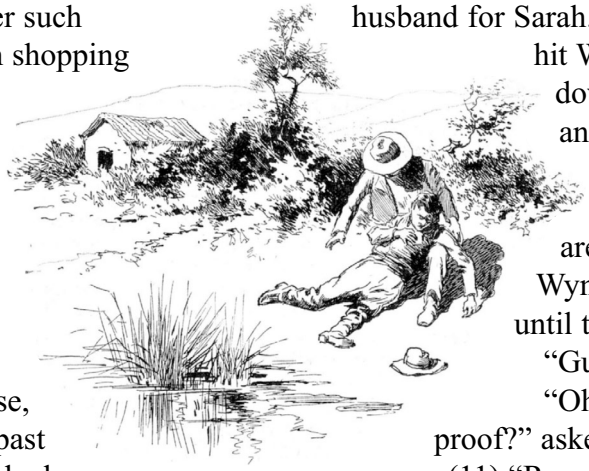
"Ah, come on, Thomas," I protested hurriedly, "if you have any regard for a curious old bat like me, tell me the rest of the story!" I implored.

"Oh now, surely . . ." Hardeman began. But, he must have seen the look of dashed anticipation on my face, for he stopped and shrugged. "Well, alright. If it won't bore you."

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He cleared his throat and sat back down. "Apparently, a 'skeleton' lurked in Jones' closet. This 'ghost' haunted Jones for many years. And this 'ghost,' I believe, is the culprit of Randolph's ***demise***."

"Hurrummph, a likely story!" I snorted. "I'll remember such speculations when I'm shopping for tall tales! (8) Obviously, Randolph Jones died of poisoning because he ingested something toxic," I said.



"Not so fast, Peterson," cautioned Hardeman. "In this case, someone from Jones' past appeared whom Jones had long thought dead."

(9) "There!" I said in excitement. "That is your answer! And so simple! Of course the ghostly somebody from Jones' past was responsible for his death," I suggested.

Hardeman leaned back and stretched his long, bowed legs. "The man from Randolph's past is named Weston Wynne. I left him just before riding here to visit you. Wynne told me his story. You see, Wynne and Jones go way back—forty years or more."

(10) "Revenge!" I fairly yelled, interrupting Hardeman. "If Wynne showed up after that many years, then his motive must have been unsavory," I said, certain I had solved the case.

Sheriff Hardeman cleared his throat then continued, "Apparently, Jones and Wynne had been childhood friends and room mates during college and law school," he explained. "They agreed on everything and shared everything. However, one thing their friendship could not share: the love of the same beautiful gal. Sarah Heimlick was the feisty daughter of a local merchant. As time passed, Sarah began to show more affection for Wynne than Jones. One night after work, the two friends, now rivals for Sarah's love, began to argue which one would be the better husband for Sarah. In a fit of jealousy, Jones hit Wynne and knocked him down. Wynne stayed down and didn't move. Afraid he had killed Wynne, Jones ran away. No one in this area saw or heard from Wynne again for forty years, until the other night."

"Guilty he is!" I confirmed.

"Oh yeah? Do you have proof?" asked Hardeman.

(11) "Remember when I was an eager young feller, hunting the bad guys? I always got my man, didn't I? Boy, we had some good times, you and me, solving cases!" I reminisced. (12) "This man is guilty. I've heard that after twenty years, people lose their memories."

"You're impulsive, Peterson!" growled Hardeman. "I'm headin' now to the coroner's office to discover what actually caused Jones' death."

"You mean you don't believe Wynne killed Jones?" I gasped as I rose from my chair.

"I most certainly do not!" snorted the sheriff.

I hurriedly put on my hat. "Hey, uh, just wait a minute. I'll saddle Blackie and go with ya to Doc Blanchard's office," I said. Caught up as I was in the drama, I couldn't bear the thought of not knowing the outcome. Two hours later, the sheriff and I were standing in the doc's office. I was stunned at what I had just learned.

"As I thought!" triumphed Hardeman as he read the doctor's report. "Randolph Jones died of natural causes."

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"Natural causes, my eye!" I sputtered. "That's preposterous! (13) Where did this doctor get his credentials anyway?"

"You see," explained Hardeman, "Galveston didn't used to have a law against ***shanghaiing*** sailors. When Jones thought he had killed Wynne, Jones ran, leaving Wynne unconscious. Some of old Captain Rider's sailors shanghaied Wynne and dragged him aboard the *Sally Mae* which sailed that very evening," related Hardeman. "Twenty years passed before Wynne was able to escape. Just this week he returned. He knew that he could never hope that Sarah had waited for him all those years. She would have thought him dead long ago. When he learned that she was married, he only wanted a glimpse of his former love. When Jones sat down to eat his pie and drink his coffee on the porch, a flash of lightning illuminated Wynne in the shadows. Jones was terrified and thought that Wynne's ***specter*** had returned to torment Jones for his evil deed. He screamed in horror and had a stroke that caused the fatal ***aneurysm***," concluded Sheriff Hardeman.

"Well I'll be a three legged toad," I muttered. "I never figured that a man's own conscience and a shanghaied sailor would have combined to make a man up and die like that." ■

(original idea from a Sherlock Holmes story)

Continue to the Activities where you will analyze the fallacies Sheriff Hardeman spotted in the reasoning of his friend, Buck Peterson.

Life Principle



"Bad temper is its own scourge . . . . A man's venom poisons himself more than his victim."

—Charles Buxton

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