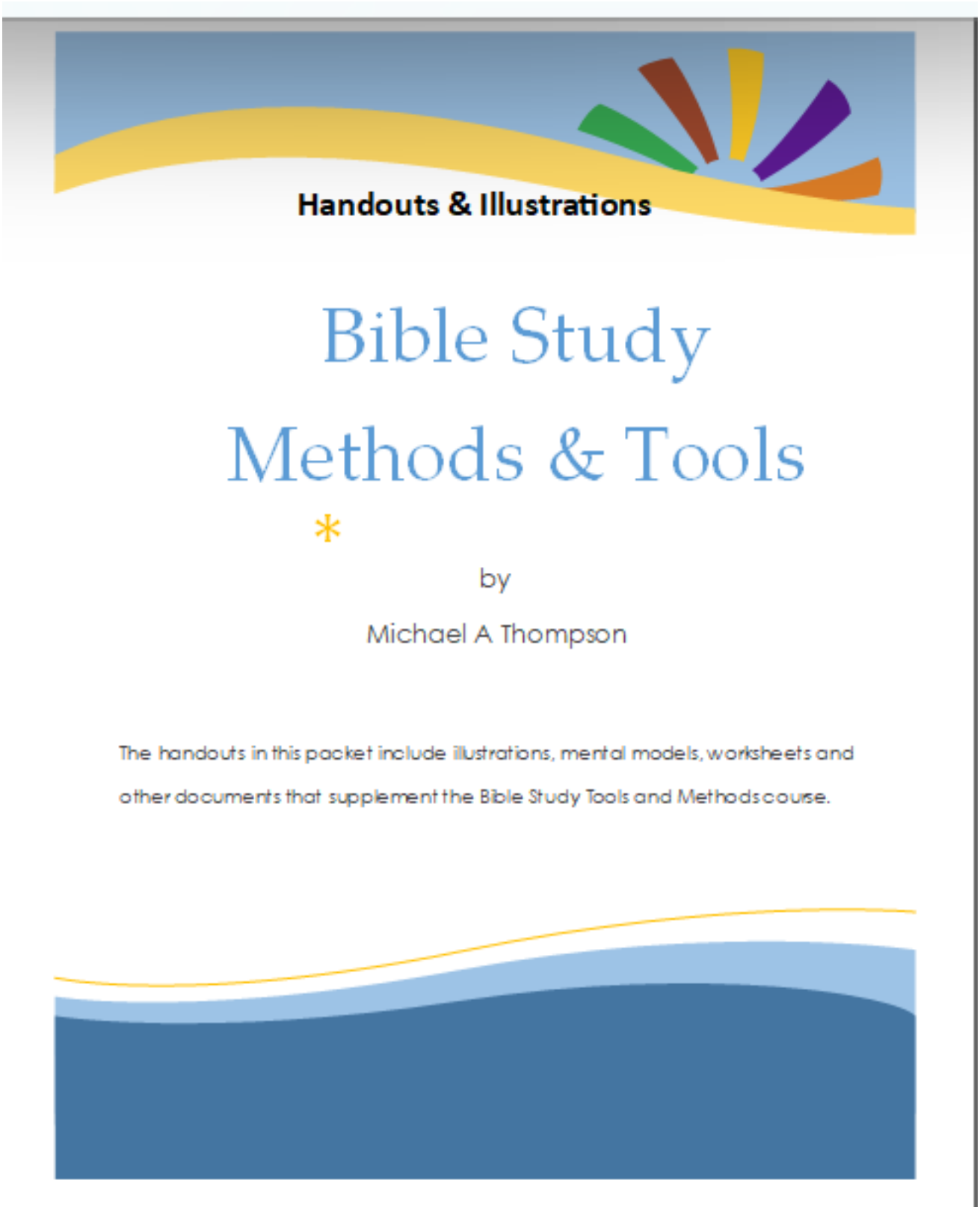

Bible Study Methods & Tools

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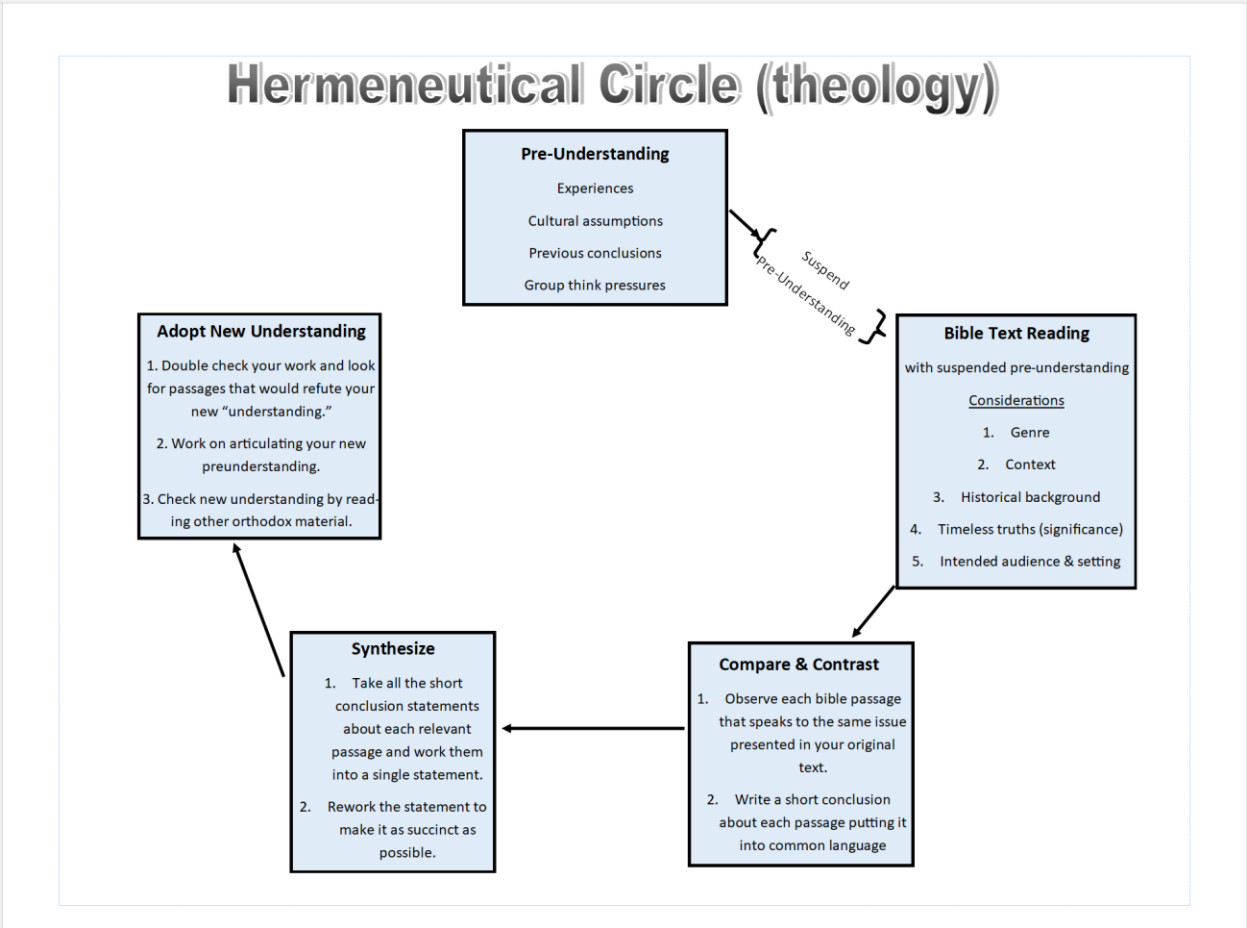
by

Michael A Thompson

The handouts in this packet include illustrations, mental models, worksheets and other documents that supplement the Bible Study Tools and Methods course.

HAND OUTS

HERMENEUTICS & STUDY TOOLS COHORT



DEBATE TECHNIQUES APPLIED

TO THEOLOGICAL, PREACHING AND APOLOGETICS

1. **Don't make "claims" that are unsubstantiated**. For example; an Arminian might reject predestination because he "just can't see it," to him "it just doesn't seem fair that God would remove all human choice!" This, however, is a claim without authority.

   The speaker is appealing to his sense of fairness, rather than a reliable source, such as the word of God. Similarly, an Augustinian (Calvinistic) theologian, in defense of his view of God's sovereignty, may claim, "well God has to be in charge of everything." "If you left things up to people, nothing good would happen!" This claim is not based on scripture, but, rather, on the Augustinian's view of humanity. He may be correct; however, the Augustinian has not established his primary point using scriptures related to the Sovereignty of God over the affairs of humanity.

2. **The used of rejoinder:** Rejoinder involves suspending judgment while investigating in a serious manner the claims of those who oppose your theological or apologetical view. It involves looking for the weaknesses of your view while observing the ways in which scripture substantiates some (or all) of your opponent's viewpoint. It is possible that two seemingly opposing view are supported by the bible text. If there are two seemingly opposing views supported by scripture, the struggle is not to determine which is correct, but how to assimilate both of these views properly into a coherent theology that is currently not being considered. For example; the Westminster Confession affirms BOTH predestination and free will in a well-constructed coherent statement.

3. **Address questions directly:** It is tempting to ignore questions and propositions for which one has not prepared. One commonly used method of addressing theological and apologetical questions is to ignore the question posed and continue to state one's own conviction with increasing volume and dramatic expression. If one is unprepared to answer an objection or another's point of view, the best practice is to be honest about your lack of knowledge with the subject matter. When encountering unfamiliar subject matter, I have found it mutually satisfying to state; "I will research your question (or point of view) more and would love to reengage at a later time."

Note: While preaching emphatically, the speaker is seen as more credible when also presenting honestly the opposing view point before presenting their own view. Presenting honestly the opposition's view is called "rejoinder."

Five Core Principles of Journalism

1. Truth and Accuracy

We should always strive for accuracy; give all the relevant facts we have and ensure that they have been checked. When we cannot corroborate information, we should say so.

2. Independence

Journalists must be independent voices; we should not act, formally or informally, on behalf of special interests whether political, corporate or cultural. We should declare to our editors – or the audience – any of our political affiliations, financial arrangements or other personal information that might constitute a conflict of interest.

3. Fairness and Impartiality

Most stories have at least two sides. While there is no obligation to present every side in every piece, stories should be balanced and add context. Objectivity is not always possible, and may not always be desirable (in the face for example of brutality or inhumanity), but impartial reporting builds trust and confidence.

4. Humanity

Journalists should do no harm. What we publish or broadcast may be hurtful, but we should be aware of the impact of our words and images on the lives of others.

5. Accountability

A sure sign of professionalism and responsible journalism is the ability to hold ourselves accountable. When we commit errors, we must correct them and our expressions of regret must be sincere not cynical.

THE VALUE OF OBSERVATION

The Student, The Fish, and Agassiz

By the Student

It was more than fifteen years ago that I entered the laboratory of **Professor** Agassiz, and told him I had enrolled my name in the scientific school as a **student** of natural history. He asked me a few questions about my object in coming, my antecedents generally, the mode in which I afterwards proposed to use the knowledge I might acquire, and finally, whether I wished to study any special branch. To the latter I replied that while I wished to be well grounded in all departments of zoology, I purposed to devote myself specially to insects.

"When do you wish to begin?" he asked. "Now," I replied. This seemed to please him, and with an energetic "Very well," he reached from a shelf a huge jar of specimens in yellow alcohol. "Take this fish," said he, "and look at it; we call it a Haemulon [pronounced Hem- yú- lon]; by and by I will ask what you have seen." With that he left me, but in a moment returned with explicit instructions as to the care of the object entrusted to me. "No man is fit to be a naturalist," said he, "who does not know how to take care of specimens."

I was to keep the fish before me in a tin tray, and occasionally moisten the surface with alcohol from the jar, always taking care to replace the stopper tightly. Those were not the days of ground glass stoppers, and elegantly shaped exhibition jars; all the old students will recall the huge, neckless glass bottles with their leaky, wax-besmeared corks half eaten by insects and begrimed with cellar dust. Entomology was a cleaner science than ichthyology, but the example of the **professor**, who had unhesitatingly plunged to the bottom of the jar to produce the fish, was infectious; and though this alcohol had "a very ancient and fishlike smell," I really dared not show any aversion within these sacred precincts, and treated the alcohol as though it were pure water. Still I was conscious of a passing feeling of disappointment, for gazing at a fish did not commend itself to an ardent entomologist. My friends at home, too, were annoyed, when they discovered that no amount of eau de cologne would drown the perfume which haunted me like a shadow. In ten minutes I had seen all that could be seen in that fish, and started in search of the **professor**, who had, however, left the museum; and when I returned, after lingering over some of the odd animals stored in the upper apartment, my specimen was dry all over. I dashed the fluid over the fish as if to resuscitate it from a fainting-fit, and looked with anxiety for a return of the normal, sloppy

appearance. This little excitement over, nothing was to be done but return to a steadfast gaze at my mute companion. Half an hour passed, an hour, another hour; the fish began to look loathsome. I turned it over and around; looked it in the face—ghastly; from behind, beneath, above, sideways, at a three-quarters' view—just as ghastly. I was in despair; at an early hour I concluded that lunch was necessary; so, with infinite relief, the fish was carefully replaced in the jar, and for an hour I was free.

On my return, I learned that **Professor** Agassiz had been at the museum, but had gone and would not return for several hours. My fellow students were too busy to be disturbed by continued conversation. Slowly I drew forth that hideous fish, and with a feeling of desperation again looked at it. I might not use a magnifying glass; instruments of all kinds were interdicted. My two hands, my two eyes, and the fish; it seemed a most limited field. I pushed my finger down its throat to feel how sharp its teeth were. I began to count the scales in the different rows until I was convinced that that was nonsense. At last a happy thought struck me—I would draw the fish; and now with surprise I began to discover new features in the creature. Just then the **professor** returned.

"That is right," said he; "a pencil is one of the best of eyes. I am glad to notice, too, that you keep your specimen wet and your bottle corked."

With these encouraging words he added,— "Well, what was it like?"

He listened attentively to my brief rehearsal of the structure of parts whose names were still unknown to me: the fringed gill—arches and movable operculum; the pores of the head, fleshy lips, and lidless eyes; the lateral line, the spinous fin, and forked tail; the compressed and arched body. When I had finished, he waited as if expecting more, and then, with an air of disappointment,— "You have not looked very carefully; why," he continued, more earnestly, "you haven't seen one of the most conspicuous features of the animal, which is as plainly before your eyes as the fish itself; look again, look again!" and he left me to my misery. I was piqued; I was mortified. Still more of that wretched fish! But now I set myself to my task with a will, and discovered one new thing after another, until I saw how just the **professor**'s criticism had been. The afternoon passed quickly, and when, towards its close, the **professor** inquired,— "Do you see it yet?" "No," I replied, "I am certain I do not, but I see how little I saw before." "That is next best," said he earnestly, "but I won't hear you now; put away your fish and go home; perhaps you will be ready with a better answer in the morning. I will examine you before you look at the fish."

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The **Student**, The Fish, and Agassiz

Page:3

This was disconcerting; not only must I think of my fish all night, studying, without the object before me, what this unknown but most visible feature might be; but also,

without reviewing my new discoveries, I must give an exact account of them the next day. I had a bad memory; so I walked home by Charles River in a distracted state, with my two perplexities. The cordial greeting from the **professor** the next morning was reassuring; here was
a man who seemed to be quite as anxious as I that I should see for myself what he saw. “Do you perhaps mean,” I asked, “that the fish has symmetrical side with paired organs?” His thoroughly pleased, “Of course, of course!” repaid the wakeful hours of the previous night. After he had discoursed most happily and enthusiastically—as he always did—upon the importance of this point, I ventured to ask what I should do next.
“Oh, look at your fish!” he said, and left me again to my own devices. In a little more than an hour he returned and heard my new catalogue. “That is good, that is good!” he repeated, “but that is not all; go on.” And so, for three long days, he placed that fish before my eyes, forbidding me to look at anything else, or to use any artificial aid. “Look, look, look,” was his repeated injunction.
This was the best entomological lesson I ever had—a lesson whose influence has extended to the details of every subsequent study; a legacy the **professor** has left to me, as he has left it to many others, of inestimable value, which we could not buy, with which we cannot part. A year afterward, some of us were amusing ourselves with chalking outlandish beasts upon the museum blackboard. We drew prancing star-fishes; frogs in mortal combat; hydra-headed worms; stately craw-fishes, standing on their tails, bearing
aloft umbrellas; and grotesque fishes, with gaping mouths and staring eyes. The **professor** came in shortly after, and was amused as any, at our experiments. He looked at the fishes.
“Haemulons, every one of them,” he said. “Mr. ---------- drew them.”
True; and to this day, if I attempt a fish, I can draw nothing but Haemulons.
The fourth day, a second fish of the same group was placed beside the first, and I was bidden to point out the resemblances and differences between the two;
another and another followed, until the entire family lay before me, and a whole legion of jars covered the table and surrounding shelves; the odor had become a pleasant perfume; and even now, the sight of an old, six-inch, worm-eaten cork brings fragrant memories!

Page 4

The **Student**, The Fish, and Agassiz
Page:4
The whole group of Haemulons was thus brought in review; and, whether engaged upon the dissection of the internal organs, the preparation and examination of the bony framework, or the description of the various parts, Agassiz’s training in the

method of observing facts and their orderly arrangement was ever accompanied by the urgent exhortation not to be content with them.

“Facts are stupid things,” he would say, “until brought into connection with some general law.”

At the end of eight months, it was almost with reluctance that I left these friends and turned to insects; but what I had gained by this outside experience has been of greater value than years of later investigation in my favorite groups.

From *American Poems* (3d ed.; Boston: Houghton, Osgood and Co., 1879), pp. 450-54. This essay first appeared in *Every Saturday*, XVI (Apr. 4, 1874), 369-70, under the title “In the Laboratory, With Agassiz, By a former pupil.”

One Two Threes of Meaning
(For A Single Bible Passage)

- Read the entire book or letter
- Go to the passage in question
- Read a few paragraphs before and after your text to understand the context
- Take into account the historical setting of the author and issues the book addresses
- Take into account the type of literature you are reading
- Determine the plain meaning of the author as applied to the author's intended audience.
- Come up with points of significant or applications without stretching the basic meaning of the text
- Consult commentaries or Christian leaders to see if you are on the right track

One Two Threes of Theology

- Use a concordance or computer word search to locate all the passages in the bible that speak to your subject

- Understand the meaning of each text using interpretation principles from this course

- Weed out passages that do not apply to the topic you are researching

- Create some summary statements that are big enough to include all the passages making sure not violate the plain meaning of any passage

- Remember: Your theology or summary statement cannot change the plain meaning of any passage. The plain meaning of every passage trumps all theology statements.

- Do not make a theology out of an unclear or a single passage (unless that single passage is as certain as snow in Wisconsin)

Research Tools

- Study bible with cross references
- Concordance (on line or hardcover) (*where to find it in Scripture* is good)
- Bible background commentary (IVP)
- Commentaries (Life Application bible commentary is great for laity)
- Bible dictionary (tells you expanded info about many topics)
- Theology commentary (I like Grudem's "Systematic Theology")
- Internet (bible.com or biblegateway.org has all the bibles and many research tools)

Theology or Ethic Worksheet

1. What does The Bible say about *(name the subject)* _____?

Example: Ask very specific questions about your subject. For example, if your question relates to baptism, form your question narrowly and specifically before you begin looking up passages.

Sample Questions**:** 1. Should a person be baptized before they become a believer? 2. What method is used to baptize individuals in the New Testament? 3. In scripture who should perform a baptism ceremony?

PASSAGE LOOK UPS

Plain meaning of a passage is determined by observing the
Text, Context, Historical Background, Timeless-Truths
of each passage. Remember genre and context for each passage.

2. Look up all passages that speak to your topic and then whittle them down to about 4 or 5 of the most relevant ones. Make sure they related to the questions you wrote. List them below.

Passage One:

Plain meaning: _____

Passage Two: _____

Plain meaning: _____

Passage Three: _____

Plain meaning: _____

HARMONIZE

Compare Scripture with Scripture

In this process you compare scripture with scripture to harmonize them into a single statement.

Considering all the relevant passages that you found, the bible says, about
(e.g. *the best means of baptism*)…..

3. Theology or Ethic Statement:(taken from a summary of passages)

_____

_____

Sample of 1,2,3s Topic Research

General Topic - Baptism
Specific Question: Should I get baptized (immediately?) AFTER becoming a believer?
Search Words: Baptism, Baptized, Water, Believe
Implied or Commanded: Do the passages command or imply baptism AFTER belief?

- If it is a command (from Apostolic instruction in the letters) then we must.
- If it is implied because we see a pattern, then we could, or should, but there may be exceptions.

==========

Baptism

Romans 6:4
We were buried therefore with him by **baptism** into death, in order that, just as Christ was raised from the dead by the glory of the Father, we too might walk in newness of life.

Baptized

Mark 16:16
Whoever believes and is **baptized** will be saved, but whoever does not believe will be condemned.

Acts 2:38
And Peter said to them, “Repent and be **baptized** every one of you in the name of Jesus Christ for the forgiveness of your sins, and you will receive the gift of the Holy Spirit.

Acts 2:41
So those who received his word were **baptized**, and there were added that day about three thousand souls.

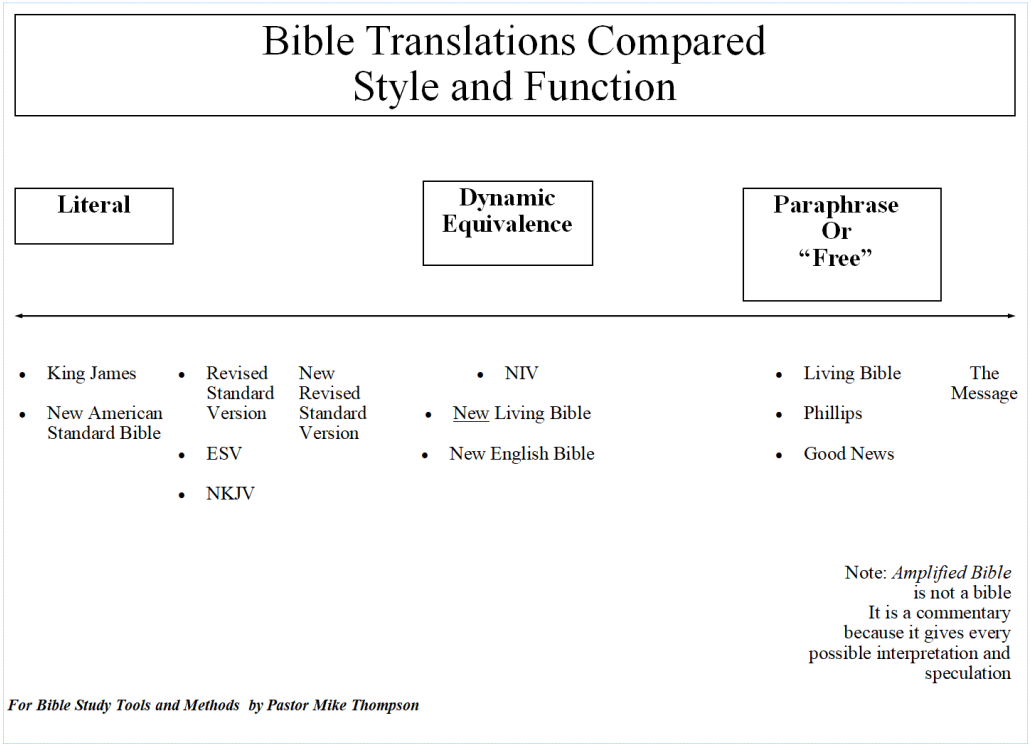
Acts 8:13
Even Simon himself believed, and after being **baptized** he continued with Philip. And seeing signs and great miracles performed, he was amazed.

Acts 8:35
35 Then Philip opened his mouth, and beginning with this Scripture he told him the good news about Jesus. **36** And as they were going along the road they came to some water, and the eunuch said, “See, here is water! What prevents me from being baptized?”

English Bible Translations

Word for Word vs Thought for Thought

By
Michael A Thompson



Timeline of Bible Translation History

1,400 BC: The first written Word of God: The Ten Commandments delivered to Moses.

500 BC: Completion of All Original Hebrew Manuscripts which make up the 39 Books of the Old Testament.

200 BC: Completion of the Septuagint Greek Manuscripts which contain the 39 Old Testament Books AND 14 Apocrypha Books.

1st Century AD: Completion of All Original Greek Manuscripts which make up the 27 Books of the New Testament.

315 AD: Athanasius, the Bishop of Alexandria, identifies the 27 books of the New Testament which are today recognized as the canon of scripture.

382 AD: Jerome's Latin Vulgate Manuscripts Produced which contain All 80 Books (39 Old Test. + 14 Apocrypha + 27 New Test).

500 AD: Scriptures have been Translated into Over 500 Languages.

600 AD: LATIN was the Only Language Allowed for Scripture.

995 AD: Anglo-Saxon (Early Roots of English Language) Translations of The New Testament Produced.

1384 AD: Wycliffe is the First Person to Produce a (Hand-Written) manuscript Copy of the Complete Bible; All 80 Books.

1455 AD: Gutenberg Invents the Printing Press; Books May Now be mass-Produced Instead of Individually Hand-Written. The First Book Ever Printed is Gutenberg's Bible in Latin.

1516 AD: Erasmus Produces a Greek/Latin Parallel New Testament.

1522 AD: Martin Luther's German New Testament.

1526 AD: William Tyndale's New Testament; The First New Testament printed in the English Language.

1535 AD: Myles Coverdale's Bible; The First Complete Bible printed in the English Language (80 Books: O.T. & N.T. & Apocrypha).

1537 AD: Tyndale-Matthews Bible; The Second Complete Bible printed in English. Done by John "Thomas Matthew" Rogers (80 Books).

1539 AD: The "Great Bible" Printed; The First English Language Bible Authorized for Public Use (80 Books).

1560 AD: The Geneva Bible Printed; The First English Language Bible to add Numbered Verses to Each Chapter (80 Books).

1568 AD: The Bishops Bible Printed; The Bible of which the King James was a Revision (80 Books).

1609 AD: The Douay Old Testament is added to the Rheims New Testament (of 1582) Making the First Complete English Catholic Bible; Translated from the Latin Vulgate (80 Books).

1611 AD: The King James Bible Printed; Originally with All 80 Books. The Apocrypha was Officially Removed in 1885 Leaving Only 66 Books.

1782 AD: Robert Aitken's Bible; The First English Language Bible (KJV) Printed in America.

1791 AD: Isaac Collins and Isaiah Thomas Respectively Produce the First Family Bible and First Illustrated Bible Printed in America. Both were King James Versions, with All 80 Books.

1808 AD: Jane Aitken's Bible (Daughter of Robert Aitken); The First Bible to be Printed by a Woman.

1833 AD: Noah Webster's Bible; After Producing his Famous Dictionary, Webster Printed his Own Revision of the King James Bible.

1841 AD: English Hexapla New Testament; an Early Textual Comparison showing the Greek and 6 Famous English Translations in Parallel Columns.

1846 AD: The Illuminated Bible; The Most Lavishly Illustrated Bible printed in America. A King James Version, with All 80 Books.

1885 AD: The "English Revised Version" Bible; The First Major English Revision of the KJV.

1901 AD: The "American Standard Version"; The First Major American Revision of the KJV.

1971 AD: The "New American Standard Bible" (NASB) is Published as a "Modern and Accurate Word for Word English Translation" of the Bible.

1973 AD: The "New International Version" (NIV) is Published as a "Modern and Accurate Phrase for Phrase English Translation" of the Bible.

1982 AD: The "New King James Version" (NKJV) is Published as a "Modern English Version Maintaining the Original Style of the King James."

2002 AD: The English Standard Version (ESV) is Published as a translation to bridge the gap between the accuracy of the NASB and the readability of the NIV.

History of The English Bible Versions

Go to the following link to read in more detail about how each of the English bible versions was developed.

https://www.greatsite.com/timeline-english-bible-history/index.html

15 Common Defense Mechanisms

By John M. Grohol, Psy.D.
Last updated: 3 Jun 2019
~ 8 MIN READ

In some areas of psychology (especially in psychodynamic theory), psychologists talk about "defense mechanisms," or manners in which a person behaves or thinks in certain ways to better protect or "defend" their inner selves (their personality and self-image). Defense mechanisms are one way of looking at how people distance themselves from a full awareness of unpleasant thoughts, feelings, and behaviors.

Psychologists have categorized defense mechanisms based upon how primitive they are. The more primitive a defense mechanism, the less effective it works for a person over the long-term. However, more primitive defense mechanisms are usually very effective short-term, and hence are favored by many people and children especially (when such primitive defense mechanisms are first learned). Adults who don't learn better ways of coping with stress or traumatic events in their lives will often resort to such primitive defense mechanisms as well.

Most defense mechanisms are fairly unconscious – that means most of us don't realize we're using them in the moment. Some types of psychotherapy can help a person become aware of what defense mechanisms they are using, how effective they are, and how to use less primitive and more effective mechanisms in the future.

Primitive Defense Mechanisms

1. Denial

Denial is the refusal to accept reality or fact, acting as if a painful event, thought or feeling did not exist. It is considered one of the most primitive of the defense mechanisms because it is characteristic of early childhood development. Many people use denial in their everyday lives to avoid dealing with painful feelings or areas of their life they don't wish to admit. For instance, a person who is a functioning alcoholic will often simply deny they have a drinking problem, pointing to how well they function in their job and relationships.

2. Regression

Regression is the reversion to an earlier stage of development in the face of unacceptable thoughts or impulses. For an example an adolescent who is overwhelmed with fear, anger and growing sexual impulses might become clingy and start exhibiting earlier childhood behaviors he has long since overcome, such as bedwetting. An adult may regress when under a great deal of stress, refusing to leave their bed and engage in normal, everyday activities.

3. Acting Out

Acting Out is performing an extreme behavior in order to express thoughts or feelings the person feels incapable of otherwise expressing. Instead of saying, "I'm angry with you," a person who acts out may instead throw a book at the person, or punch a hole through a wall. When a person acts out, it can act as a pressure release, and often

helps the individual feel calmer and peaceful once again. For instance, a child's temper tantrum is a form of acting out when he or she doesn't get his or her way with a parent. Self-injury may also be a form of acting-out, expressing in physical pain what one cannot stand to feel emotionally.

4. Dissociation

Dissociation is when a person loses track of time and/or person, and instead finds another representation of their self in order to continue in the moment. A person who dissociates often loses track of time or themselves and their usual thought processes and memories. People who have a history of any kind of childhood abuse often suffer from some form of dissociation.

In extreme cases, dissociation can lead to a person believing they have multiple selves ("multiple personality disorder" now known as dissociative identity disorder). People who use dissociation often have a disconnected view of themselves in their world. Time and their own self-image may not flow continuously, as it does for most people. In this manner, a person who dissociates can "disconnect" from the real world for a time, and live in a different world that is not cluttered with thoughts, feelings or memories that are unbearable.

5. Compartmentalization

Compartmentalization is a lesser form of dissociation, wherein parts of oneself are separated from awareness of other parts and behaving as if one had separate sets of values. An example might be an honest person who cheats on their income tax return but is otherwise trustworthy in his financial dealings. In this way, he keeps the two value systems distinct and sees no hypocrisy in doing so, perhaps remaining unconscious of the discrepancy.

6. Projection

> *Projection is when you put your feelings or thoughts onto another person, as though they were that person's feelings and thoughts.*

Projection is the misattribution of a person's undesired thoughts, feelings, or impulses onto another person who does not have those thoughts, feelings or impulses. Projection is used especially when the thoughts are considered unacceptable for the person to express, or they feel completely ill at ease with having them. For example, a spouse may be angry at their significant other for not listening, when in fact it is the angry spouse who does not listen. Projection is often the result of a lack of insight and acknowledgement of one's own motivations and feelings.

7. Reaction Formation

Reaction Formation is the converting of unwanted or dangerous thoughts, feelings or impulses into their opposites. For instance, a woman who is very angry with her boss and would like to quit her job may instead be overly kind and generous toward her boss

and express a desire to keep working there forever. She is incapable of expressing the negative emotions of anger and unhappiness with her job, and instead becomes overly kind to publicly demonstrate her lack of anger and unhappiness.

Less Primitive, More Mature Defense Mechanisms

Less primitive defense mechanisms are a step up from the primitive defense mechanisms in the previous section. Many people employ these defenses as adults, and while they work okay for many, they are not ideal ways of dealing with our feelings, stress and anxiety. If you recognize yourself using a few of these, don't feel bad — everybody does.

8. Repression

Repression is the unconscious blocking of unacceptable thoughts, feelings and impulses. The key to repression is that people do it unconsciously, so they often have very little control over it. "Repressed memories" are memories that have been unconsciously blocked from access or view. But because memory is very malleable and ever-changing, it is not like playing back a DVD of your life. The DVD has been filtered and even altered by your life experiences, even by what you've read or viewed.

9. Displacement

Displacement is the redirecting of thoughts feelings and impulses directed at one person or object, but taken out upon another person or object. People often use displacement when they cannot express their feelings in a safe manner to the person they are directed at. The classic example is the man who gets angry at his boss, but can't express his anger to his boss for fear of being fired. He instead comes home and kicks the dog or starts an argument with his wife. The man is redirecting his anger from his boss to his dog or wife. Naturally, this is a pretty ineffective defense mechanism, because while the anger finds a route for expression, it's misapplication to other harmless people or objects will cause additional problems for most people.

10. Intellectualization

> *When a person intellectualizes, they shut down all of their emotions and approach a situation solely from a rational standpoint — especially when the expression of emotions would be appropriate.*

Intellectualization is the overemphasis on thinking when confronted with an unacceptable impulse, situation, or behavior without employing any emotions whatsoever to help mediate and place the thoughts into an emotional, human context. Rather than deal with the painful associated emotions, a person might employ intellectualization to distance themselves from the impulse, event or behavior. For instance, a person who has just been given a terminal medical diagnosis, instead of expressing their sadness and grief, focuses instead on the details of all possible fruitless medical procedures.

11. Rationalization

Rationalization is putting something into a different light or offering a different explanation for one's perceptions or behaviors in the face of a changing reality. For instance, a woman who starts dating a man she really, really likes and thinks the world of is suddenly dumped by the man for no reason. She re-imagines the situation in her mind with the thought, "I suspected he was a loser all along."

12. Undoing

Undoing is the attempt to take back an unconscious behavior or thought that is unacceptable or hurtful. For instance, after realizing you just insulted your significant other unintentionally, you might spend then next hour praising their beauty, charm and intellect. By "undoing" the previous action, the person is attempting to counteract the damage done by the original comment, hoping the two will balance one another out.

Mature Defense Mechanisms

Mature defense mechanisms are often the most constructive and helpful to most adults, but may require practice and effort to put into daily use. While primitive defense mechanisms do little to try and resolve underlying issues or problems, mature defenses are more focused on helping a person be a more constructive component of their environment. People with more mature defenses tend to be more at peace with themselves and those around them.

13. Sublimation

Sublimation is simply the channeling of unacceptable impulses, thoughts and emotions into more acceptable ones. For instance, when a person has sexual impulses they would like not to act upon, they may instead focus on rigorous exercise. Refocusing such unacceptable or harmful impulses into productive use helps a person channel energy that otherwise would be lost or used in a manner that might cause the person more anxiety.

Sublimation can also be done with humor or fantasy. Humor, when used as a defense mechanism, is the channeling of unacceptable impulses or thoughts into a light-hearted story or joke. Humor reduces the intensity of a situation, and places a cushion of laughter between the person and the impulses. Fantasy, when used as a defense mechanism, is the channeling of unacceptable or unattainable desires into imagination. For example, imagining one's ultimate career goals can be helpful when one experiences temporary setbacks in academic achievement. Both can help a person look at a situation in a different way, or focus on aspects of the situation not previously explored.

14. Compensation

Compensation is a process of psychologically counterbalancing perceived weaknesses by emphasizing strength in other arenas. By emphasizing and focusing on one's strengths, a person is recognizing they cannot be strong at all things and in all areas in their lives. For instance, when a person says, "I may not know how to cook, but I can sure do the dishes!," they're trying to compensate for their lack of cooking skills by

emphasizing their cleaning skills instead. When done appropriately and not in an attempt to over-compensate, compensation is defense mechanism that helps reinforce a person's self-esteem and self-image.

15. Assertiveness

> *You can be clear and assertive in your communication, without needing to be aggressive and blunt.*

Assertiveness is the emphasis of a person's needs or thoughts in a manner that is respectful, direct and firm. Communication styles exist on a continuum, ranging from passive to aggressive, with assertiveness falling neatly in-between. People who are passive and communicate in a passive manner tend to be good listeners, but rarely speak up for themselves or their own needs in a relationship.

People who are aggressive and communicate in an aggressive manner tend to be good leaders, but often at the expense of being able to listen with empathy to others and their ideas and needs. People who are assertive strike a balance where they speak up for themselves, express their opinions or needs in a respectful yet firm manner, and listen when they are being spoken to. Becoming more assertive is one of the most desired communication skills and helpful defense mechanisms most people want to learn, and would benefit in doing so.

* * *

Remember, defense mechanisms are most often learned behaviors, most of which we learned during childhood. That's a good thing, because it means that, as an adult, you can choose to learn some new behaviors and new defense mechanisms that may be more beneficial to you in your life. Many psychotherapists will help you work on these things, if you'd like. But even becoming more aware of when you're using one of the less primitive types of defense mechanisms above can be helpful in identifying behaviors you'd like to reduce.

15 Logical Fallacies You Should Know Before Getting Into a Debate

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Common Logical Fallacies

Logical fallacies are like landmines; easy to overlook until you find them the hard way. One of the most important components of learning in college is academic discourse, which requires argumentation and debate. Argumentation and debate inevitably lend themselves to flawed reasoning and rhetorical errors. Many of these errors are considered logical fallacies. Logical fallacies are commonplace in the classroom, in formal televised debates, and perhaps most rampantly, on any number of internet forums. But what is a logical fallacy? And just as important, how can you avoid making logical fallacies yourself? Whether you're in college, or preparing to go to college; whether you're on campus or in an online bachelor's degree program, it pays to know your logical fallacies. This article lays out some of the most common logical fallacies you might encounter, and that you should be aware of in your own discourse and debate.

What is a Logical Fallacy?

A logical fallacy is an error in reasoning common enough to warrant a fancy name. Knowing how to spot and identify fallacies is a priceless skill. It can save you time, money, and personal dignity. There are two major categories of logical fallacies, which in turn break down into a wide range of types of fallacies, each with their own unique ways of trying to trick you into agreement.

A Formal Fallacy is a breakdown in how you say something. The ideas are somehow sequenced incorrectly. Their form is wrong, rendering the argument as noise and nonsense.

An Informal Fallacy denotes an error in what you are saying, that is, the content of your argument. The ideas might be arranged correctly, but something you said isn't quite right. The content is wrong or off-kilter.

For the purposes of this article, when we say **logical fallacies**, we refer to informal fallacies. Following is a list of the **15 types of logical fallacies you are most likely to encounter in discussion and debate**.

1. Ad Hominem Fallacy

When people think of "arguments," often their first thought is of shouting matches riddled with personal attacks. Ironically, personal attacks run contrary to rational arguments. In logic and rhetoric, a personal attack is called an *ad hominem*. *Ad hominem* is Latin for "against the man." Instead of advancing good sound reasoning, an *ad hominem* replaces logical argumentation with attack-language unrelated to the truth of the matter.

More specifically, the *ad hominem* is a fallacy of relevance where someone rejects or criticizes another person's view on the basis of personal characteristics, background, physical appearance, or other features irrelevant to the argument at issue.

An *ad hominem* is more than just an insult. It's an insult used as if it were an argument or evidence in support of a conclusion. Verbally attacking people proves nothing about the truth or falsity of their claims. Use of an *ad hominem* is commonly known in politics as "mudslinging." Instead of addressing the candidate's stance on the issues, or addressing his or her effectiveness as a statesman or stateswoman, an *ad hominem* focuses on personality issues, speech patterns, wardrobe, style, and other things that affect popularity but have no bearing on their competence. In this way, an *ad hominem* can be unethical, seeking to manipulate voters by appealing to irrelevant foibles and name-calling instead of addressing core issues. In this last election cycle, personal attacks were volleyed freely from all sides of the political aisle, with both Clinton and Trump facing their fair share of *ad hominem* fallacies.

Ad hominem is an insult used as if it were an argument or evidence in support of a conclusion.
A thread on Quora lists the following doozies against Hillary Clinton: "Killary Clinton," "Crooked Hillary," "Hilla the Hun," "Shillary," "Hitlery," "Klinton," "Hildebeest," "Defender of Child rapists," "Corporate Whore," "Mr. President," "Heil Hillary," "Wicked Witch of the West Wing," "Robberty Hillham Clinton," "Mrs. Carpetbagger", and the decidedly unsubtle, "The Devil."

The NY Daily News offers an amusing list of insults against Donald Trump: "Short fingered Vulgarian," "Angry Creamsicle," "Fascist Carnival Barker," "F*ckface von

Clownstick," "Decomposing Jack-O-Lantern," "Chairman of the Saddam Hussein Fanclub," "Racist Clementine," "Sentient Caps Lock Button," "Cheeto Jesus," "Tangerine Tornado," and perhaps the most creative/literary reference, "Rome Burning in Man Form."

The use of *ad hominem* often signals the point at which a civil disagreement has descended into a "fight." Whether it's siblings, friends, or lovers, most everyone has had a verbal disagreement crumble into a disjointed shouting match of angry insults and accusations aimed at discrediting the other person. When these insults crowd out a substantial argument, they become *ad hominems*.

Your Turn:

See if you can tell which of these is an *ad hominem* argument, and which is just an insult.

Example 1: "MacDougal roots for a British football team. Clearly he's unfit to be a police chief in Ireland."

Example 2: "All people from Crete are liars"

2. Strawman Argument

It's much easier to defeat your opponent's argument when it's made of straw. The Strawman argument is aptly named after a harmless, lifeless, scarecrow. In the strawman argument, someone attacks a position the opponent doesn't really hold. Instead of contending with the actual argument, he or she attacks the equivalent of a lifeless bundle of straw, an easily defeated effigy, which the opponent never intended upon defending anyway.

The strawman argument is a cheap and easy way to make one's position look stronger than it is. Using this fallacy, opposing views are characterized as "non-starters," lifeless, truthless, and wholly unreliable. By comparison, one's own position will look better for it. You can imagine how strawman arguments and *ad hominem* fallacies can occur together, demonizing opponents and discrediting their views.

With the strawman argument, someone attacks a position the opponent doesn't really hold.
This fallacy can be unethical if it's done on purpose, deliberately mischaracterizing the opponent's position for the sake of deceiving others. But often the strawman argument is accidental, because the offender doesn't realize the are oversimplifying a nuanced position, or misrepresenting a narrow, cautious claim as if it were broad and foolhardy.

Your Turn:

See if you can detect how both of the following statements could qualify as a strawman argument.

Example 1: “The Senator thinks we can solve all our ecological problems by driving a Prius.”

Example 2: “Quite the contrary, the Senator thinks the environment is such a wreck that no one’s car choice or driving habits would make the slightest difference.”

3. Appeal to Ignorance (*argumentum ad ignorantiam*)

Any time ignorance is used as a major premise in support of an argument, it’s liable to be a fallacious appeal to ignorance. Naturally, we are all ignorant of many things, but it is cheap and manipulative to allow this unfortunate aspect of the human condition to do most of our heavy lifting in an argument.

An appeal to ignorance isn’t proof of anything except that you don’t know something. Interestingly, appeal to ignorance is often used to bolster multiple contradictory conclusions at once. Consider the following two claims:

- “No one has ever been able to prove definitively that extra-terrestrials exist, so they must not be real.”
- “No one has ever been able to prove definitively that extra-terrestrials do not exist, so they must be real.”

If the same argument strategy can support mutually exclusive claims, then it’s not a good argument strategy.

An appeal to ignorance isn’t proof of anything except that you don’t know something. If no one has proven the non-existence of ghosts or flying saucers, that’s hardly proof that those things either exist or don’t exist. If we don’t know whether they exist, then we don’t know that they *do* exist or that they *don’t* exist. Appeal to ignorance doesn’t prove any claim to knowledge.

Your Turn:

Consider the following examples. Can you spot the appeal to ignorance?

Example 1: “We have no evidence that the Illuminati ever existed. They must have been so clever they destroyed all the evidence.”

Example 2: “I know nothing about Tank Johnson except that he has a criminal record as long as your leg, but I’ll bet he’s really just misunderstood.”

4. False Dilemma/False Dichotomy

This fallacy has a few other names: “black-and-white fallacy,” “either-or fallacy,” “false dichotomy,” and “bifurcation fallacy.” This line of reasoning fails by limiting the options to two when there are in fact more options to choose from. Sometimes the choices are between one thing, the other thing, or both things together (they don’t exclude each other). Sometimes there is a whole range of options, three, four, five, or a hundred and forty-five. However, it may happen, the false dichotomy fallacy errs by oversimplifying the range of options.

Dilemma-based arguments are only fallacious when, in fact, there are more than the stated options. It’s not a fallacy however if there really are only two options. For example, “either Led Zeppelin is the greatest band of all time, or they are not.” That’s a true dilemma, since there really are only two options there: A or non-A. It would be fallacious however to say, “There are only two kinds of people in the world: people who love Led Zeppelin, and people who hate music.” Some people are indifferent about that music. Some sort of like it, or sort of dislike it, but don’t have strong feelings either way.

Dilemma-based arguments are only fallacious when, in fact, there are more than the stated options.
The false dilemma fallacy is often a manipulative tool designed to polarize the audience, heroicizing one side and demonizing the other. It’s common in political discourse as a way of strong-arming the public into supporting controversial legislation or policies.

Your Turn:

See if you can identify a third option these politicians failed to mention.

Example 1: “Either we go to war, or we appear weak.”

Example 2: “Either you love me, or you hate me.”

5. Slippery Slope Fallacy

You may have used this fallacy on your parents as a teenager: “But, you *have to* let me go to the party! If I don’t go to the party, I’ll be a loser with no friends. Next thing you know I’ll end up alone and jobless living in your basement when I’m 30!” The slippery slope fallacy works by moving from a seemingly benign premise or starting point and working through a number of small steps to an improbable extreme.

This fallacy is not just a long series of causes. Some causal chains are perfectly reasonable. There could be a complicated series of causes that are all related, and we have good reason for expecting the first cause to generate the last outcome. The slippery slope fallacy, however, suggests that unlikely or ridiculous outcomes are likely when there is just not enough evidence to think so.

The slippery slope fallacy suggests that unlikely or ridiculous outcomes are likely when there's just not enough evidence to think so.
It's hard enough to prove one thing is happening or has happened; it's even harder to prove a whole series of events *will* happen. That's a claim about the future, and we haven't arrived there yet. We, generally, don't know the future with that kind of certainty. The slippery slope fallacy slides right over that difficulty by *assuming* that chain of future events without really proving their likelihood.

Your Turn:

Which of these examples is a slippery slope fallacy and which is not?

Example 1: "Your coach's policy is that no one can be a starter on game day if they miss practice. So, if you miss basketball practice today, you won't be a starter in Friday's game. Then you won't be the first freshman to start on the Varsity basketball team at our school."

Example 2: "If America doesn't send weapons to the Syrian rebels, they won't be able to defend themselves against their warring dictator. They'll lose their civil war, and that dictator will oppress them, and the Soviets will consequently carve out a sphere of influence that spreads across the entire Middle East."

6. Circular Argument (*petitio principii*)

When a person's argument is just repeating what they already assumed beforehand, it's not arriving at any new conclusion. We call this a circular argument or circular reasoning. If someone says, "The Bible is true; it says so in the Bible"—that's a circular argument. They are assuming that the Bible only speaks truth, and so they trust it to truthfully report that it speaks the truth, because it says that it does. It is a claim using its own conclusion as its premise, and vice versa, in the form of "If A is true because B is true; B is true because A is true". Another example of circular reasoning is, "According to my brain, my brain is reliable." Well, yes, of course we would think our brains are in fact reliable if our brains are the one's telling us that our brains are reliable.

Circular arguments are also called *Petitio principii*, meaning "Assuming the initial [thing]" (commonly mistranslated as "begging the question"). This fallacy is a kind of presumptuous argument where it only *appears* to be an argument. It's really just restating one's assumptions in a way that looks like an argument. You can recognize a circular argument when the conclusion also appears as one of the premises in the argument.

Your Turn:

Another way to explain circular arguments is that they start where they finish, and finish where they started. See if you can identify which of these is a circular argument.

Example 1: “Smoking pot is against the law because it’s wrong; I know it’s wrong because it is against the law.”

Example 2: “Because smoking pot is against the law, this leads many to believe it is wrong.”

7. Hasty Generalization

A hasty generalization is a general statement without sufficient evidence to support it. A hasty generalization is made out of a rush to have a conclusion, leading the arguer to commit some sort of illicit assumption, stereotyping, unwarranted conclusion, overstatement, or exaggeration.

Normally we generalize without any problem; it is a necessary, regular part of language. We make general statements all the time: “I like going to the park,” "Democrats disagree with Republicans,” "It’s faster to drive to work than to walk," or "Everyone mourned the loss of Harambe, the Gorilla.”

Hasty generalization may be the most common logical fallacy because there’s no single agreed-upon measure for “sufficient” evidence.
Indeed, the above phrase “all the time” is a generalization — we aren’t literally making these statements *all the time*. We take breaks to do other things like eat, sleep, and inhale. These general statements aren’t addressing every case every time. They are speaking generally, and, generally speaking, they are true. Sometimes you don’t enjoy going to the park. Sometimes Democrats and Republicans agree. Sometimes driving to work can be slower than walking if the roads are all shut down for a Harambe procession.

Hasty generalization may be the most common logical fallacy because there’s no single agreed-upon measure for “sufficient” evidence. Is one example enough to prove the claim that, "Apple computers are the most expensive computer brand?" What about 12 examples? What about if 37 out of 50 apple computers were more expensive than comparable models from other brands?

There’s no set rule for what constitutes “enough” evidence. In this case, it might be possible to find reasonable comparison and prove that claim is true or false. But in other cases, there’s no clear way to support the claim without resorting to guesswork. The means of measuring evidence can change according to the kind of claim you are making, whether it’s in philosophy, or in the sciences, or in a political debate, or in

discussing house rules for using the kitchen. A much safer claim is that "Apple computers are more expensive than many other computer brands."

Meanwhile, we do well to avoid treating general statements like they are anything more than simple, standard *generalizations*, instead of true across the board. Even if it is true that many Apple computers are more expensive than other computers, there are plenty of cases in which Apple computers are more affordable than other computers. This is implied in the above generalization, but glossed over in the first hasty generalization.

A simple way to avoid hasty generalizations is to add qualifiers like "sometimes," "maybe," "often," or "it seems to be the case that . . . ". When we don't guard against hasty generalization, we risk stereotyping, sexism, racism, or simple incorrectness. But with the right qualifiers, we can often make a hasty generalization into a responsible and credible claim.

Your Turn:

Which of the following is a hasty generalization?

Example 1: "Some people vote without seriously weighing the merits of the candidate."

Example 2: "People nowadays only vote with their emotions instead of their brains."

Example 3: "All liberals hate guns."

8. Red Herring Fallacy (*ignoratio elenchi*)

A "red herring fallacy" is a distraction from the argument typically with some sentiment that seems to be relevant but isn't really on-topic. This tactic is common when someone doesn't like the current topic and wants to detour into something else instead, something easier or safer to address. A red herring fallacy is typically related to the issue in question but isn't quite relevant enough to be helpful. Instead of clarifying and focusing, it confuses and distracts.

A red herring fallacy can be difficult to identify because it's not always clear how different topics relate.
The phrase "red herring" refers to a kippered herring (salted herring-fish) which was reddish brown in color and quite pungent. According to legend, this aroma was so strong and delectable to dogs that it served as a good training device for testing how well a hunting dog could track a scent without getting distracted. Dogs aren't generally used for hunting fish so a red herring is a distraction from what he is supposed to be hunting.

A red herring fallacy can be difficult to identify because it's not always clear how different topics relate. A "side" topic may be used in a relevant way, or in an irrelevant way. In the big meaty disagreements of our day, there are usually a lot of layers involved, with different subtopics weaving into them. We can guard against the red herring fallacy by clarifying how our part of the conversation is relevant to the core topic.

Your Turn:

Which of the following examples is a red herring fallacy?

Example 1: "My wife wants to talk about cleaning out the garage, so I asked her what she wants to do with our patio furniture. Now she's shopping for new patio furniture and not asking me about the garage."

Example 2: "My wife wants to talk about cleaning out the garage, so I asked her what she wants to do with the patio furniture, because it's just sitting in the garage taking up space."

9. *Tu Quoque* Fallacy (**"appeal to hypocrisy"**)

The "*tu quoque*," Latin for "you too," is also called the **"appeal to hypocrisy"** because it distracts from the argument by pointing out hypocrisy in the opponent. This tactic doesn't solve the problem, or prove one's point, because even hypocrites can tell the truth. Focusing on the other person's hypocrisy is a diversionary tactic. In this way, using the *tu quoque* typically deflects criticism away from yourself by accusing the other person of the same problem or something comparable. If Jack says, "Maybe I committed a little adultery, but so did you Jason!" Jack is trying to diminish his responsibility or defend his actions by distributing blame to other people. But no one else's guilt excuses his own guilt. No matter who else is guilty, Jack is still an adulterer.

The *tu quoque* fallacy is an attempt to divert blame, but it really only distracts from the initial problem. To be clear, however, it isn't a fallacy to simply point out hypocrisy where it occurs. For example, Jack may say, "yes, I committed adultery. Jill committed adultery. Lots of us did, but I'm still responsible for my mistakes." In this example, Jack isn't defending himself or excusing his behavior. He's admitting his part within a larger problem. The hypocrisy claim becomes a *tu quoque* fallacy only when the arguer uses some (apparent) hypocrisy to neutralize criticism and distract from the issue.

Your Turn:

Which of the following is a *tu quoque* fallacy?

Example 1: "But, Dad, I know you smoked when you were my age, so how can you tell me not to do it?"

Example 2: “Son, yes, I smoked when I was your age, it was dumb then. And it’s dumb now. That’s why I forbid you to smoke, chew, or vape, or use nicotine gum, or whatever you kids do with tobacco these days.”

10. Causal Fallacy

The causal fallacy is any logical breakdown when identifying a cause. You can think of the causal fallacy as a parent category for several different fallacies about unproven causes.

One causal fallacy is the false cause or *non causa pro causa* ("not the-cause for a cause") fallacy, which is when you conclude about a cause without enough evidence to do so. Consider, for example, “Since your parents named you ‘Harvest,’ they must be farmers.” It’s *possible* that the parents are farmers, but that name alone is not enough evidence to draw that conclusion. That name doesn’t tell us much of anything about the parents. This claim commits the false cause fallacy.

Another causal fallacy is the *post hoc* fallacy. *Post hoc* is short for *post hoc ergo propter hoc* ("after this, therefore because of this"). This fallacy happens when you mistake something for the cause just because it came first. The key words here are “*post*” and “*propter*” meaning “after” and “because of.” Just because this came before that doesn’t mean this *caused* that. *Post* doesn’t prove *propter*. A lot of superstitions are susceptible to this fallacy. For example:

“Yesterday, I walked under a ladder with an open umbrella indoors while spilling salt in front of a black cat. And I forgot to knock on wood with my lucky dice. That must be why I’m having such a bad day today. It’s bad luck.”

Now, it’s *theoretically possible* that those things cause bad luck. But since those superstitions have no known or demonstrated causal power, and “luck” isn’t exactly the most scientifically reliable category, it’s more reasonable to assume that those events, by themselves, didn’t cause bad luck. Perhaps that person’s "bad luck" is just their own interpretation because they were expecting to have bad luck. They might be having a genuinely bad day, but we cannot assume some non-natural relation between those events caused today to go bad. That’s a Post Hoc fallacy. Now, if you fell off a ladder onto an angry black cat and got tangled in an umbrella, that will guarantee you one bad day.

Another kind of causal fallacy is the correlational fallacy also known as *cum hoc ergo propter hoc* (Lat., “with this therefore because of this"). This fallacy happens when you mistakenly interpret two things found together as being causally related. Two things may correlate without a causal relation, or they may have some third factor causing both of them to occur. Or perhaps both things just, coincidentally, happened together. Correlation doesn’t prove causation.

Consider for example, “Every time Joe goes swimming he is wearing his Speedos. Something about wearing that Speedo must make him want to go swimming.” That statement is a correlational fallacy. Sure it’s *theoretically possible* that he spontaneously sports his euro-style swim trunks, with no thought of where that may lead, and surprisingly he’s now motivated to dive and swim in cold, wet nature. That’s possible. But it makes more sense that he put on his trunks *because* he already planned to go swimming.

Your Turn:

Which kind of causal fallacy is at work in these examples?

Example 1: “Jimmy isn’t at school today. He must be on a family trip.”

Example 2: “Jimmy has a fever, sinus congestion, a cough, and can’t come to school, so he probably has a test later today.”

Example 3: “Someone really should move this ‘deer crossing’ sign. This is a dangerous stretch of highway and the deer really should be crossing somewhere else.”

11. Fallacy of Sunk Costs

Sometimes we invest ourselves so thoroughly in a project that we’re reluctant to ever abandon it, even when it turns out to be fruitless and futile. It’s natural and usually not a fallacy to want to carry on with something we find important, not least because of all the resources we’ve put into it. However, this kind of thinking becomes a fallacy when we start to think that we *should* continue with a task or project because of all that we’ve put into it, without considering the *future* costs we’re likely to incur by doing so. There may be a sense of accomplishment when finishing, and the project might have other values, but it’s not enough to justify the cost invested in it.

We are susceptible to this errant behavior when we crave that sense of completion or a sense of accomplishment
“Sunk cost” is an economic term for any past expenses that can no longer be recovered. For example, after watching the first six episodes of *Battlestar Galactica*, you decide the show isn’t for you. Those six episodes are your “sunk cost.” But, because you’ve already invested roughly six hours of your life in it, you rationalize that you might as well finish it. All apologies to Edward James Olmos, but this isn’t "good economics" so to speak. It’s more cost than benefit.

Psychologically, we are susceptible to this errant behavior when we crave that sense of completion or a sense of accomplishment, or we are too comfortable or too familiar with this unwieldy project. Sometimes, we become too emotionally committed to an “investment,” burning money, wasting time, and mismanaging resources to do it.

Your Turn:

Consider the following examples. Which of these is a sunk cost fallacy and which is not?

Example 1: "I know this relationship isn't working anymore and that we're both miserable. No marriage. No kids. No steady job. But I've been with him for seven years, so I'd better stay with him."

Example 2: "I'm halfway done with college. This is so tough, and it's not nearly as fun as I thought it would be, but I don't know. I guess I'll finish it and get my degree."

12. Appeal to Authority (*argumentum ad verecundiam*)

This fallacy happens when we misuse an authority. This misuse of authority can occur in a number of ways. We can cite only authorities — steering conveniently away from other testable and concrete evidence as if expert opinion is always correct. Or we can cite irrelevant authorities, poor authorities, or false authorities.

Like many of the other fallacies in this list, the *argumentum ad verecundiam* ("argument from respect") can be hard to spot. It's tough to see, sometimes, because it is normally a good, responsible move to cite relevant authorities supporting your claim. It can't hurt. But if all you have are authorities, and everyone just has to "take their word for it" without any other evidence to show that those authorities are correct, then you have a problem.

Often this fallacy refers to irrelevant authorities — like citing a foot doctor when trying to prove something about psychiatry; their expertise is in an irrelevant field. When citing authorities to make your case, you need to cite relevant authorities, but you also need to represent them correctly, and make sure their authority is legitimate.

Suppose someone says, "I buy Fruit of the Loom™ underwear because Michael Jordan says it's the best." Michael Jordan may be a spokesperson, but that doesn't make him a relevant authority when it comes to underwear. This is a fallacy of irrelevant authority.

Now consider this logical leap: "four out of five dentists agree that brushing your teeth makes your life meaningful." Dentists generally have expert knowledge about dental hygiene, but they aren't qualified to draw far-reaching conclusions about its existential meaningfulness. This is a fallacy of misused authority. For all we know, their beliefs about the "meaning of life" are just opinions, not expert advice.

Or take the assumption that, "I'm the most handsome man in the world because my mommy says so." Now, while I might be stunningly handsome, my mom's opinion doesn't prove it. She's biased. She's practically required to tell me I'm handsome

because it's her job as a mother to see the best in me and to encourage me to be the best I can be. She's also liable to see me through "rose-colored glasses." And, in this case, she's not an expert in fashion, modeling, or anything dealing in refined judgments of human beauty. She's in no position to judge whether I'm the most handsome man in the world. Her authority there is illusory (sorry mom).

There's another problem with relying too heavily on authorities: even the authorities can be wrong sometimes. The science experts in the 16th century thought the Earth was the center of the solar system (geocentrism). Turns out they were wrong. The leading scientists in the 19th century thought that the universe as we know it always existed (steady state theory). They too were wrong. For these reasons, it's a good general rule to treat authorities as helpful guides with suggestive evidence, but even authorities deserve a fair share of skepticism since they can make mistakes, overstep their expertise, and otherwise mislead you.

Your Turn:

Consider the following examples. How do these statements mishandle authorities?

Example 1: "Because Martin Sheen played the president on television, he'd probably make a great president in real life."

Example 2: "One day robots will enslave us all. It's true. My computer science teacher says so."

Example 3: "This internet news site said that the candidate punches babies. We know that's true because it's on the internet."

13. Equivocation (ambiguity)

Equivocation happens when a word, phrase, or sentence is used deliberately to confuse, deceive, or mislead by sounding like it's saying one thing but actually saying something else. Equivocation comes from the roots "equal" and "voice" and refers to two-voices; a single word can "say" two different things. Another word for this is ambiguity.

When it's poetic or comical, we call it a "play on words." But when it's done in a political speech, an ethics debate, or in an economics report, for example, and it's done to make the audience think you're saying something you're not, that's when it becomes a fallacy. Sometimes, this is not a "fallacy" per se, but just a miscommunication. The equivocation fallacy, however, has a tone of deception instead of just a simple misunderstanding. Often this deception shows up in the form of euphemisms, replacing unpleasant words with "nicer" terminology. For example, a euphemism might be replacing "lying" with the phrase " creative license, " or replacing my "criminal background" with my "youthful

indiscretions," or replacing "fired from my job" with "taking early retirement." When these replacement words are used to mislead people they become an equivocation fallacy.

Your Turn:

How do each of these examples commit an equivocation fallacy?

Example 1: "His political party wants to spend your precious tax dollars on big government. But my political party is planning strategic federal investment in critical programs."

Example 2: "I don't understand why you're saying I broke a promise. I said I'd never speak again to my ex-girlfriend. And I didn't. I just sent her some pictures and text messages."

14. Appeal to Pity (*argumentum ad misericordiam*)

Argumentum ad misericordiam is Latin for "argument to compassion." Like the *ad hominem* fallacy above, it is a fallacy of relevance. Personal attacks, and emotional appeals, aren't strictly relevant to whether something is true or false. In this case, the fallacy appeals to the compassion and emotional sensitivity of others when these factors are not strictly relevant to the argument. Appeals to pity often appear as emotional manipulation. For example,

"How can you eat that innocent little carrot? He was plucked from his home in the ground at a young age and violently skinned, chemically treated, and packaged, and shipped to your local grocer, and now you are going to eat him into oblivion when he did nothing to you. You really should reconsider what you put into your body."

Obviously, this characterization of carrot-eating is plying the emotions by personifying a baby carrot like it's a conscious animal, or, well, a baby. By the time the conclusion appears, it's not well-supported. If you are to be logically persuaded to agree that "you should reconsider what you put into your body," then it would have been better evidence to hear about unethical farming practices or unfair trading practices such as slave labor, toxic runoffs from fields, and so on.

Truth and falsity aren't emotional categories, they are factual categories. They deal in what is and is not, regardless of how one feels about the matter. Another way to say it is that this fallacy happens when we mistake feelings for facts. Our feelings aren't disciplined truth-detectors unless we've trained them that way. So, as a general rule, it's problematic to treat emotions as if they were (by themselves) infallible proof that something is true or false. Children may be scared of the dark for fear there are monsters under their bed, but that's hardly proof of monsters.

Truth and falsity aren't emotional categories, they are factual categories.

To be fair, emotions can sometimes be relevant. Often, the emotional aspect is a key insight into whether something is morally repugnant or praiseworthy, or whether a governmental policy will be winsome or repulsive. People's feelings about something can be critically important data when planning a campaign, advertising a product, or rallying a group together for a charitable cause. It becomes a fallacious appeal to pity when the emotions are used in substitution for facts or as a distraction from the facts of the matter.

It's not a fallacy for jewelry and car companies to appeal to your emotions to persuade you into purchasing their product. That's an action, not a claim, so it can't be true or false. It would however be a fallacy if they used emotional appeals to prove that you *need* this car, or that this diamond bracelet will reclaim your youth, beauty, and social status from the cold clammy clutches of Father Time. The fact of the matter is, you probably don't need those things, and they won't rescue your fleeting youth.

Your Turn:

Which of these is a fallacious appeal to emotion, and which one is not?

Example 1: "Professor, you have to give me an A on this paper. I know I only turned in a sentence and some clip art, but you have to understand, my grandmother suddenly died while traveling in the Northern Yukon, and her funeral was there so I had to travel, and my parents got divorced in the middle of the ceremony, and all the stress caused me to become catatonic for two weeks. Have some pity, my grandmother's last wish was that I'd get an A in this class."

Example 2: "Professor, I know this work was subpar, and I feel pretty bad about it. I'd like to schedule a meeting with you to discuss how I can do better on our next assignment."

15. Bandwagon Fallacy

The bandwagon fallacy assumes something is true (or right, or good) because other people agree with it. A couple different fallacies can be included under this label, since they are often indistinguishable in practice. The *ad populum* fallacy (Lat., "to the populous/popularity") is when something is accepted because it's popular.
The *concensus gentium* (Lat., "consensus of the people") is when something is accepted because the relevant authorities or people all agree on it. The status appeal fallacy is when something is considered true, right, or good because it has the reputation of lending status, making you look "popular," "important," or "successful."

For our purposes, we'll treat all of these fallacies together as the bandwagon fallacy. According to legend, politicians would parade through the streets of their district trying to draw a crowd and gain attention so people would vote for them. Whoever supported

that candidate was invited to literally jump on board the bandwagon. Hence the nickname “bandwagon fallacy.”

This tactic is common among advertisers. “If you want to be like Mike (Jordan), you’d better eat your Wheaties.” “Drink Gatorade because that’s what all the professional athletes do to stay hydrated.” “McDonald’s has served over 99 billion, so you should let them serve you too.” The form of this argument often looks like this: “Many people do or think X, so you ought to do or think X too.”

One problem with this kind of reasoning is that the broad acceptance of some claim or action is not always a good indication that the acceptance is justified. People can be mistaken, confused, deceived, or even willfully irrational. And when people act together, sometimes they become even more foolish — i.e., “mob mentality.” People can be quite gullible, and this fact doesn’t suddenly change when applied to large groups.

Your Turn:

Which of these is a bandwagon fallacy?

Example 1: “Almost everyone at my school will be at the party Friday night. It must be a popular thing to do.”

Example 2: “Almost everyone at my school will be at the party Friday night. It must be the right thing to do.”

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We hope this little primer on logical fallacies helps you to navigate future disputes with friends, family, and unhinged online acquaintances without descending into vitriol or childish name-calling. Or at least if it does descend into vitriol and childish name-calling, you’ll be in a great position to rhetorically trounce your opponent with sound reasoning and airtight logic.

Even more important than winning online arguments with complete strangers, knowing your logical fallacies will be a huge help when you’re working on your next research paper. Speaking of which, if you don’t know where to start on that research paper, check out these Controversial Research Topics.

And for valuable advice on the writing process, check out How to Write a Research Paper and Tips to Improve your Online Research.

If you’re preparing for debate, take a look at these valuable Online College Debate Tips. And for our full library of study starters and homework tips, check out The Study Lounge!

Of course, understanding the rules of logic has enormous value even beyond getting your homework done. The ability to make an effective, logical argument is useful in a wide range of fields. Do you love debate enough to do it full-time? There are online degrees for that. Check out these programs to learn more: