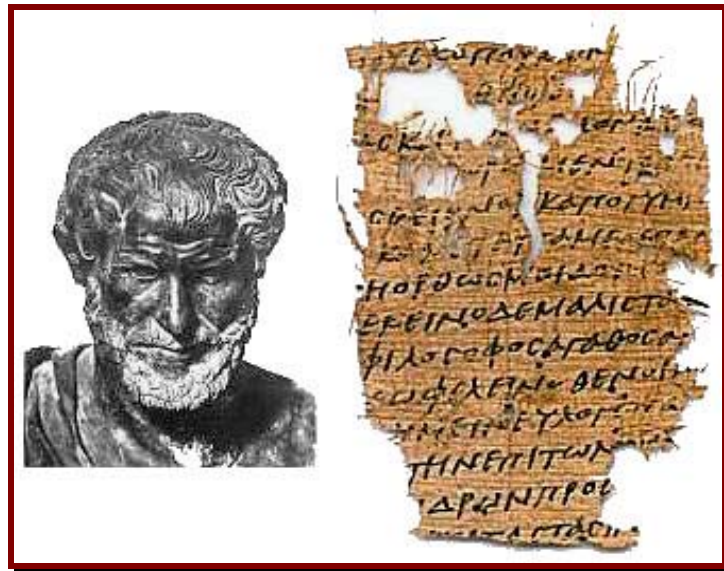


# LOGIC

AND THE

# SOUND CHRISTIAN MIND



*Believe in Thinking.  
Think in Believing!*

# LOGIC AND THE SOUND CHRISTIAN MIND



## I. LOGIC AND WORLDVIEWS

## II. DEFINING TERMS, SUCH AS *TERM*

A. WHAT DOES IT *MEAN* TO MEAN?

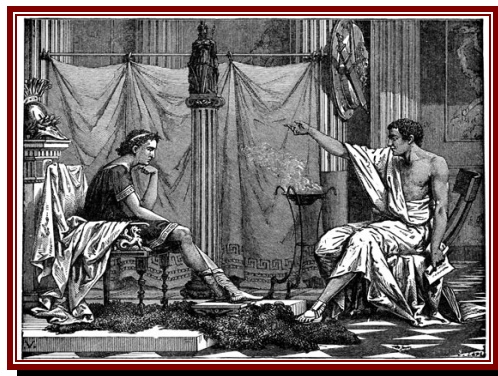
B. AND NOW, A FEW TERMS...

## III. ARGUMENTATION, SOPHISTRY OR SOLIDITY

A. 'I'D LIKE TO HAVE AN ARGUMENT PLEASE'

B. UMM, YOU MEAN MY WHOLE FALLACY IS WRONG?

## IV. COME, LET US REASON TOGETHER





# I. LOGIC AND WORLDVIEWS

A worldview provides basic concepts about reality and basic plans for action. You have underlying beliefs and you make claims (assertions) about: **what there is** ... and **what you ought to do** with what there is! For the **WV** you hold, you must have grounds for holding it.

For everything you believe, say, and do ... you should offer **justifiable reasons**. This is why our WV Critique needs a new Logic Unit. **Logic** helps expose assumptions *and* evaluate assertions. If we shouldn't 'believe anything without good **reason**' then we want to **reason** well! Logic delineates the **rules of valid reasoning**. Like a sharp-witted sleuth equipped with a built-in 'defect-detector,' Logic carefully scrutinizes how well your **reasoning process** is proceeding!

Logic is the '**discipline of correct thinking**.' The aim is to make explicit the '**rules for valid inferences**.' It is the necessary basis for math, science and *all* rational thought. Logic doesn't tell us *what* to think, but shows us how to avoid fallacies and inconsistencies *in* our thinking.

Logic deals with **sound argumentation**: how to draw valid **conclusions** from **premises**. That is an indispensable tool for *all* thought and language. Even those who *try* to deny Logic use logical forms to argue for the rejection of Logic, thus refuting themselves!

The '**laws of logic**' are self-evident and inescapable. (If we try to negate the laws we must use them in the very process of trying to negate them.) We are 'fixed' upon and stuck with them!

*Be thankful for that!*

Because if these laws were not acknowledged, we'd end up spouting utter nonsense and no coherent apprehension of the world would be possible.

And we simply do not **and can not** live that way!

To make a meaningful statement about reality, **True/False** as a category must exist and these rules must be used. How much more so in worldviews? If these rules apply to discreet statements, how much more do they apply to those entire sets of assumptions that comprise our philosophies and belief systems!



'Only man is logical. No woman is a man. Therefore no woman is logical.'

What particular type of **fallacy** has been committed here?

[Read On.](#)



## II. DEFINING TERMS, SUCH AS TERM

### A. WHAT DOES IT *MEAN* TO MEAN?

### B. AND NOW, A FEW GOOD TERMS...

#### A. WHAT DO YOU *MEAN* 'WHAT DOES IT MEAN TO MEAN'??

Here we are not discussing “*The Meaning of Life.*” Neither will we entangle ourselves in the convoluted intricacies and the beguiling bewilderments of the Philosophy of Language. We only want to establish what we mean by saying *we mean something*. What is it to ‘mean’ anything at all?

To ‘mean’ something is to communicate something; it is to be intelligible, such that another mind can comprehend what it is you have communicated. (This implies intentionality, for ‘to mean’ is to intend to convey an idea.) Any *definiendum* deserves a dandy *definiens*. **Know what I mean?** 😊

#### B. DEFINING A FEW TERMS [‘To Define’ – To assign a useful meaning to a term or phrase.]

**accident** – A *non-essential property* of something...a feature it has but just as well may *not* have had.

Example: A man may (or may not) be handsome, but he **must** be male. Maleness is **essential** to being a man, handsomeness is not. In this case, handsomeness is merely an ‘accident.’

**ambiguity / ambiguous** – a term or expression is ambiguous if it can have more than one distinct meaning in a given context. To employ the same term more than one way in an argument is misleading.

**analytic** – a statement is analytic if its truth is confirmed only by the definitions of its terms and the laws of logic.

**argument** – (from L. *arguere* – ‘make clear’) a series of statements whereby premises provide solid inferential support for a valid conclusion.

**assumption** – a pre-supposition which is sometimes *offered as a premise* in the course of argumentation.

*In Philosophy* when we discuss very BASIC assumptions we mean those propositions that don’t seem to break down into simpler propositions...statements ‘beneath which’ we need not go. Basic assumptions are ‘unproved’ principles of intellectual organization.

They provide a **terminus of a regress of explanation**...(we needn’t keep ‘backing up’ to explain a supporting concept, for they are ‘self-supporting.’) Thus they present a **starting place** for further inquiry.

They are seemingly self-evident facts about reality and the under-girding conceptual planks of a worldview.

**axiom** – a proposition that can be formally accepted without proof or demonstration.

Like a basic assumption in that it can be a starting place for a system of knowledge.

**category** – in our conceptualization of reality, a **category** is a basic **classification** of entities or modes-of-being!

**categorical term** – a word (or phrase) designating a **class**. Such a term divides the world into two parts: the class, and its complement. In other words, you have the things to which the term applies and the things to which it does not apply. A **categorical proposition** states the relationship between two classes (each of which is designated by a **categorical term**.)

*There are only two classes of people in the world: those who put things into categories and those who do not!*

**Cogent argument** – an inductive argument that is strongly inferred from all true premises.

**Conclusion** – a proposition whose verity has been duly inferred from an assemblage of other propositions (called **premises**) in the course of a logical argument.

**Conditional** – any statement that has this form: “**IF** \_\_\_\_, **THEN** \_\_\_\_.”

(the **antecedent** follows **IF** and the **consequent** follows **THEN**.)

**Consistent** – a set of propositions is consistent **if** they can all be true at the same time.

– a system of logical proofs is consistent **if** every argument in that system is a valid argument.

**Contradiction** – (L. *contradicere* – ‘speak against’) a contradiction can be simply the negation of a statement.

– any statement that is contradictory by logical rules cannot be true. A ‘logical falsehood.’

[Two statements are ‘contradictory’ if it is **impossible** for **both** of them to be **true** at the same time.]

**Contradictories** – a pair of categorical propositions where one is true **IF** and **ONLY IF** the other is false.

**Contraposition** – the reciprocal relationship between two categorical propositions of the same form whereby the subject term of each is the complement of the predicate term of the other.

**Contraries** – a pair of categorical propositions that cannot both be true but *can* both be false.

**deductive argument** – one in which **if** the premises are assumed to be true, then the conclusion **MUST** necessarily be true, (it would be **impossible** for the conclusion to be false.)

A deductive argument proceeds **from** a general truth **to** a particular instance.

**inductive argument** – one in which it would be **improbable** for the conclusion to be false if the premises are true.

A **Generalization** is an inductive argument that proceeds **from** particular facts & examples **to** a general statement about reality.

**inference** – the reasoning *process* expressed by an argument. To infer is to *proceed* from premise to conclusion.

**‘laws of logic’** – also called the **principles of thought**. In Philosophy we see them as ‘**ONTOLOGICAL**’ as well as logical. (Because, well, just try to imagine any Reality where such laws did **not** apply to what **IS**!)

**1. The Law of Identity:  $A = A$**  [A thing is **what** it is...(it has ‘**whatness**’ or identity – it is identical to itself)]

“*To speak the truth is to say of what is, that it is, and of what is not, that it is not.*” - Aristotle

**“IT IS WHAT IT IS!”** If any proposition is True, it is True. If False, then False.

**2. The Law of (Non)-Contradiction:  $A \neq \sim A$**  [A thing **cannot** both be what it **is** and what it **is not**.]

“*One cannot say of something that it is, and that it is not, in the same respect and at the same time.*” - Aristotle

A proposition (declarative statement) simply cannot be both True and False at the same time.

**3. The Law of the Excluded Middle:  $A \vee \sim A$**  [A thing is **either** what it is **or** what it is not.]

There is no other possibility. There exists no murky **Middle-Land** betwixt **IS** and **IS NOT**!! Every proposition is **either** True **or** False. Opposite propositions cannot both be true.

**LOGIC** – (From *logikos*. Greek word for word, thought, reason, order, discourse, meaning, all that which pertains to intelligibility!)

– **Logic** studies the rules of precise **reasoning** and is one of the great ‘branches’ or sub-disciplines of Philosophy...

– **Logic** is like a mathematical science delineating the **rules** for making correct **inferences**...*ergo*...

– **Logic** is absorbed with **argumentation**: how to distinguish sound and valid ones from fuzzy and misleading ones!

– **Logic** is thus **foundational** for all systems of human knowledge. We should love and respect Logic. 😊

– **Logic** however, is **intimidating** and overwhelmingly complicated. It has many valences. To list but a few:

**deductive logic** – apply consistent & complete rules-of-inference to formal arguments. (Conclusions should be certain.)

**inductive logic** – establish rules by which statements can be empirically confirmed. (Conclusions will be probable.)

**deontic logic** – a branch of logic that tries to formalize and systematize *ethical* concepts (such as duty, obligation, permissibility, non-permissibility, ‘oughtness’ etc.)

**dialectical logic** – tries to reject or circumvent the basic Laws of Logical Thought, thus making **Contradiction** the ‘synthesizer’ or generator of reality! This is very **Hegelian** (and Marxist) and will **not** yield truth!

**formal logic** – more concerned with **FORM** than **CONTENT** in analyzing patterns-of-inference.

**informal logic** – more concerned with **CONTENT** than **FORM**. (Here, the validity of an argument does not depend on its form but on the meaning of the premises and their empirical support.)

**multi-valued logic** – in analyzing arguments, tries to utilize more than the two truth values of **True** and **False**.  
(Categories such as: necessary/contingent, known/unknown, undeterminable, *etc.*)

**modal logic** – tries to coherently systematize concepts (such as necessity and contingency, possibility, *etc.*)

**symbolic logic** – uses totally **abstract** signs and symbols...

**traditional categorical logic** – also called Aristotelian Logic...concerned with the Categorical **Syllogism**...studying the procedural rules for relating subject and predicate to a necessary conclusion.

**non-Sequitur** – (L. 'it does not follow') a typical malady of arguments wherein the **conclusion** is the 'it' that 'does not follow' the **premises** properly. Such hiccups are due to one or more of a vast variety of **fallacies**.

**premise** – a statement in an argument that **offers evidence** or states something to be the case.

**presupposition** – an explicit or implicit **assumption** made in your process of reasoning and inference.

**prevarication** – (from L. *praevaricatus*, 'walk crookedly') deviation from the truth; straying from the facts of the case; equivocation in discourse so as to mislead; using evasive tactics in your argument; logical 'meandering' so as to *avoid* a true conclusion! **This is not the way a Christian should walk or talk!** It is 'sophistry.'

**proof** – narrowly, a 'proof' is the sequence of steps by which you proceed from **premises** to a **conclusion**.

**proposition** – the **informational content** of a statement.

– a *proposition* is a statement that is either **True** or **False** in what it 'declares.'

(A **declarative sentence** is capable of being tested for truth or falsity.)

– propositions used as **premises in arguments** are usually of these kinds:

**Universal** – speaks of *all* members of a class.

**particular** – refers to some (one or more but *not all*) members of a class.

**singular** – points to *one* specific item or person.

**rational** – (L. *ratio* – 'reason') characterized by reason; capable of being understood and sharing in the pursuit of truth; intelligible; obeying the principles of thought (such as consistency, coherence and orderliness!)

**Self-Contradiction** – a statement that literally contradicts itself (or tries to both affirm and deny something at the same time.)

Examples: "This sentence is not written in English." "There is a finite effect that has not been caused."

**sophism** – (Named after our 'wise guys' from the Athenian Era.) 'Sophists' were those clever instructors in persuasive rhetoric that did not believe in **objective truth!** A deviously **intentional fallacy** is a '**sophism!**'

Such specious arguments are 'sophistical' and that is *not* a compliment! **Detect and disdain all 'sophistry!'**

**Statement** – a sentence stating something that can be either **true** or **false**. A proposition. An arguable assertion.

(compare with 'statement of opinion' - a **non**-argument expressing one's personal belief without supporting evidence or reasoning process.)

**syllogism** – a contrived deductive argument form consisting of three categorical statements (two premises and one conclusion.) See Special Section: **Some Syllogisms Are Fun** 😊 (Forthcoming)

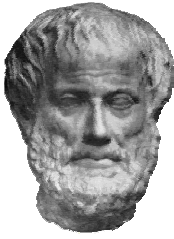
**tautology** – a logically and necessarily true statement. A tautology is a *verbal* truth: true merely **by definition**, not by correspondence with observable facts. To deny a tautology results in a self-contradiction.

**term** – a word (or phrase) used as **the subject of a declarative sentence**.

A *term* should be accurate, intelligible, unambiguous, and descriptive.

**zetetic** – (from Greek, *zetesis* – an 'inquiry, investigation, search') refers to the inquisitive character of the truth-seeker.

Added here simply to have a **Z** word. 😊!



# Calling All Logic Geeks!

## A Few **Advanced** Terms & Definitions:

**affirming the antecedent** – Take the hypothetical proposition ‘**If** your dog jumped over this garden fence, **then** we will find his paw-prints in the moist soil.’ 🐕

The **IF** portion is the ‘antecedent’ and the **THEN** portion is the ‘consequent.’

(The Form is: “if P, then Q.”)

Note the four inferences that can be drawn from “if P, then Q.”

Two are valid, two are invalid.

1. To **affirm the antecedent** is to argue that: Because P, therefore Q. This **is** valid.  
(L. – *modus ponens*)
2. To **deny the consequent** is to argue that: Since Q is false, P must also be false. This **is** valid.  
(L. – *modus tollens*)
3. To **affirm the consequent** is to argue that: Because Q, therefore P. This **is not** valid.
4. To **deny the antecedent** is to argue that: Because P is false Q must also be false. This **is not** valid.

**a fortiori** (L. – ‘from the stronger’) – Phrase to mean “**all the more**” (even more certainly.) If we first accept a weaker application of a rationale, then we are logically ‘bound’ to accept an **a fortiori** claim. Example: If all men are mortal, then **a fortiori** all husbands are mortal. (Because married men are a ‘subset’ of all men.) If all SWC students study, then **a fortiori**, all Boville’s Philosophy students study.

(And, they had better study **a fortiori**!) 🎓

**antinomy** (from Greek, *anti* - against + *nomos* - law) – An exasperating contradiction between two principles each of which appears to be true, but which cannot both be true! A **Paradox**.

See: **insolubilia** – semantic antinomies such as the ‘Liar Paradox.’ [‘This statement is false.’ True or False?]

**complement** – The complement of any given ‘class’ is: everything within the world of discourse that is **not** included in that given class.

**distribution** – In **sylogistic logic**, to say a term (in a categorical statement) is **distributed** means that the statement makes some claim about **every member** of the class designated by that term.

**enthymeme** – An argument that resembles a syllogism except that either the conclusion or one of the premises has been implied but has not been stated.

**extension** – The class of objects to which a term applies. **Intension** (**not** to be confused with the word ‘intention’) means: the properties shared by all the objects in a term’s extension (by virtue of which they are included in the term’s **extension**.)  
**Intension** is also: the meaning or **connotation** of a term or phrase as opposed to its **extension** or **denotation** (which consists of those objects signified by the term or phrase.)

**Square of Opposition** – (Traditional) A cool diagram depicting the necessary relationships between the four kinds of standard form categorical propositions as interpreted by Aristotelians.

“**GEEK**” – A reader who finds any of this the least bit captivating. 🧐



### III. ARGUMENTATION, SOPHISTICAL OR SOLID?

#### A. 'I'D LIKE TO HAVE AN ARGUMENT PLEASE'

Here of course, we do not mean we'd like to bicker and squabble. What we want is to become more credible and compelling in our verbal communications. This effort can be daunting and technical but it can also help us **think issues through more clearly** and even to **make wiser decisions!**

Do you ever 'argue'? Do you do it well? Perhaps, more frequently than you realize, you *do* give logical (or sadly, *illogical*) arguments! Whenever you make any claim or case about something, you typically marshal a few statements to allegedly support that claim. Thus, you have **made an argument.**

You intend thereby to convince your hearer of the rightness of your claim or the strength of your case. *In Logic as in Life...*

***We want 'good sound reasons, not just reasons that sound good.'***

We should always want to make a 'solid' case by offering 'sound' arguments...and that is where Logic is so helpful. *Essentially*, an argument contains **premises** (those reasons we give) and a **conclusion.** *Technically*, a **sound argument** is one that has true premises **and** has correctly inferred a valid conclusion from them. To give a solid argument is to 'make a cogent case.' That's what you want!

What you do not want is to be weak, dubious, ill-informed, vague or dishonest. If you are, why should you expect anyone to listen to you!? You don't want others to 'hoodwink' you into accepting some spurious contention. But they will try to! But Logic can help you detect such dubieties.

Argumentation is like oil in the engine on the 'train' of knowledge and rationality. Let us not 'derail' that noble train-of-thought! When arguments **fail to do** what they purport to do (which is provide good reasons for accepting a conclusion) something has gone awry. Perhaps the premises are vapid.

Perhaps they are 'fine as they go' but do *not* genuinely support the conclusion. Perhaps...well, it gets rather confusing from this point on...because there are so many blighted ways in which an argument can 'go astray'!

In these faulty or 'bogus' arguments...a dastardly error has been committed. These we call **FALLACIES.**

For a mirthful exhibition of what an argument is decidedly *not*, go to [YouTube](#) and find that classic Monty Python sketch: "**The Argument Clinic.**" It is most amusing.



## B. UMM, YOU MEAN MY WHOLE FALLACY IS WRONG?

### What exactly is a FALLACY?

The word comes from the Latin *fallacia* which means deceitful trick! Indeed, fallacies are quite ‘tricky.’ A fallacy is a **mistake** in an argument which consists in something *other than* merely false premises. The **mistake** is: that those ‘indispensable logical rules of valid inference’ have been dispensed with! The **logical error** is: that a **conclusion** has been stated that is just not justified by the **premises** given! So, a fallacy is not simply a falsehood (a mistaken ‘fact’), but a **defect in the reasoning process**. What makes this so ‘tricky’ is that the **defect** can be quite subtle and often go **undetected**. A fallacious argument is a defective argument. Nevertheless, fallacious arguments can be very persuasive!

### **Sophistry is alive and well and can be psychologically compelling.**

Why are these defects so difficult to sniff out? How can they so often go unnoticed? Why aren’t they as glaringly obvious as a zit on prom night? Well, it is complicated. **To wit:**

A fallacy may occur *regardless of* whether the premises happen to be true or false.

And, an argument can be fallacious *even if* the conclusion just happens to be true!

‘Do you mean we can support truth with hollow arguments?’ Yeah, but let’s not.

Fallacies may be wily and subtle, but if we care about truth (and we do) and we want to conduct our discourse with integrity (and we better)...then we *must* become adept at spotting and averting them!



*Logic plays detective here.* 🔍

Learning to **detect** fallacies helps us to expose errors in others and to avoid making our own!

### What KINDS of FALLACIES are there?

The first important distinction to make is between Formal and Informal Fallacies:

#### Formal Fallacies

Are committed when the fault is in the **technical FORM** of the argument.

They have an invalid **DEDUCTIVE** set-up.

#### Informal Fallacies

Occur when the mistake is not just in the form but the **CONTENT** of the argument.

They are committed due to faulty or weak **INDUCTIVE** reasoning.

**Informal Fallacies** will be our chief interest in this new Logic Unit. (We will save Formal Logic and the Syllogism for when we can offer an entire semester of **LOGIC** as its own 400-Level course!) (You can hardly wait, huh?)

Informal fallacies are as common as **desert dust** and come in so many varieties that there are several different ways to categorize them, and logicians since Aristotle have not agreed on which way is best! That can be so confusing that it isn’t even helpful! (or funny.)

Therefore, we will be very ‘broad-minded’ and ‘informal’ in broadly classifying informal fallacies. ☺

These **Content** Fallacies have problems with the actual **content**, the ‘stuff,’ of the given argument.

These are *usually* matters of: inadequate **evidence**, ‘**word-meanings** gone awry,’ **or** even of attention-diverting **irrelevancies** sneaking into the argument and veering it off-course!

### Here is a general warning about faulty components to help you 'detect' them:

An argument is in danger of falling into fallaciousness if it contains:

- 1. Unacceptable Premises.** In a good argument the premises provide a **solid** basis for accepting the conclusion. But if your premises are **shaky**, your argument will at best be **inconclusive**.
- 2. Insufficient Premises.** Premises are *insufficient* if they do not establish the conclusion beyond a *reasonable* doubt. In a good argument, the premises eliminate reasonable grounds for doubt.
- 3. Irrelevant Premises.** Premises are *irrelevant* if they have no bearing on the truth of the conclusion. In a good argument, the conclusion follows from the premises. Your premises may be interesting, but if they are **logically unrelated** to your conclusion, they provide no genuine reason to accept it.

### Here is a general warning about the inherent difficulties of *all* meaningful discourse!

Language itself is notoriously imprecise, so it **is** difficult to communicate with crystal clarity. And because reasoning depends on the 'logic of language', it **is** admittedly difficult to avoid **dusty** thinking. But we must.

*Let 'Soundness of Thought and Clarity in the Expression Thereof' become our college motto!*

### Here are some of the **linguistic** problematics that cause arguments to fall into fallacies:

#### FALLACIES OF AMBIGUITY

##### **Equivocation**

Words can have more than one meaning. If you use one meaning of a word in your premise and yet another meaning of that word in another premise, or in your conclusion, you are 'equivocating'! You're building your argument on an ambiguity! You may *appear* to have proved something but you really haven't.

A Daft Example:

"Logic is absorbed with how to argue and argue forcefully.

But it is not polite to argue a lot and it is wrong to use force in dealing with people.

Hence, we should not study logic!"

Remember the Monty Python sketch? You can easily see here that 'argue' and 'forceful' are being used differently in the first premise than in the second! In Logic, arguments are good things! To carefully infer a conclusion from well-marshaled premises is **not** the same activity as a belligerent altercation!

(Now, argue badly and you may end up in a shouting match, but bad argumentation is what we're here to avoid!)

Can you tell what term has been equivocated in *this* example?

"It says in the New Testament that Jesus Christ is the end of the Law. I believe in Jesus. Therefore, I do not have to obey the commandments."



And, that Classic Example:

"Only man is rational. No woman is a man. Therefore no woman is rational."

"May we illustrious females point out that in the first premise, 'man' means *humankind*... and in the second premise, 'man' means *male*?"

##### **Semantic and Syntactic Ambiguity** (aka. **Amphiboly** – From Greek, *amphibolos* - 'irregular speech')

Other ambiguities occur when variously understood terms are used or when the sentence structure is unclear.

Good Old Examples:

"Lots for sale." (Semantic Ambiguity: **Allotments** of real estate or numerous things?)

"Mia always calls her mother when she's alone." (Syntactic Ambiguity: Who is alone, Mia or her mom?) **MORE:**

"Save soap and waste paper." "Two Tickets for One Special Price." "Professor Tuffy lectured on *behavior* in the classroom."

"I only eat potatoes when thoroughly smashed." "Excellent steaks are rare." "Johnny rode a horse with a bit in his mouth."

Obviously, these are silly examples and not even real arguments, but they illustrate how sentences can be misleading when words have multiple meanings or when the grammatical structure is confused! If these 'linguistically shifty' **Fallacies of Ambiguity** aren't bad enough, remember there are **other** 'kinds' of fallacies:

**Fallacies of Grammatical Analogy** – The argument bears structural-grammatical **similarity** to a good one but itself is not a good one!

**Fallacies of Presumption** – The premises **PRESUME** what they purport to prove.

**Fallacies of Relevance** – The conclusion is **LOGICALLY IRRELEVANT** to the premises, even if it is psychologically / emotionally relevant.

**Fallacies of Weak Induction** – The connection between the premises (even if they *are* relevant) and conclusion is **not strongly supportive**.

## MORE DUSTY (ALL TOO COMMON) FALLACIES WITH SOME DAFT EXAMPLES

**FALLACIES OF GRAMMATICAL ANALOGY** – Argument bears structural **similarity** to a good one but itself is not a good one!

**Composition** – The error of presuming that what is true about each (or some) of the parts of a whole must also be true about the whole.

“Subatomic particles are lifeless. Hummingbirds are composed of subatomic particles, ergo, they must be lifeless.” Or...

“Subatomic particles are in constant random motion. The Statue of Plato is made of these particles, ergo, it is in continual motion.”

“No individual water molecule is wet, therefore the water in this bucket is not wet.”

“All the important components in this television set are almost weightless, therefore the television set is very lightweight.”

**Division** – The converse of the Fallacy of Composition. The error of taking a property of the whole and assigning it to all its parts.

“Human Beings are alive and are composed of subatomic particles. So each particle must be deemed to be alive as well.”

“It is a strenuous effort even for a muscular guy to lift and haul this TV set, so it must be made up of very heavy parts.”

“The campus map is rectangular in shape. It stands to reason then, that all of the school buildings are rectangular in shape.”

“Paradise Valley is an exceptionally affluent community. Professor Tuffy lives there so I’ll bet he’s very rich!”

**FALLACIES OF PRESUMPTION** – The premises have already **PRESUMED** what they purport to prove.

**Begging the Question and Circular Reasoning – *Petitio Principii***

**Begging the Question** – To draw your conclusion from suspiciously unjustified premises. This is a clever way to ‘make your case’ by ‘sleight-of-hand’! You slyly *pre-assume* your dubious conclusion and *then* surreptitiously offer it as a premise of your argument!

[***Petitio principii*** means ‘**petition**’ (request) for the source, or asking to be granted the ‘**principle**’ you’re supposed to be proving! So, you might say it is a **taking for ‘granted’** kind of fallacy!]

**Circular Reasoning** – The Begging the Question fallacy makes your reasoning ‘Circular.’

Simply put: An argument Begs its own Question and Argues in a Circle when its conclusion is used as one of its own premises!

“I have never owned a slave or treated anyone badly on account of their skin color, so I am not a racist and I can’t see why we owe anything special to minorities.”

“The belief in a discreet ‘self’ is universal; after all, every person alive is a discreet self!”

“You need another character reference for my C.V. so here’s the name of my associate, whose judgment I can surely vouch for.”

“I believe in God as Creator because the Bible, which is divinely inspired, declares that God created everything.”

“If such transactions were not illegal they wouldn’t be prohibited by law.”

“I believe that science, which is the very best tool we have for knowing all about nature, proves that only what can be known by the scientific method can be known at all.”

**Complex Question** – Tacitly assume an answer in the question and do not allow the needed qualifications. This is also called “**Loaded Question.**” (Like the old: “Have you stopped beating your wife?”) This fallacy may occur when a ‘complex’ of two or more questions is compressed and posed as a single question and then given a single answer! Sometimes it can be a pre-packed ‘**rhetorical**’ question.’

“Have you stopped cheating on your Philosophy Exams?” “Where did you stash the equipment you stole?”

“How long will you sit by and abide by this shameless social injustice?”

“How long can humanity survive unless we eradicate all indifference to Ecology such as this apathy about Global Warming?”

**False Dilemma / False Dichotomy** – To posit two dichotomous alternatives as the **only** ones possible, thus forcing a drastic choice. This creates a dilemma where there need not be one, for there may be other alternatives you failed to consider. Or the two given are not, in fact, mutually exclusive. (aka – the “either/or” fallacy)

“Either we accept a totalitarian socialist government soon, or our greedily inequitable capitalistic ‘democracy’ will end in anarchy.”

“Clearly, if a student fails to read and comprehend every word of this document they are in mortal danger of failing the course.”

“If you don’t read the entire Bible with consistent literalism, you will wind up with unorthodox, even heretical interpretations!”

**FALLACIES OF RELEVANCE** – Conclusion is **LOGICALLY IRRELEVANT** to the premises, even if it is psychologically relevant.

**Accident** – Occurs when a **general** rule is applied to a **particular** case it was not intended to cover. (Applying a general principle to a particular instance whose circumstances *by accident* do not allow proper application of a generalization.) A version of this fallacy is to argue from a general truth while suppressing legitimate exceptions.

“Lying is wrong. Therefore I must tell the kidnappers where the child’s room is.”

“Pre-meditated murder is morally reprehensible, so I’d say that war is the worst evil known to mankind.”

“The Freedom of Speech is an inalienable right, so why can’t I yell anything I feel like in public places?”

This fallacy is also known by the Latin phrase: *a dicto simpliciter ad dictum secundum quid* or **‘secundum quid’** – (to disregard qualifications; to overlook exceptions to the general rule.)

You will also find the related term **“Converse Accident”** – (*a dicto secundum quid ad dictum simpliciter*) the error of generalizing from atypical or exceptional circumstances. (See also **“Hasty Generalization.”**)

“Nyquil really helps my Aunt Tilda get a good night’s sleep, so we should all take it to relax more.”

“Vitamin C helps your immune system. We should load up on vitamins and never get sick at all.”

**Ad Hominem** – (L. ‘against the man.’) This is not an argument against a position but an attack against the person who holds the position. This type of rhetoric is useful to politicians because it can misdirect the audience away from tough issues and focus on the personality of the other candidate!

**Ad Hominum Tu Quoque** – To disregard a certain position because its proponent does not consistently ‘practice what he preaches.’

“In no way can I take seriously the theories or research proposals of an experimental psychologist who has admitted to having depression. He may have several degrees, but he can’t even think straight.”

“I heard that their candidate has been divorced; so he will certainly not support family values and I’m not voting for him!”

“No man of genuine humility would aspire to becoming a military leader; so how can General Stanton’s testimony be trusted?”

“I saw the Temperance League spokesman at the Brass Rail Saloon, so obviously drinking can’t really be a bad thing to do.”

“My doctor smokes a cigar, so his advising me to quit cigarettes is probably not backed up by medical findings.”

**Missing the Point** – Draw a conclusion that is not supported by your own original premises.

**Red Herring** – This one is fun to commit. “In the course of heated argumentation, a wily interlocutor may fail to respond directly to his opponent’s counter-attack. Instead, he will stray ‘off-topic,’ diverting attention away from the challenge yet still ‘pad’ his case with impressive but irrelevant statements”!

*The name comes from the old method of training hunting dogs to doggedly follow a scent without being led astray by the pungent smell of a sack of smoked herring placed ‘on the trail!’ 🐕*

“Yes, I understand your misgivings about tax exemptions for faith-based organizations. But how can you ignore our nation’s great Christian heritage and all of the impressive contributions to society that religious leaders have made, not to mention the desperately needed moral influence.....”

“Look, even if you are right, and point well taken, it does not follow that the result of tax cuts would be economic stimulation. Have you considered this? Nations having the highest per capita income taxes are culturally progressive, beautiful, at peace, and have proud happy citizens.....”

“Pesticides used on farmlands are unhealthy for the vegetables. But the price of organic food is outrageous and poor families cannot afford to shop at specialty supermarkets such as Whole Foods and Sprouts, something should be done about price regulations.....”

**Straw Man** 🏹 – (Don’t oppose the *real* ‘man’, make a ‘scarecrow effigy’ and knock *it* down!) Take your opponent’s view and weaken it (by over-simplifying it or misrepresenting it unflatteringly) thereby rendering it much easier to refute.

Note: This time-honored fallacy occurs frequently in theological squabbles and seems hard to resist!

“Freudian psychoanalysis, with its Oedipal complexes and all that rubbish, is unscientific. How can we put any stock in personality theories that come from Greek mythology?”

“Arminians usually ‘go liberal’ because they don’t believe in the sovereignty of God, so it is better to be a Calvinist if you want to be safe and stay conservative.”

“Humanists have a terribly low view of what ‘personhood’ means; and they therefore have no respect at all for individual rights.”

“Those who support gun control are wrong to believe that no one should have the right to defend themselves in any situation.”

**FALLACIES OF WEAK INDUCTION** – The connection between the premises (even if they *are* relevant) and conclusion is **not strongly supportive**. These fallacies include citing unqualified authorities and arguing based on 'lack' of evidence, but those '*appeals*' are in their own class!

**Generalization** – To overstate a general conclusion based upon inadequate evidence. To make an inference about a group based upon a paltry sampling selected from that group. Also: **Hasty Generalization** – to draw a general conclusion from 'atypical' specific cases.

"Christianity obviously teaches its adherents to leap in blind faith, judging by the number of lame-brained Christians I've met."

"Sam told us he met some shrewish feminists and said they were guilty of stereotyping all men as sexist morons! Now he thinks that all feminists are obviously lesbian man-haters!"

"We can conclude, based upon the past few months that Phoenix enjoys a very mild climate."

**False Cause** – To rest your conclusion on an improbable or an 'imagined' causal connection.

aka.- **Post hoc ergo propter hoc** (after this therefore the effect of this, or therefore because of this )

To assign causation to something simply because it occurs prior to some other event or situation.

To blame a thing as the cause of a problem just because it happened prior to the problem.

"The present crisis in the economy is an obvious result of this last election."

"We prayed right before Dad went in for his bypass operation, and it was successful. See, heartfelt prayer never fails!"

"Every time Miss Boville closes the classroom door, the room becomes quiet. So, all the noise must have been out in the hall."

**Slippery Slope** – To rest a conclusion on a supposed chain reaction. Usually, to insist that 'one small step' will create an incremental culmination in something undesirable or dangerous.

"Two years ago, SWC gained a number of students from GCU. Last year, several more GCU students transferred to SWC.

By 2014, all of the students at SWC will have transferred from GCU."

"We should not send troops abroad. Once we do, things only escalate, thousands of men die needlessly, wars never end and soon we will have no military left to defend us."

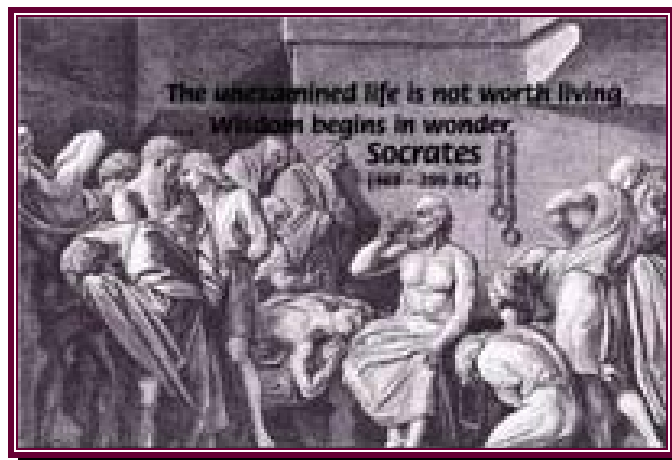
"It may seem good to have laws against pornography, hate-speech and libel. But in truth, all forms of censorship are dangerous and will lead to reactionary paranoia and inevitably, to fascist book-burnings!"

"Don't start trusting and caring about others. Once you do, you'll get lied to, 'taken advantage of,' and you'll end up becoming a total doormat."

**Weak or Faulty Analogy** – Rest your conclusion on a defective analogy or incidental similarity.

"Astronauts wear helmets and fly in spaceships. The figure in this Mayan carving seems to be wearing a helmet and flying in a spaceship. Therefore it is a carving of an ancient astronaut."

"Socrates wore robes, taught by asking questions, never wrote (only his disciples did), offended the establishment and was martyred for truth. Socrates must have been the Greek Messiah."



## QUITE APPEALING!!

Speeches can be powerfully persuasive without being true. And many kinds of arguments can sound compelling when they aren't at all valid! We all feel passionate about pet causes and we make claims that seem *psychologically relevant*...but, if the connection between our premise and conclusion is weak or emotional rather than logical, we have a problem. We must learn to discern genuine evidence and strong induction from the *many* tempting biases, prejudices, inclinations and sentiments!

*Remember, we want 'good sound reasons, not reasons that sound good!'*

☞ These **Fallacies of Relevance and Weak Induction** are usually called: **"Appeal(s) to \_\_\_\_."**  
[When naming the fallacious ARGUMENT, often the Latin is used, as in *Argumentum ad \_\_\_\_*, meaning: 'Argument from \_\_\_\_.' (for example: *argumentum ad miserecordium* = to argue from pity, evoking pity.)]

**Appeal to Sentiment** – Ignore evidence, bypass reasoning, and go straight for your hearer's *feelings*.  
Use 'emotional manipulation.' (This can be quite effective!) (But wrong.)

**Appeal to Fear** – Play on your listeners' fears rather than engage them rationally.

**Appeal to Pity** – Evoke sympathy or pity rather than provide good reasons. *ad miserecordium*

**Appeal to Superiority** – Play on your listeners' need to feel superior to someone else. "Snob-Appeal"

**Appeal to Vanity (Flattery)** – Appeal to your listener's pride or self-conceit.

**Appeal to Authority** – Quote an alleged expert or cite an **authority** (may be a person, institution or even a custom.)  
*ad verecundium (veneration)*

**Appeal to Tradition** – Accept uncritically an idea simply because it is traditional and conventional.  
**Also:** *consensus gentium* (L. unanimity of the nations; widespread agreement.)  
Majority acceptance of something is taken as if it is a universal verity!

**Appeal to the People/Masses (Bandwagon)** – 'Join the crowd...they can't all be wrong...everybody thinks that way so I should too...' *ad populum*  
This fallacy equates the popularity of the idea with the validity of the idea!

**Appeal to Force** – Be a bully! Use threats of harm rather than offer good reasons. *ad baculum* ('stick!')

**Appeal to Probability** – Confuse inevitability with mere possibility. 'This may occur so it must occur.'

**Appeal to Motive** – Dismiss any thesis simply because you suspect the motives of the proponent.

**Appeal to Novelty** – Accept a view or assume it is preferable simply because it is novel and new... 'it's the *latest* thing therefore it's the *greatest* thing!'

**Appeal to Poverty** – Appeal to your listeners' suspicions and prejudice *against* the affluent 'upper class'!

**Appeal to Wealth** – Assume that the rich and powerful must have better ideas! 💰

**Appeal to Ignorance** – Form a conclusion about something based on the **lack** of 'proof otherwise'. *ad ignorantium*  
You may say something is true if it has not been proven false or say something is false because it has not been proven true.

The problem with this argument is that it takes a *lack* of evidence for one thing to be positive evidence for another. A *lack* of evidence, however, proves nothing much at all.

The **Appeal to Ignorance** is also called **The Fallacy of Negative Proof** – To assume a premise to be true if it cannot be proven false, or assume a premise false if it cannot be proven true. An argument commits this fallacy when it argues from a mere **lack** of proof.

(Lack of evidence for any proposition should not be offered as evidence for an opposing proposition!)

**Note:** Do not confuse *argumentum ad ignorantium* with **Ignorantio Elenchi**.

**Ignorantio Elenchi** (L. 'ignorance of the refutation') This 'ignorance' can generally be said of any argument that fails to 'keep to the issues at hand.' So *any* argument marred by irrelevancies whereby the premises and conclusion are not properly related can be accused of *Ignorantio Elenchi*!

In everyday discourse we can simply call it: **MISSING THE POINT!!**

## MATCH THE FOLLOWING EXAMPLES TO THE 'APPEALS' ABOVE:

- "Professor Tuffy, the reason you should give me an A is because if I don't maintain my GPA, I'll lose my scholarship, have to drop out, and will probably end up in jail. Think of my poor Mother."
- "Professor Tuffy, the reason you should give me an A is because if you don't, I'll have my folks stop supporting the college and make sure that you get fired."
- "Professor Tuffy, the reason I know you'll give me an A is because you are the wisest, kindest, and most gracious teacher around!"
- "Absolutely! Who can doubt a belief that has been around as long as that one?"
- "My learned friends, I am sure that such an astute and erudite audience as I see before me tonight will readily agree with me that..."
- "Ya know what the real 'Golden Rule' is? 'He who has the gold makes the rules.' So it is never smart to question your employers or to criticize the administration. Besides, they obviously know best or they wouldn't be in charge!"
- "I believe in the paranormal because none of those demonstrations done at the Caspar Institute have ever been proven to be fraudulent. Not one experiment has ever proven that ghosts aren't real."
- "I believe in ESP and parapsychology because I can read your mind right now!"
- "Yeah, my 'karma ran over your dogma.' This new openness in religion and spirituality is a welcome 'breath of fresh air.'"
- "In styles, technology, and yes even in social mores, we all know that the most recent innovations will be superior!"
- "If that is the opinion of the village elder, then why should we presume to be wiser than he? No, I'm sure he is right."
- "That humble speaker from Zambia had a lot more credibility than the one from Denmark."
- "Well surely the homeless people are incapable of saying anything of value in today's society."
- "I would never believe any statement issued by a rich CEO."
- "I found the editorial to be most compelling. After all, the author is a multi-millionaire so he must know what he's talkin' about!"
- "You will sign up for our program or you will suffer the consequences and wish you had!"
- "One out of every ten drinkers will prefer Campari instead." (*an actual advert!*) 
- "Nine out of every ten customers prefer Dandy Brand."
- "Sorry, I cannot believe anything you're saying about Jesus and eternal life! Why, you just want to 'snag me' as a convert to make your church bigger!"
- "By appointment only, please."
- "This new Patriot Party has a groundswell of fervent support. Anyone not joining forces with them is probably un-American."
- "The brilliant Mel Gibson loves Jesus Christ and despises Jews, so there must be something inherently despicable about Jews."
- "Our family doctor likes to vacation in Rocky Point, Mexico, so it must be a very healthy place to live."
- "I see no reason to doubt the existence of extra-terrestrial life-forms; I mean, they surely must be out there somewhere!"
- "There is nothing in any of his files to disprove affiliation with the Soviet Communist Party, ergo, he should not be exonerated of charges of un-American activities."
- "Belief in God can never and will never be proven, therefore I am fully justified to call myself an ardent atheist."

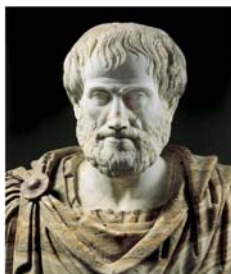
Make a list of some fallacies you've actually heard, or create a few of your own! Have FUN!  
But do utilize these pages as homework exercises and do spend time on this Unit.

**Because, here is another 'warning':**

You are expected to understand the **LAWS OF LOGIC** and to be able to recite them from memory.

Pay attention to the most important **TERMS** and be able to recognize the correct definitions.

You will be tested on some of the **INFORMAL FALLACIES** in the Memorization Portion of the Mid-Term Exam.



**You have been duly warned!**

## CAN YOU TELL WHAT 'KINDS' OF FALLACIES THESE ARE? (Or, on which of the above they are 'variations'?)

**Biased Sampling** – To make a conclusion based upon pre-selected, unvaried or one-sided samples.

"Society must support it because **97.5 %** of college students surveyed believe that higher education is important."

"According to a reliable survey (conducted via a wide-scale email poll) **96%** of Americans are staunchly opposed to a new tax on internet access."

"Most Arizona citizens are fully in favor of legislation that would make air-conditioning a basic human right."

"We are pleased to report that **97%** of respondents to our recent questionnaire on gun control are supportive of increased restrictions. The questionnaire was sent to every single member." – *The Society for Preservation of Life and Promotion of Pacifism*

**Black and White** – Using stark distinctions without justifiable reasons to make your case seem more 'HD'!  
Or, classifying some moderate view as one of the extremes you are discussing.

"You are either for us or against us. You surely *will* support the grassroots Tea Party unless you are a subversive perfidious traitor."

"A person either joins in as a team-player, or they are a misanthropic recluse."

**Gambler's Fallacy** – (aka The *Monte Carlo* Fallacy!) The faulty supposition that in some game of 'chance' (such as coin-tossing or dice-rolling) events which are *actually independent* of one another (according to the laws of probability) are *causally related*. An example would be that ole cigarette-smokin' lady at Akchin Casino who assumes that since a slot machine didn't pay-off for the patron ahead of her, it will probably be 'ripe for a jackpot'!

"The coin has come up 'tails' twelve times in a row! It just *has* to be 'heads' on the thirteenth try, so 'unlucky **13**' aside ('cuz I'm not superstitious) I'm gonna bet a hundred dollars that the next toss..."

"No one has flunked Philosophy in the past few years, so it is about time this semester." (No, wait; that *may not be fallacious*.)

**Genetic Fallacy** – To confuse the origin of an idea with evidence for its validity. Or to reject an idea if you are suspicious of its source.

"My saintly mother told me never talk to strange men and I've never met one who wasn't strange."

"I heard it on the PBS-NPR Evening News, so why would I doubt that it is an accurate description of events?"

"I heard it on Fox News, so I know better than to believe it is 'fair and balanced.'"

"The President said it in his State of the Union address, a forum in which there is no need for mendacity, and I believe him."

Sometimes the **Genetic Fallacy** is defined as: Arguing that the origin of something is identical to the thing from which it has originated. (Explaining something only in terms of its source.) This is also called 'reductionistic.'

"Human Consciousness is coterminous with neural-chemical processes. Therefore, the mind is nothing more than the brain."

**Naturalistic Fallacy** – To claim that something is right or good just because it is deemed 'natural.'

"Unlike animals, it is human nature to mate in any season; therefore, what could possibly be wrong with 'free sex'?"

"It is a natural inclination to want more. Even institutions have this normal urge for acquisition and avarice; therefore our government has no right to monitor and regulate 'high finance' or to impede Wall Street's momentum."

**Package Deal** – To assume that ideas or practices linked by custom and tradition must always be 'packaged' together in the same way.

"Christians will always vote Republican."

"To be a truly sophisticated and cultured person is to listen exclusively to **KBAQ** (all classical music...all the time.)"

"It must be a truism to say that highly educated people are agnostic, for higher education shatters religious faith."

**Pragmatic Fallacy** – Arguing for the 'truth' of something based only on its practical effects.

"Meditation obviously taps into a divine reality because look at how much more spiritual and serene TM practitioners are!"

**Spotlight Fallacy** – To assume that all members of a group are exactly like the most visible and vociferous members of that group (the ones who get the most media attention or like the spotlight!)

"You know, **99%** of lawyers give the rest a bad name! All they do is chase ambulances and advertise on TV to make people want to sue somebody."

"Charismatics, as you can tell by those 'televangelists,' are the most self-promoting, ignorant, greediest, and most gaudy people anywhere! They should all be called 'Crazi-matics'!"

## SOME SYLLOGISMS ARE FUN [Special Section – To Be Continued.]



We don't have this in our glossary but here is an entry from Ambrose Bierce's infamous *The Devil's Dictionary*:

**Logic**, *n.* The art of thinking and reasoning in strict accordance with the limitations and incapacities of the human misunderstanding.

The basic of logic is the **syllogism**, consisting of a major and a minor premise and a conclusion – thus:

**Major Premise:** Sixty men can do a piece of work sixty times as quickly as one man.

**Minor Premise:** One man can dig a post-hole in sixty seconds; therefore –

**Conclusion:** Sixty men can dig a post-hole in one second.

This may be called the syllogism arithmetical, in which, by combing logic and mathematics, we obtain a double certainty and are twice blessed.

But seriously, what is the **SYLLOGISM**?

The syllogism is a special (and by far the best known) form of **Deductive Reasoning**. As catchy as a haiku poem, the syllogism contains three (not TWO, not FOUR, but **THREE!**) propositions.

Two are Premises, one is the Conclusion...making **THREE**.

The real 'fun' emerges as logicians rule on whether the premises adequately imply the conclusion.

Each Proposition (and there are **THREE**) in a Syllogism contains **FOUR** parts. The proposition opens with a **Quantifier**. Next, the proposition has a word which serves as **Subject**, followed by a word which serves as the **Predicate**. Finally, there is a word *relating* the Subject to the Predicate. That sexy connector word is called the **Copula**. (You won't forget that.)

But let us review:

- 1. QUANTIFIER** – Indicates the extent to which we are referring to the Subject's 'class-mates.'
- 2. SUBJECT** – The item or entity about which we are making a statement.
- 3. PREDICATE** – That which we are stating about the Subject.
- 4. COPULA** – The connector. Usually some form of the verb To Be. (is, are...)

Propositions must always take this Subject–Predicate Form. In that way can propositions 'propose' and assert something. As we noted earlier, only such declarative sentences are of interest to logicians because they can thus be evaluated for Truth or Falsity. (There are, of course, other kinds of sentences: 'Interrogative, Imperative and Optative,' for example. But in LOGIC we aren't 'questioning, commanding and wishing.' We are declaring! And those tidy little series of declarative statements we call ARGUMENTS can then be ruled upon. ("Logic is the science of valid inference.")

Declarative propositions are also **Qualified**...that is, further categorized into those that affirm and those that deny.

**AFFIRMATIVE** – The Predicate affirms something about the Subject.

**NEGATIVE** – The Predicate denies something about the Subject. (By modifying the Copula.)

But this is boring. So before giving anymore definitions and delineating the rules, and learning how to utilize SYMBOLS...we can look at some simplistic examples.

## Formally Valid Arguments (The FORM is okay.)

### 1. True and Valid:

All men are mortal.

Socrates is a man.

Therefore Socrates is mortal.

### 2. False but Valid:

All men are green.

Socrates is a man.

Therefore Socrates is green.

## Formally Invalid Arguments (The FORM is not okay.)

### 3. False and Invalid:

Some men are green.

Socrates is a man.

Therefore Socrates is green.

### 4. True but Invalid:

Some men are mortal.

Socrates is a man.

Therefore Socrates is mortal.

In example 2, the first statement is false, but the form or structure of the argument is correct or valid. (If all men were green; then Socrates obviously would have to be also.)

In examples 3 and 4, the first statement says something about some men, not about all men. One could correctly reason from this first statement that Socrates might possibly be green or mortal, but he could not correctly reason that Socrates necessarily is green or mortal.

Formal fallacies are therefore invalid arguments — arguments where the concluding statement does not necessarily follow from the statements preceding it. The concluding statement may actually be objectively true, but its truth does not depend on or follow from the other statements.

A change in the actual terms used in an argument may affect the actual truth value of the argument, but a change in terms will not affect the validity or invalidity of the argument.

Because the terms themselves do not affect validity, we can begin to substitute **symbols** for the terms.

All men are mortal.

All **a** are **b**.

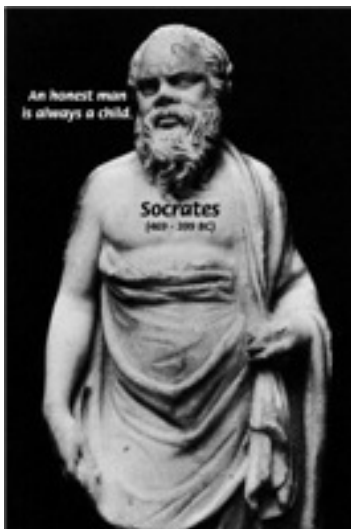
Socrates is a man.

**c** is **a**.

Therefore Socrates is mortal.

Therefore **c** is **b**.

No matter what terms you may put in the place of **a**, **b**, and **c**, if all **a** are members of the class called **b**, and **c** is a member of the class called **a**, then **c** must necessarily be a member of the class called **b**.



For more 'fun' with the SYLLOGISM...

[The Categorical Syllogism; Enthymemes; Sorites, etc.]

...and for much much more...

[Truth Tables; The Square of Opposition; Symbolic Logic, etc.]

.....You will certainly want to take **PHI 498 - INTRO TO LOGIC**



## **IV. COME, LET US REASON TOGETHER**

*“Believe in Thinking, and THINK in Believing!”*

The basic principles of truth and reason that give LOGIC its efficacy are found in the Bible. They derive first and foremost from the very **character** of God – Who IS Truth! In Him is no darkness at all. He has created and ordered all things and shines forth as the Logos. Rationality and the ‘True Word’ about reality are contingent on the nature of the self-disclosed God! So, Truth and Reason are manifest in the verifiable fact that God has given true propositions about existence! God does not contradict Himself. And neither should we. The sheer fact that propositional truth exists should fill us with wonder and gratitude, for it is the ‘reason’ that reality is dynamically relational and that existence can be discovered to be meaningful!

It is to the glory of God that we utilize logic so as to reason correctly, for without correct reasoning we cannot understand His Word, and without understanding it we cannot fully live it...live it to the praise of His Glory. We must resist falsehood as staunchly as we resist evil! Ever since the origins of deception and its subsequent sin and alienation, humans have suffered from ‘faulty reasoning’ about the world and our place in it! If we can come to see that the proper use of **REASON** is a moral obligation and spiritual benefit, we will live with greater wisdom and honesty. *Then* we may have more impact on this darkened world.

***Let us understand that LOGIC can honor the LOGOS from Whom it derives!***

### **✚ SOME BASIC PRINCIPLES IN CULTIVATING A SOUND CHRISTIAN MIND:**

The Christian disciple must **love God** with their entire mind. Anything less is dishonorable and disobedient.

**We must love our neighbors** as ourselves. We do not want to be lied to, misled or coerced, and we must give others the same respect.

**A sound-minded believer** is responsible for **interpreting** the Bible correctly and authentically.

**A sound-minded believer** is responsible for **understanding** the beliefs of others and engaging them honorably.

**As sound-minded Christians**, we must humbly and honestly **critique** our own practices and beliefs. There is no other way to become mature. Salvation is a free gift, but on the arduous road of obedient discipleship, there are **no** ‘EZ’ short-cuts.

The mature believer must be well prepared to **respond** to skeptical challenges and attacks from unbelievers.

**A sound-minded believer** can be compellingly **articulate** in the marketplace of ideas...political and religious.

**We must lead impeccably righteous lives and speak the truth in love.** We must have **intellectual as well as moral** integrity. To share the good news profoundly, we need excellence in **both** areas.



## VERSES 'REMINDING' US TO CULTIVATE A SOUND CHRISTIAN MIND:

“You shall love the Lord your God with all your heart, and with all your soul...

...and with all of your mind.” Matthew 22:37

“Whom shall (God) teach knowledge? And whom shall He make to understand doctrine?

They that are weaned from the milk.

For precept must be upon precept...line upon line; here a little, and there a little...” Isaiah 28:9-10

“The fear of the Lord is the beginning of knowledge, but fools despise wisdom and instruction.” Proverbs 1:7

“Wisdom shouts in the streets, she lifts up her voice in the square...How long, oh naïve ones, will you love being simple-minded? Scoffers delight themselves in scoffing. And fools hate knowledge...

...the waywardness of the naïve will kill them. And the complacency of the fools will destroy them.

But he who listens to me shall live securely and be at ease from the dread of evil.” Proverbs 1:20 f

‘The LORD is the ultimate source of wisdom, knowledge and understanding.’ Proverbs 2:6

“Make your ear attentive to wisdom. Search for her as for a hidden treasure!

Incline your heart to understanding...Cry for discernment...Lift up your voice for understanding. Proverbs 2:2,3

“Do not be wise in your own eyes...fear the Lord and turn away from evil.” Proverbs 3:7

“Acquire wisdom and understanding! Do not forget or turn from ‘my teaching.’ Proverbs 4:5

“Hear instruction and be wise and refuse it not.” Proverbs 8:33

“Reprove a wise man and he will love you. Give instruction to a wise man and he will be wiser still.

Teach a righteous man and he will increase his learning. Proverbs 9:8

“He is in the way of life that keeps instruction, but he that refuses reproof errs.” Proverbs 10:17

“Who can understand his errors? Cleanse me from secret faults.” Psalms 19:12

“With his mouth the godless man destroys his neighbor...

...but through knowledge the righteous will be delivered.” Proverbs 11:9

“The way of a fool is right in his own eyes; but he that harkens unto counsel is wise.” Proverbs 12:15

“The tongue of a righteous man uses knowledge aright; but the mouths of fools pour out foolishness.”

Proverbs 15:2

“Understanding is a wellspring of life...” Proverbs 16:22

“He that answers a matter before he hears it, it is folly and a shame to him. Proverbs 18:13

“Prove all things; hold fast that which is good.” 1 Thessalonians 5:21

“Henceforth do not be children, tossed to and fro; carried about with every wind of doctrine...

...by the sleight of men and cunning craftiness whereby they lie in wait to deceive.” Ephesians 4:14

“As you have received Christ Jesus the Lord, so walk in him...rooted and built up in him, and established in the faith as you have been taught, abounding therein with thanksgiving.

Beware lest any man spoil you through philosophy and vain deceit after the traditions of men...

...after the rudiments of the world and not after Christ.” Colossians 2:6-8

“For we have not followed cleverly devised fables when we made known to you the power and coming of our

Lord Jesus Christ, but we were eyewitnesses of His majesty. 2 Peter 1:16

“Beloved, do not believe every spirit, but test the spirits whether they are of God.

Many false prophets are out in the world.” 1 John 4:1

“...no lie is of the truth.” 1 John 2:21

“The goal of the commandment is love, which comes out of a pure heart, and of good conscience, and of a faith unfeigned. Some (false teachers/mythmakers) have wandered away from this and turned to babbling.

Desiring to be teachers of the law, understanding neither what they say, nor whereof they affirm.”

1 Timothy 1:5-7

“If any of you lack wisdom, let him ask of God...and it shall be given.” *James 1:5*

“You should earnestly contend for the faith which was once delivered to the saints.” *Jude 3*

“In the church I would rather speak five intelligible words to instruct others than ten thousand words in a tongue. Brothers, stop thinking like children!” *1 Corinthians 14:19*

“Holding fast the faithful word as he has been taught, that he may be able by sound doctrine both to exhort and to convince the gainsayers.” *Titus 1:9*

“That which I cannot see, teach thou me...” *Job 34:32*

“Walk in wisdom toward them that are without, redeeming the time. Let your speech be always with grace, seasoned with salt, that you may know how you ought to answer every man.” *Colossians 4:5,6*

“Though we live in this world, we do not wage war as the world does. The weapons we fight with are not the weapons of the world. On the contrary, they have divine power to demolish strongholds. We demolish arguments and every pretension that sets itself up against the knowledge of God... ..and we take captive every thought to make it obedient to Christ. *2 Corinthians 10:3-5*

“Who is going to harm you if you are eager to do good? But even if you should suffer for what is right... ..you are blessed! Do not fear what they fear; do not be frightened. But in your hearts set apart Christ as Lord. Always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have. But do this with gentleness and respect, keeping a clear conscience... *1 Peter 3:13-16a*

“And this is my prayer; that your love may abound more and more in knowledge and depth of insight, so that you may be able to discern what is best and may be pure and blameless until the day of Christ, filled with the fruit of righteousness that comes through Jesus Christ – to the glory and praise of God.” *Philippians 1:9-11*

“Do not conform any longer to the pattern of this world, but be transformed by the renewing of your mind. Then you will be able to test and approve what God’s will is – his good, pleasing and perfect will.” *Romans 12:2*

“Prepare your minds for action; be self-controlled; set your hope fully on the grace to be given you when Jesus Christ is revealed.” *1 Peter 1:13*

“A double-minded man is unstable in all his ways.” *James 1:8*

“...with God there is no variableness, neither any shadow of turning.” *James 1:17*

“He is the rock...his work is perfect. All his ways are judicious. He is a God of truth and without iniquity. He is right and just. *Deuteronomy 32:4*

“God is not a man that he should lie; neither the son of man, that he should repent. Hath he said, and shall he not do it? Or hath he spoken, and shall he not make it good?” *Numbers 23:19*

“That by...immutable things, in which it was impossible for God to lie, we might have strong consolation.” *Hebrews 6:18*

“In hope of eternal life, which God, that cannot lie, promised before the world began...” *Titus 1:2*

“You have redeemed me, Oh Lord God of Truth!” *Psalms 31:5*

**“Come now and let us reason together.”** *Isaiah 1:18*

