William James, (1842-1910) an important American philosopher wrote, " Philosophy is the unusually stubborn attempt to think clearly." Thinking is a broader word than the word, rational. To be rational is to think, but all thinking is not necessarily rational thinking.

If you and I had an argument, how would we decide who is right or wrong. Either of us could not decide, because we are disagreeing. We may consider bringing in a third party, but this does not help. The third party may not really know what we are arguing about, may disagree with both of us, or you, or me. A third party does not work. So, how do we settle the argument?

We can say that we need to settle it by using rational thinking. But, what is rational thinking? We might disagree about the standards we use for settling this question.

Some philosophers maintain that there must be objective and universal standards of rationality. They call this process **foundationalism**. Foundationalists hold that we can decide what is rational by appealing to principles that are undeniable to any rational person. If I make an argument that the existence of extraterrestrials is rational, then any person using proper reasoning should agree with me.

Aristotle wrote about the law of **noncontradiction,** that is, a statement cannot be both true and false.

Some foundationalists argue from a rational point of view- that foundational principles of rationality amount to "clear and distinct" ideas that are innate in the human mind or that can be discovered by careful and critical analysis of our beliefs. On the other side, are empiricists, who argue that immediate sense impressions form the foundations of rational beliefs.

But, one can keep asking you, " How do you know that." "How do you know that your reasons are good reasons." So, some philosophers claim that foundationalism does not help to answer the question of rational thinking.

The term **constructivists** is used to identify the anti-foundationalist thinkers. These folks maintain that the search for rationality falls short and is pointless. They claim that we are all so embedded in our different cultures, traditions, religions and historical situations; that we can never find some neutral point where we all agree.

Other critics maintain that if foundationalism is supported by having good reasons, then, before I accept your beliefs as rational, I should expect you to be able to display ,good reasons for your beliefs. This also falls short, because you may consistently ask me to provide more good reasons, until I claim that my reasons are self evident only to me, but not to you.

So, there are the viewpoints of **cognitive relativism** (the denial of universal truths) and **ethical relativism (**the denial of universally valid moral principles) . This may lead to the

idea that any cultures values, religious traditions, set of beliefs is a s good as anyone else's. This may be seen as self defeating. Because it then states that anyone's view is of equal merit.

Is there anywhere else to go in order to find a middle ground that allows us to assert that some answers are better than others but stops short of imposing on others our own local views on what is rational and what is good?

Perhaps the answer lies in the fact that we need to listen to other views and enter into a dialogue. Maybe in this way our views will grow and others views will also grow, and we can then seek to understand each other.

Hans Georg Gadamer, a contemporary German philosopher argues that truth is an understanding that occurs when there is a "fusion of horizons." We recognize our own understanding as a horizon resulting from the perspectives and biases which we have acquired and when we are willing to risk our horizon in order to allow the horizon of the "other" to appear. We can learn about ourselves and others and see that as a worthwhile enterprise.

There is an Eastern teaching called "syad-vada." This holds that there are 353 different viewpoints that can be held on any question, hence dogmatic closed- mindedness is not appropriate. No single philosophical view or system can say all that there is about reality. But, in the end, through dialogue and understanding some answers may be better than others. Not all answers are rational. Some are better than others. However the range of rational responses may be far broader that we realize.

Perhaps our politicians should consider this alternative.

With this thought in mind, we move onto methods of rational reasoning as compared to methods of fallacious (false) forms of reasoning.

The philosopher David Hume (1711-1776) wrote that one's moral reasoning has little or nothing to do with logic or reason, it is based on sentiment. Namely it is based upon one's personal belief system.

Many times, if you ask someone why they believe the way that they do regarding an ethical issue, they reply with: " That's what I've always believed." "That's what my family believes." "That's what my religion or political party believes." In other words, the belief is based not so much on logic or reasoning, but on one's long standing personal believe system which is tied into family, church, politics or some other group.

The challenge in ethics and philosophy and the challenge in making ethical and philosophical decisions is to think rationally, factually, and logically about an issue and come to a conclusion based upon good, solid reasoning.

So, we will look at Good Reasoning as compared to false or Fallacious Reasoning.

Any argument is a collection of statements. The statements contain premises, evidence, or supporting statements, namely grounds for the argument.

You are familiar with a deductive argument. It is an argument which deduces a conclusion based upon valid premises. It is an argument which goes like this:

If A, then B
A is true
Therefore B is true.

All of my dogs are black
Shadow is one of my dogs
Therefore, Shadow is black.

This statement contains valid logic and makes sense.

But, we can posit another such argument that may be validly true pertaining to this theory, but is not logical, so it does not make sense.

Some cars are red
Some cars are Toyotas
Therefore, Toyota cars are red.

We know that all Toyota cars are not red, so it is not a sound argument.

Another argument commonly used is called an inductive argument. They induce or establish a fact that a conclusion is likely to be true, but perhaps the argument is less than a sound argument.

I drink 6 glasses of water a day
I've never had heart problems
Therefore, 6 glasses of water a day prevents heart problems.

We know that this argument is not a sound one, even though it follows a valid formula.

There are differences between valid arguments that may be true according to a formula and sound, logical arguments. Here's an example.

One formula is a very familiar one to you:

A is greater than B
And B is greater than C
Therefore, A is greater than C

Let's put things in here to make it a valid, logical argument.

6 is greater than 4
4 is greater than 2
Therefore, 6 is greater than 2

Yes, valid and logical. But let's put other premises in this formula.

Apples are greater than Oranges
Oranges are greater than Pears
Therefore, Apples are greater than Pears.

This follows a valid formula, but it is not a sound, logical argument.

Here are a few valid and sound arguments.

It's either A or B
A is not true
Therefore, B is true.

You are either at home or in class
You are not at home
Therefore, you are in class

Another:

If A, then B
B is not true
Therefore, A is not true

If you are in class you are in the front row
You are not in the front row
Therefore, you are not in class

Or:

All A is B
C is not B
Therefore, C is not A

All birds have wings
Pigs do not have wings
Therefore, pigs are not birds

And finally:

No A is B
C is B
Therefore, C is not A

No horses can fly
Swallows can fly
Swallows are not horses.

Keeping in mind formulas such as the above, we can turn any logical moral argument into a valid deductive argument.

Listen to talk shows or the "spin doctors," or politicians debating or commercials on the radio or TV. You will hear many arguments that are not valid or logical arguments.

These type of arguments coincide with the false or Fallacious Arguments, that we covered. The arguments contain some sort of a fallacy of reasoning in the argument.

You probably recognized many of the Fallacious Arguments from TV, other media and political debates. Of course, none of us have ever used any of these arguments to support our opinions. Ha! Ha!