

Philosophy of Ethics



ETHICS

- Ethics enables an engineer to decipher questions of
- Morality,
- Duty and
- Obligation.

It sets guidelines for a code of conduct and also allows us to function harmoniously within our community.

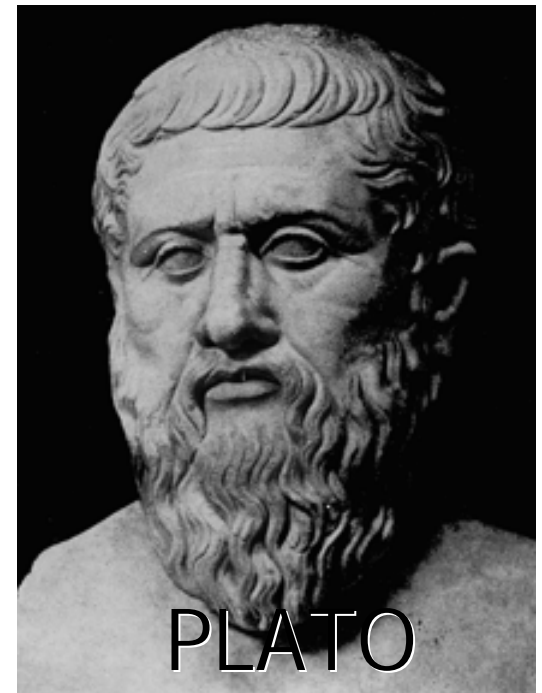
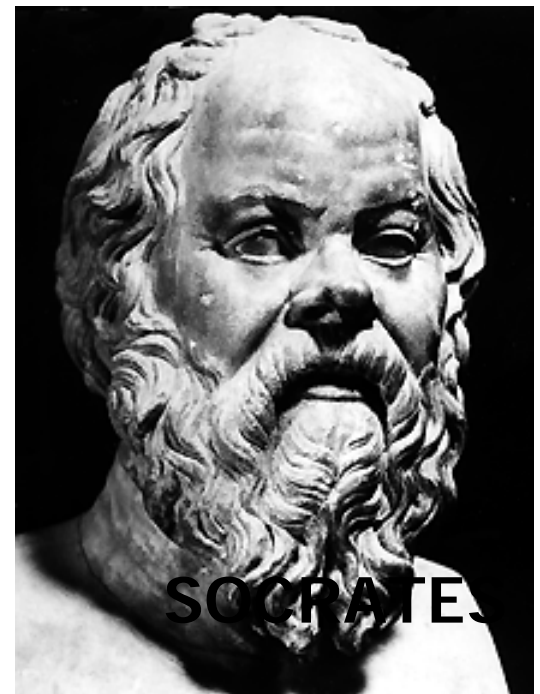
ETHICS

- Ethics are a set of disciplinary standards, which separate moral and immoral behaviour.
- Ethics play a fundamental role in every profession, and engineering is no different.
- Ethics belong to a much larger stream of thought and Philosophy.

PHILOSOPHY

"LOVE OF WISDOM"

- HUME
- KANT
- RUSSELL
- WITTGENSTEIN
- SARTRE

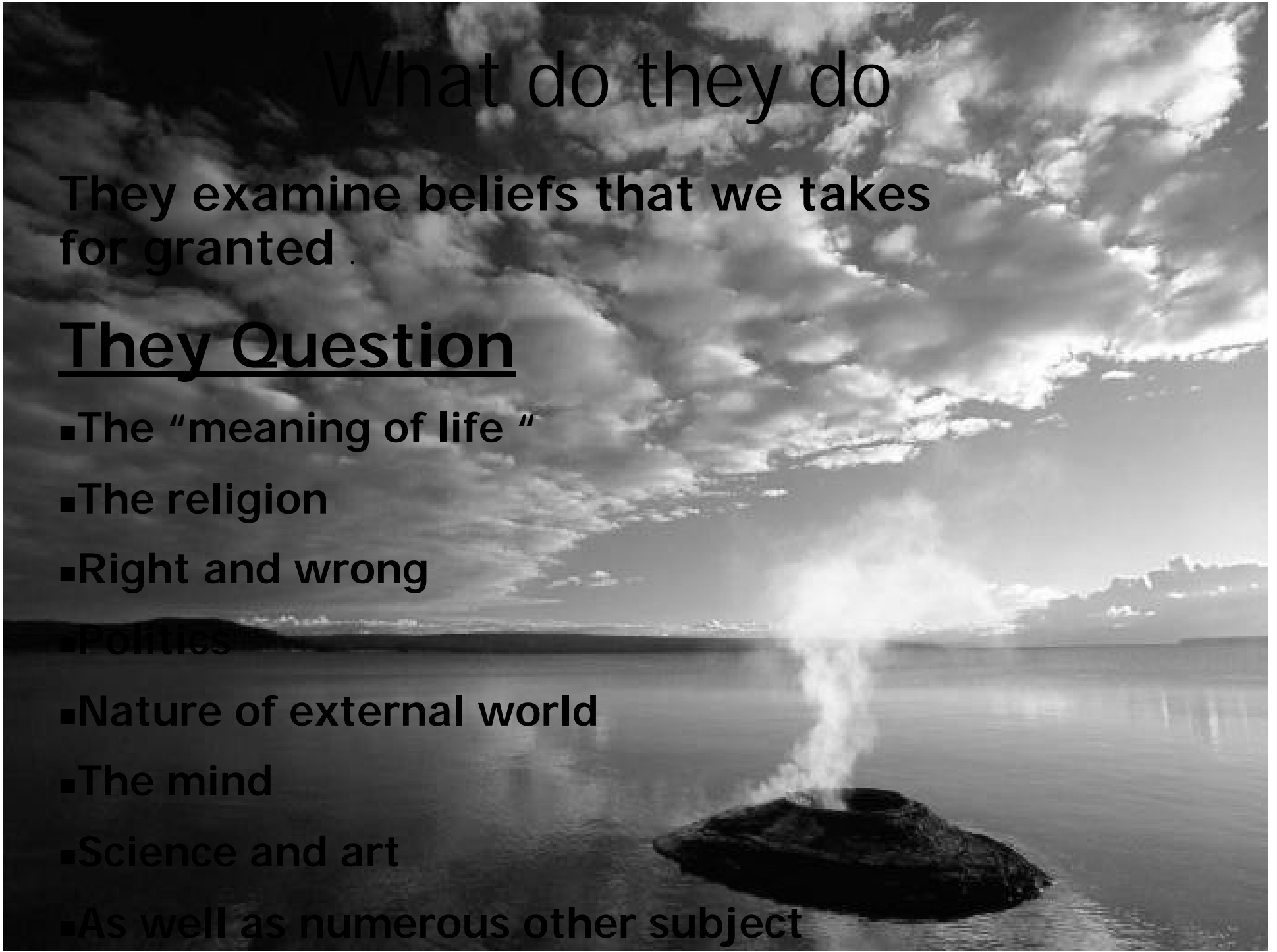


What do they do

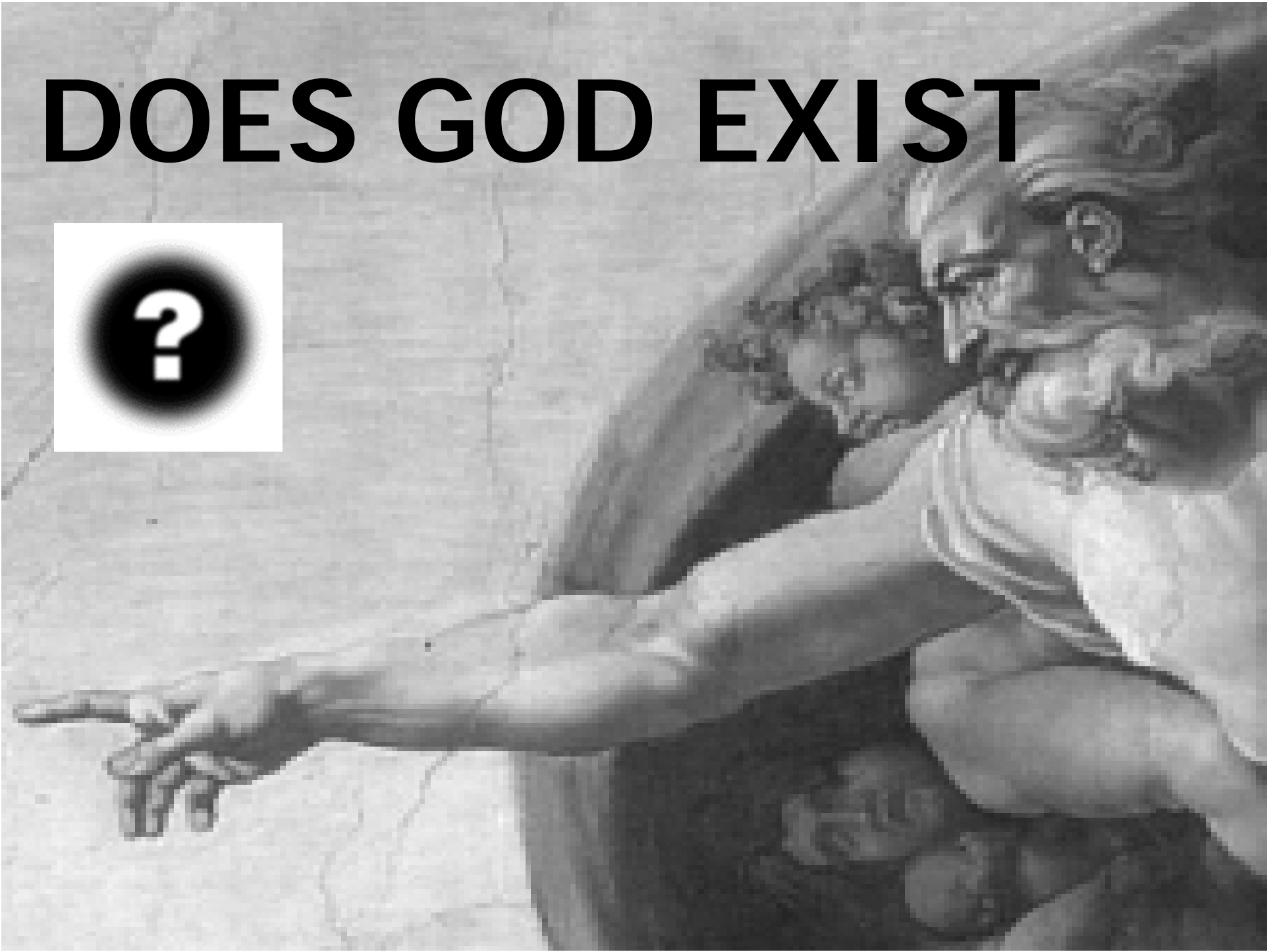
They examine beliefs that we take for granted .

They Question

- The "meaning of life "
- The religion
- Right and wrong
- Politics
- Nature of external world
- The mind
- Science and art
- As well as numerous other subjects



DOES GOD EXIST



DOES GOD EXIST?

The answer which each of us gives,

- Affects not the way we behave, but also
- How we understand and interpret the world and what we expect for the future .



God exists

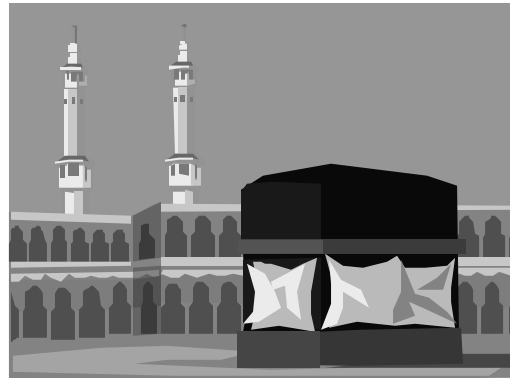
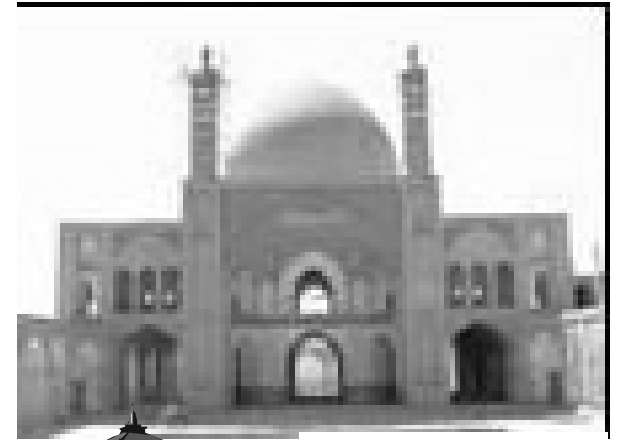
When human existence may
have a
purpose, and we may even
hope for
eternal life.

**If God
does not exist**

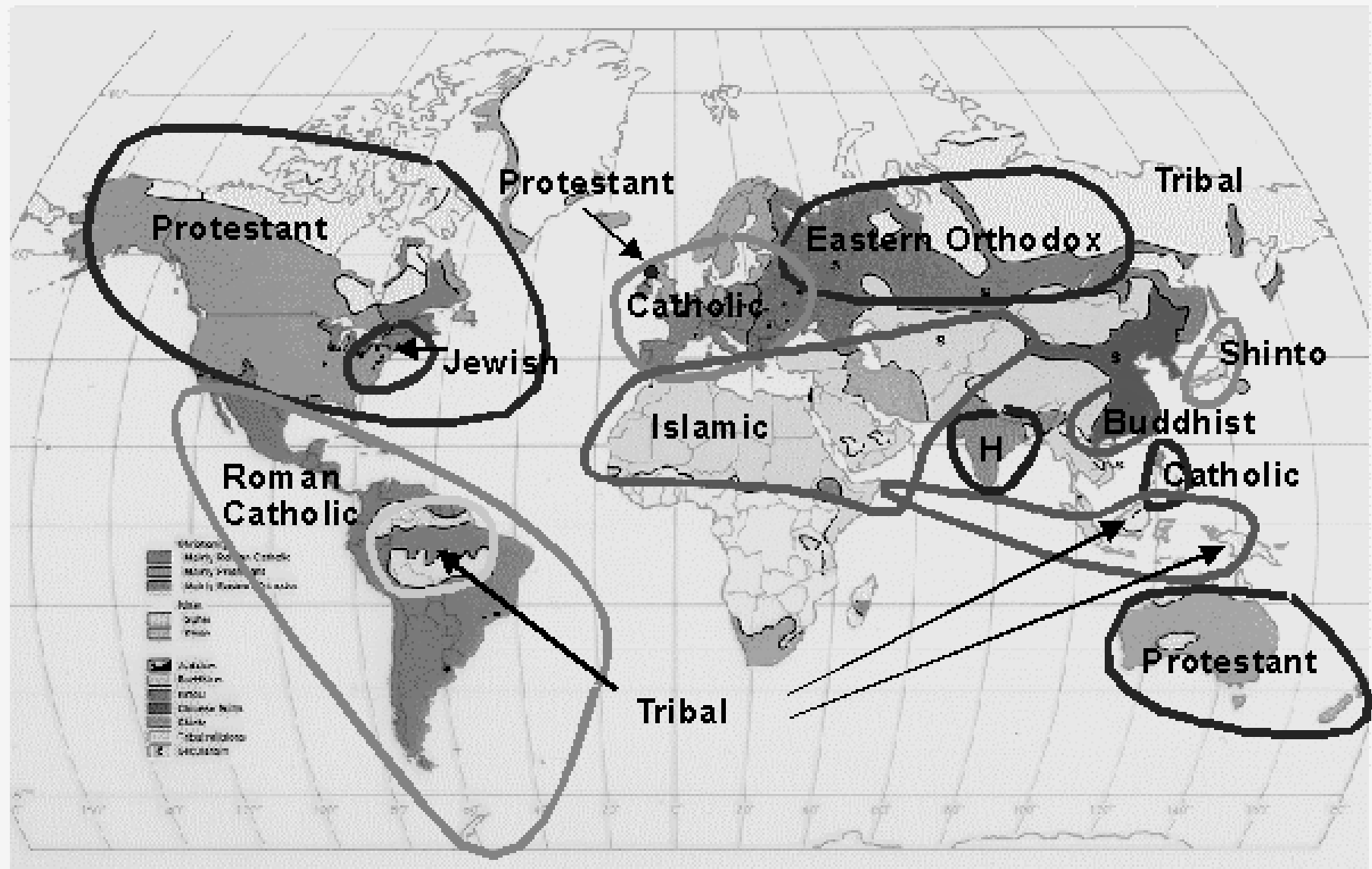


Then we must create any meaning in our lives for ourselves no meaning will be given to them from outside and death is probably final.

But who has the right god ?



Generalized map of world religions





Theism

The starting point of philosophy of religion

“**One God exist**” and he or she is

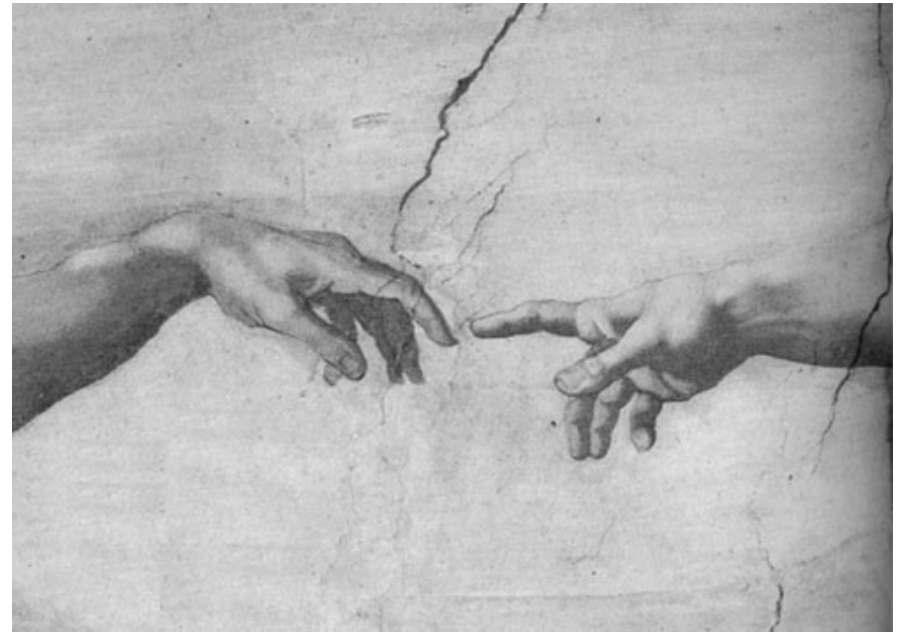
■ **OMNIPOTENT (invincible)**

■ **OMNISCIENT (All knowledgeable)**

■ **AND SUPREMEY BENEVOLENT**

But does this God exists

- Design Argument (Teleological)
Telos (purpose)



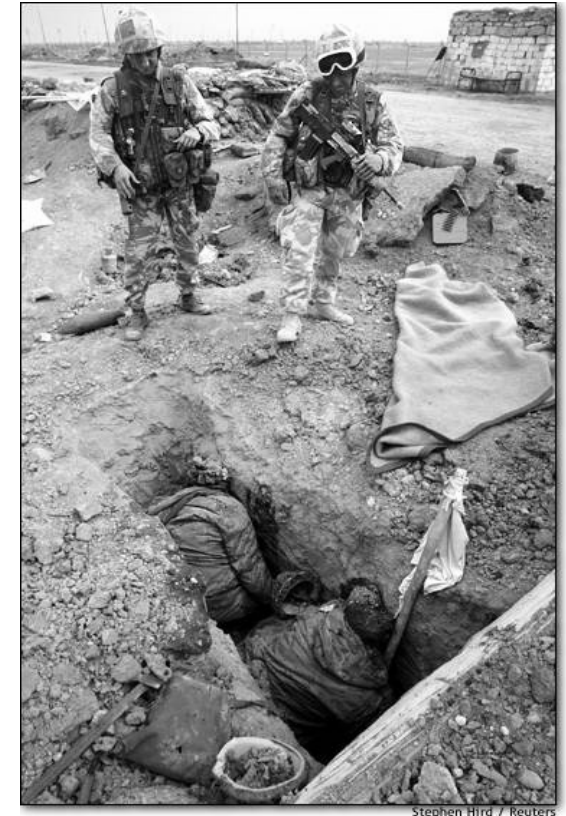
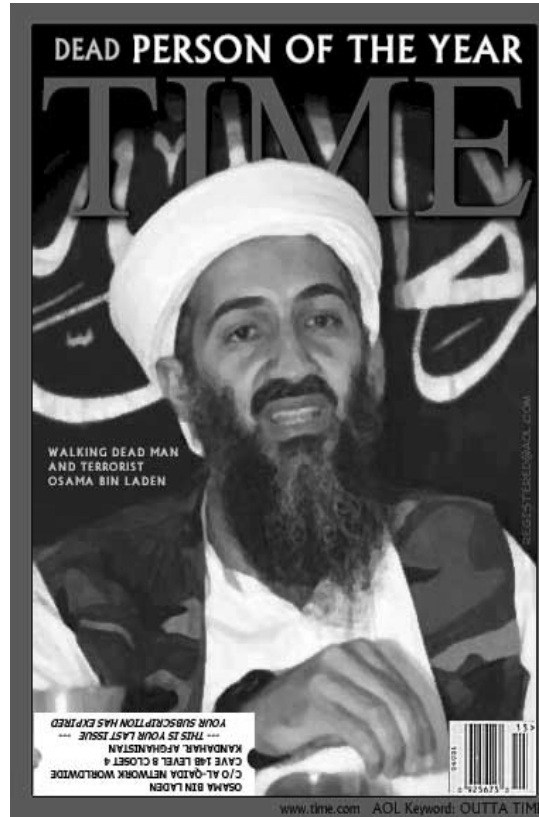
The Designed Argument

- Everything bears evidence of having been designed
- This is supposed to demonstrate the existence of a Creator

Problem of the evil



Problem of the evil





Prayer is a
matchless
opportunity
Through prayer
people, things,
problems and
relationships can
be transformed.
Prayer has
infinite power



- God is your shield
- He is your refuge
- In him you are secure

- Believe in the

FORCE

**LET THE FORCE BE WITH
YOU!!**

Should we lose our religion

- Because of what is going on in the world!!!!!!

Problem of the evil

We still think the best way to handle a dispute is by violence





Even in so called the civilized society

- Persian Empire
- Roman Empire
- Greek Empire
- British Empire
- USA Empire



**Maximus
Ignoramus**

Action of the leaders of the most powerful countries (U.K. & USA) in the world

- Was the action of the two Gentlemen was
- Right or wrong?
- Moral or immoral?
- Ethical ?
- Where is the weapon of mass destruction?
- What about the oil
- What about getting rid of a ruthless dictator and his criminal sons
- What happens to rebuilding

Do We need to learn from our leaders?



Power of

Criticism

- BUSH BLAIR
Clip

Right and Wrong

- What makes an action right or wrong
- What do we mean when we say that some one ought or ought not to do something?
- How should we live ?
- How we treat other people ?



Right and wrong

If we can not say why such things as

- **Torture**
- **Murder**
- **cruelty**
- **Slavery**
- **Rape**
- **Theft**

Are wrong what justification can we have for preventing them

If we do not follow the rules of the
religion

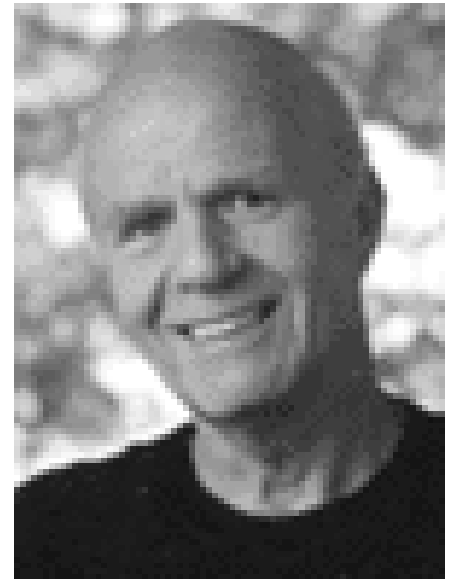
God Might say



IS HELL AWAITING US



Dr. Wayne W. Dyer



- **Dr. Wayne W. Dyer** is an internationally renowned author and speaker in the field of self-development. He has written numerous bestselling books; has created a number of audios and videos; and has appeared on thousands of television and radio programs, including The Today Show, The Tonight Show, and Oprah.
- There is a Spiritual Solution to Every Problem



- **Spiritual**

- **A spiritual being has a conscious awareness of both**

- **The physical and**

- **The invisible dimension**

You may be

spiritual and non-spiritual

Spiritual

A spiritual being has a conscious awareness of both

- **The physical and**
- **The invisible dimension**

The non-spiritual

- The non-spiritual being is only aware of the physical domain.

Neither category, as employed , implies

- Atheism or
- Religious orientation

The non-spiritual person is not incorrect or bad because he or she experiences the world only in a physical manner.

Dr. Dyer

suggests the following

- **12 beliefs and practices for you to cultivate as you develop your abilities to manifest miracles in your life.**

1. The non-spiritual being lives exclusively within the five senses, believing that if you cannot see, touch, smell, hear, or taste something, then that something simply doesn't exist.

The spiritual being knows that beyond the five physical senses, there are other senses we use to experience the world of form.

2- The non-spiritual being believes we are alone in the universe.

The spiritual being knows he or she is never alone.



3 --The non-spiritual being is focused on external power.

The spiritual being is focused on personal empowerment

4--.

The non-spiritual being feels separated and distinct from all others, a being unto himself.

The spiritual being knows that he is connected to all others and lives his life as if each person he meets shares being human with him

4-- The non-spiritual being feels separated and distinct from all others, a being unto himself.

The spiritual being knows that he is connected to all others and lives his life as if each person he meets shares being human with him.

- **5--The non-spiritual being believes exclusively in a cause/effect interpretation of life.**
- **The spiritual being knows that there is a higher power working in the universe beyond mere cause and effect.**

- **6-The non-spiritual being is motivated by achievement, performance and acquisitions.**
- **The spiritual being is motivated by ethics, serenity and quality of life.**

- **7--The non-spiritual being has no place within his awareness for the practice of meditation.**

The spiritual being cannot imagine life without it.

- **8-- For the non-spiritual being, the concept of intuition can be reduced to a hunch or a haphazard thought that accidentally pops into one's head on occasion.**
- **For the spiritual being, intuition is far more than a hunch. It is viewed as guidance or as God talking, and this inner insight is never taken lightly or ignored**

- **9-- The non-spiritual being is involved in a lot of fighting, he is aligned with the tools of power in a war against that which he believes to be evil.**
- **This person knows what he hates, and experiences a great deal of inner turmoil over perceived wrongs. Much of his energy, both mental and physical, is devoted to what he perceives to be bad or evil.**

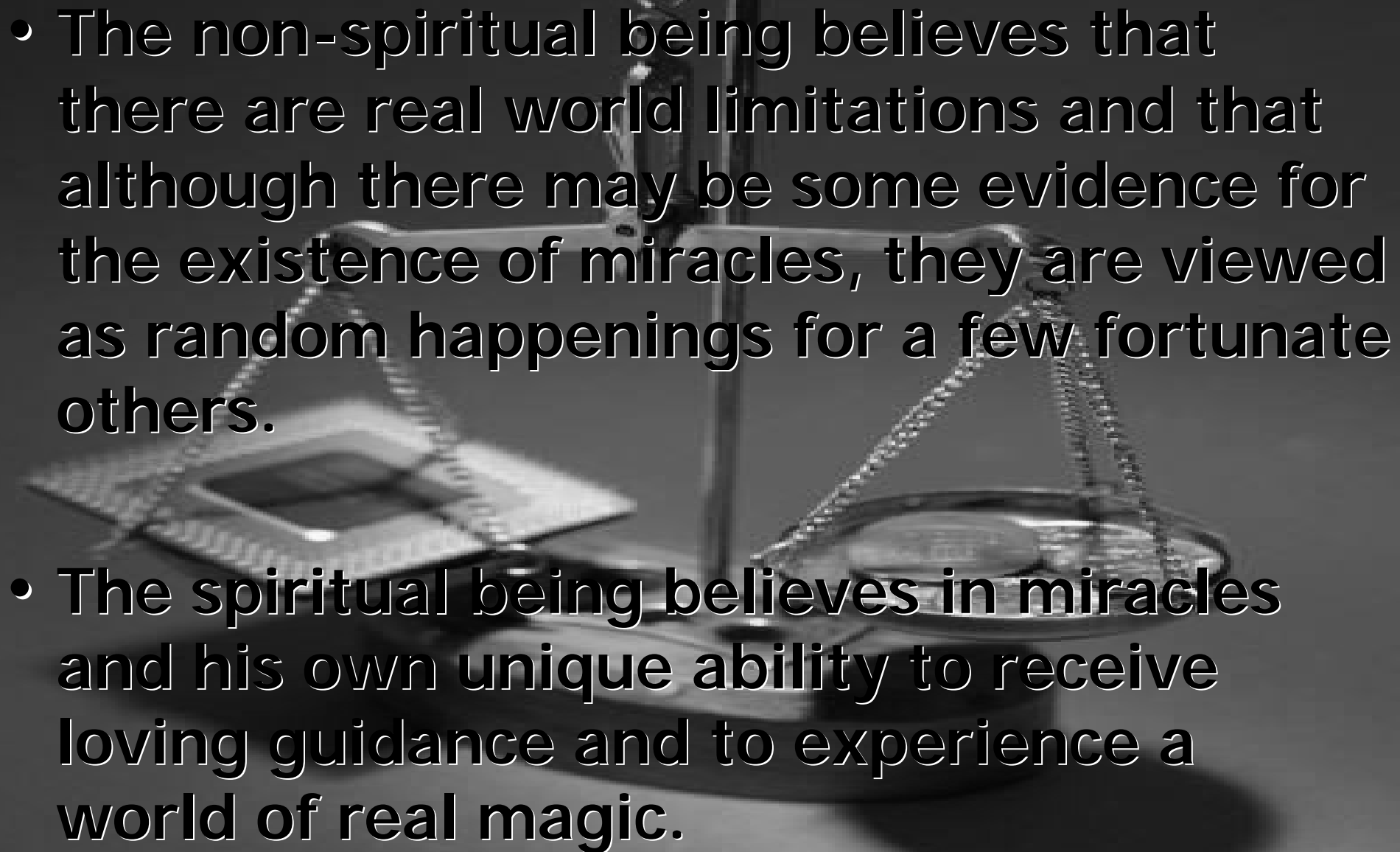
- **10-- The non-spiritual person feels no sense of responsibility to the universe, therefore he has not developed a reverence for life.**
- **The spiritual being has a reverence for life that goes to the essence of all beings.**

11-

- **The non-spiritual being is laden with grudges, hostility, and the need for revenge.**
- **The spiritual being has no room in his heart for these impediments to miracle making and real magic.**



12-

- 
- The non-spiritual being believes that there are real world limitations and that although there may be some evidence for the existence of miracles, they are viewed as random happenings for a few fortunate others.
 - The spiritual being believes in miracles and his own unique ability to receive loving guidance and to experience a world of real magic.

Quotes

- We become what we think about all day long. The question is, "What do you think about?"
- Every problem you have experienced is in your mind. The solution to the problem is in the same place.

Dr. Wayne Dyer

Morality

- **Is morality simply a matter of prejudice or can we give good reason for our moral beliefs.**
- **Ethics or Moral Philosophy**

Do women and men think differently about ethics

- The idea that women and men think differently has traditionally been used to justify subjugating one to the other.

Do women and men think differently about ethics

- Women are not as rational as men, so women are naturally ruled by men!!!!

Aristotle

- Kant agreed ,adding that for this reason women" lack civil personality" and should have no voice in public life.
- Rousseau tried to be diplomatic by emphasizing that men and women merely posses different virtues, neither better than the other

Do women and men think differently about ethics

- Rousseau went further and said;

But of course it turned out that men's virtue fit them for leadership, where as women's virtues fit them for home and hearth'

Do women and men think differently about ethics

- **Growing women's movement of the 1960 and 1970's;**

**SOCIALIST
FEMINISM:
A STRATEGY
FOR
THE WOMEN'S
MOVEMENT**

.50

HYDE PARK CHAPTER
CHICAGO WOMEN'S
LIBERATION UNION
419 W. GEORGE
CHICAGO, ILL. 60617

Do women and men think differently about ethics



Rejected the idea of psychological differences between women and men altogether

Do women and men think differently about ethics

- The conception of men as rational and women as emotional was dismissed as mere stereo type
- Nature makes no mental or moral distinction between the sexes
- If there seem to be such differences, it is only because women have been conditioned by an oppressive system to behave in “feminine” ways
- The behaviour might be different

Can Conflict Be Healthy?

Arguing is really saying,

“If you were really
more like me, then
I could like you
better.”

Dr. Wayne Dyer

Religion

- A commonly held view in congregations that Christians should not be involved in conflicts
- why does this happen if both people are Christians?

Conflict

- A commonly held view in congregations that Christians should not be involved in conflicts.
- In fact, in the religious organization or work place , staff members do get into a major disagreement.
- Some Staff- Relations Committee members ask
“why does this happen if both people are Christians?”

- It might be nice to think that Christians or other religious groups are somehow immune from the conflicts inherent in daily life, but this view is not biblical.
- During the Exodus, the chosen people were constantly in conflict.
- In the New Testament, Paul and Barnabas had such a disagreement that they ended up going their separate ways.
- **In fact, some have suggested that a subtitle for the Bible could be *War and Peace*.**

- **What *does* distinguish the Christians is that they should be skillful at *resolving* conflict.**
- **In the Sermon on the Mount, Christ exhorts us to be peacemakers.**
- **Paul reminded the Corinthian church that their unity in Christ was far more important than their perceived differences.**

Conflict

- **Conflict is necessary for life.**
- **It is also, in and of itself, neutral.**
- **It isn't inherently bad or good.**
- **People need healthy ways for dealing with conflict, not less conflict.**

Conflict resolved

- The good news is that few things are more exhilarating than a conflict resolved!

Resolved Conflict

☺ **When people in a disagreement are committed enough to work through a conflict, if they solve it, they will have grown closer to each other .**

Resolving conflicts is not a simple matter

- **Conflict can often be thought of as an onion.**

The conflict has several layers, many layers might smell bad and bring tears to your eyes, and the “real” problem is not in the layers, but somewhere near the core.

1. The layers get added when we no longer give others the benefit of the doubt,
2. when we decide what other people’s real motives are
3. when we get worked up about any little thing that could possibly be interpreted as a slight.

what is at the base of every conflict ?

- Two or more parties who *care* deeply about something
- People who are apathetic don't get involved in conflicts. Why bother?
- So, usually, two people who have a disagreement, agree on one very important thing. They care about that particular issue

what is at the base of every conflict ?

- Conflict is much better, and easier, to deal with than apathy.. So if you ever feel overwhelmed in a conflict, find some comfort in the fact that at least you aren't dealing with apathy.**

Resolving Conflict

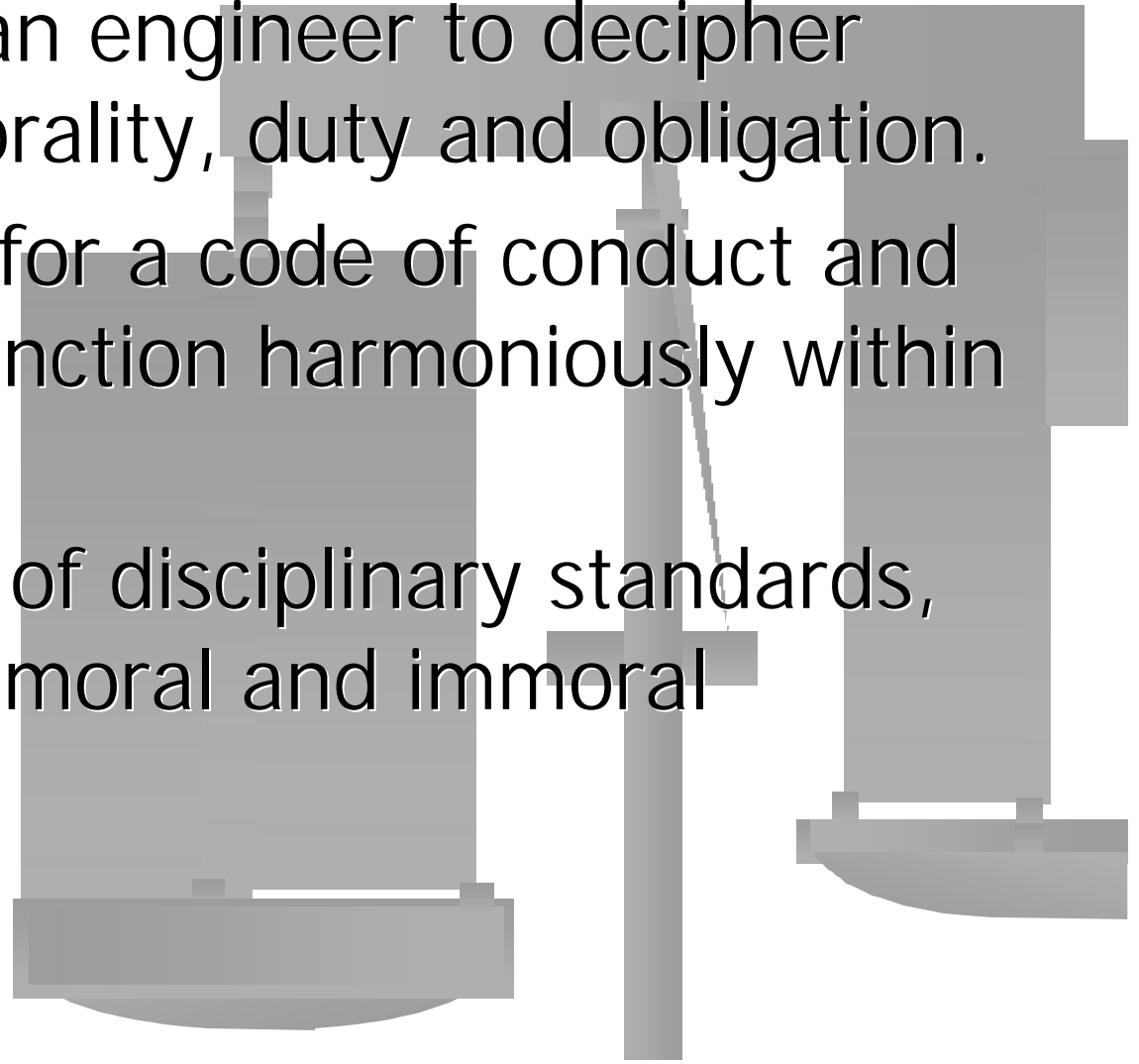
- ☺ In general, you have been missing a key resource necessary for resolving conflict.
- ☺ No one ever showed me how!
- ☺ In school we were taught math and biology, but not how to resolve conflicts.
- ☺ Some people learn from their parents, but for many of us our parents were not really the best models of conflict handlers.
- ☺ Many of us have been stumbling along solving conflicts as well as we can without knowledge and tools, and avoiding conflict any time possible.
- ☺ **That is not a recipe for success.**



Summary
Principles of Engineering
Ethics

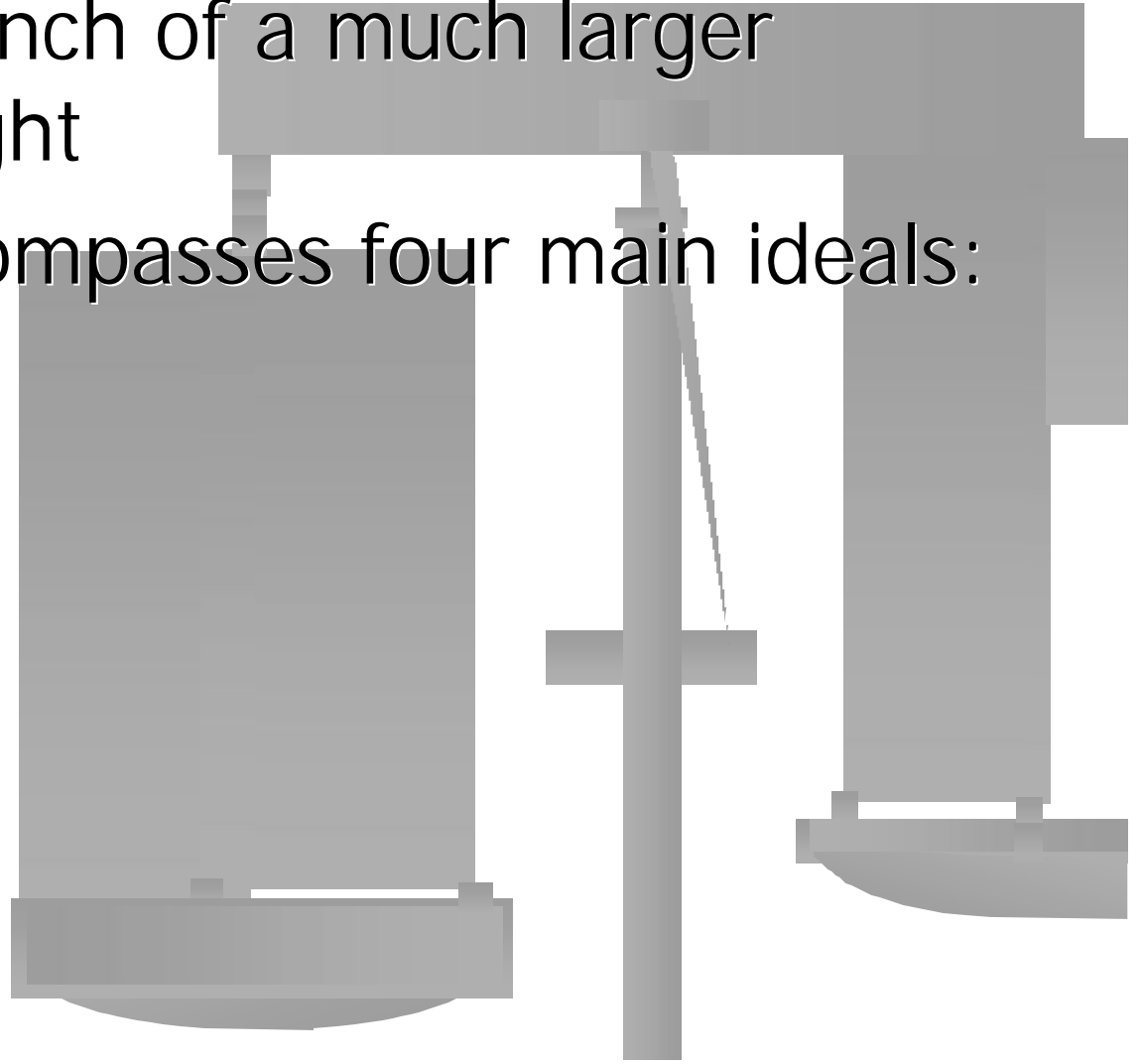
Ethics and Philosophy

- Ethics enables an engineer to decipher questions of morality, duty and obligation.
- Sets guidelines for a code of conduct and permits us to function harmoniously within our community
- Ethics are a set of disciplinary standards, which separate moral and immoral behaviour



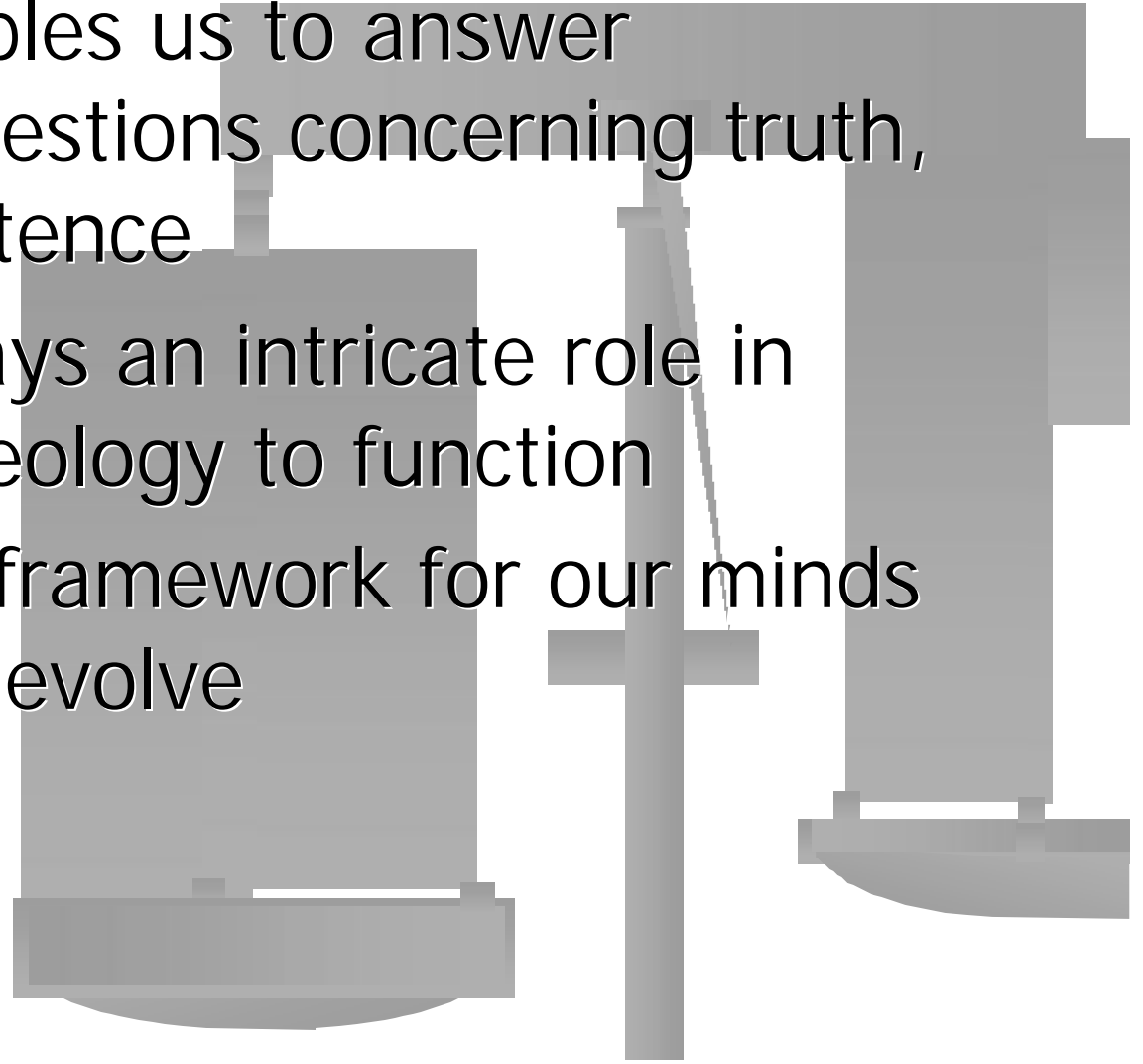
Ethics and Philosophy

- Ethics are a branch of a much larger stream of thought
- Philosophy encompasses four main ideals:
 - Ethics
 - Logic
 - Epistemology
 - Metaphysics



Ethics and Philosophy

- Philosophy enables us to answer fundamental questions concerning truth, justice and existence
- Each branch plays an intricate role in order for the ideology to function
- Philosophy is a framework for our minds to function and evolve



Ethics and Philosophy

■ The 4 Branches Revisited:

- **Ethics**: the discipline dealing with what is good and bad with moral duty and obligation
- **Metaphysics**: the system of principles underlying a particular study or subject
- **Epistemology**: the study or a theory of the nature and grounds of knowledge especially with reference to its limits and validity
- **Metaphysics**: the system of principles underlying a particular study or subject
- **Logic**: a science that deals with the principles and criteria of validity of inference and demonstration: the science of the formal principles of reasoning.

The Four Ethical Theories

Study of ethics dates back to the beginning of civilization. Many theories have been developed throughout the ages

- **However four distinct ideologies can be credited as the pillars to modern civilization**

The Four Ethical Theories

- The 4 theories will enable us to properly define an engineer's code of conduct and assist us when attempting to solve moral dilemmas.
- Although the following is merely a summary of the basic ideals, further research may aid you in fully understanding the ideologies

The Four Ethical Theories

- The 4 Principles theories:

- **Mill's Utilitarianism**

- **Kant's Formalism**

- **Locke's Rights Ethics**

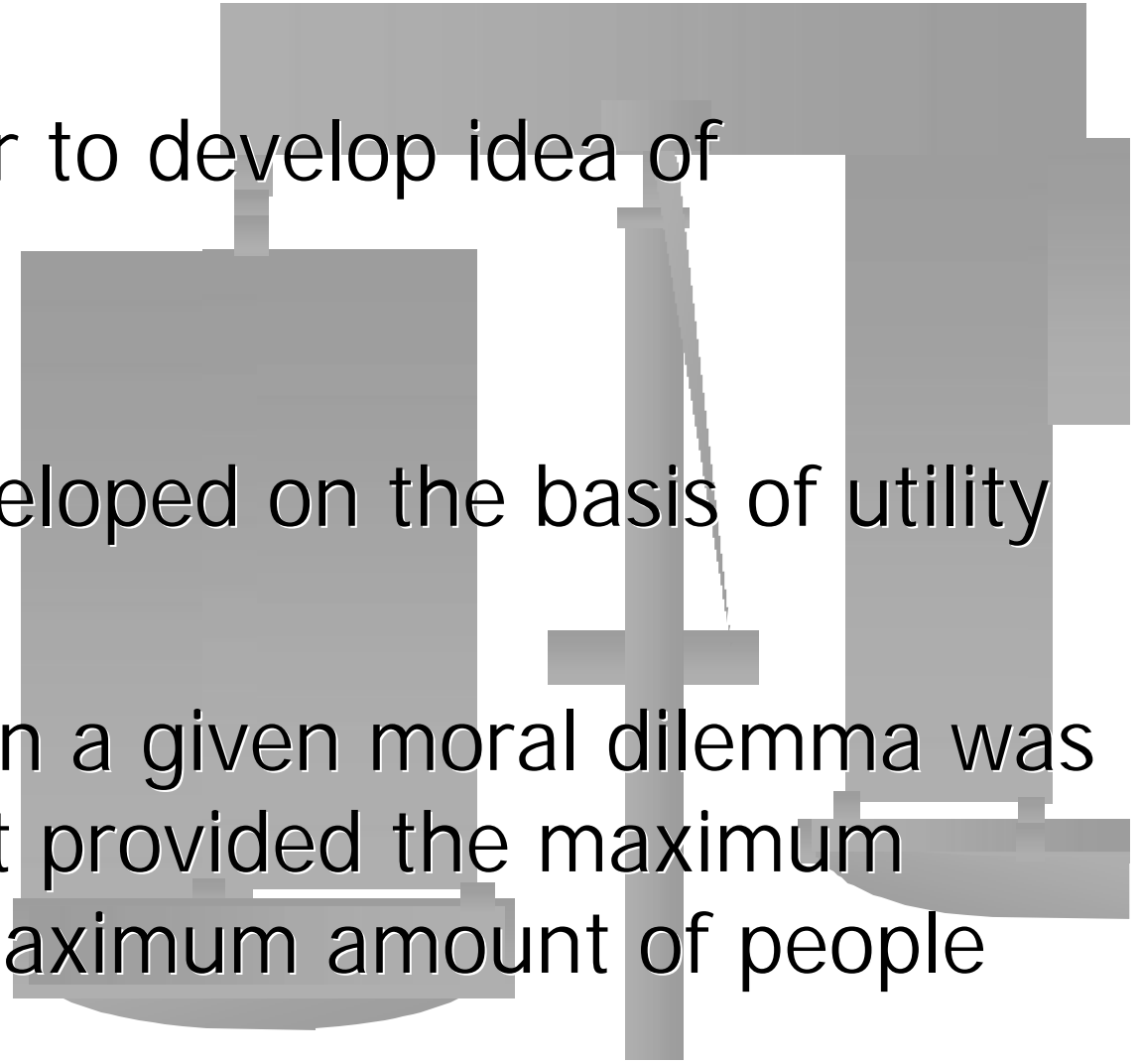
- **Aristotle's virtue Ethics**



The Four Ethical Theories

■ Mills Utilitarianism

- First philosopher to develop idea of utilitarianism
- Theory was developed on the basis of utility
- Optimal choice in a given moral dilemma was the solution that provided the maximum benefit to the maximum amount of people



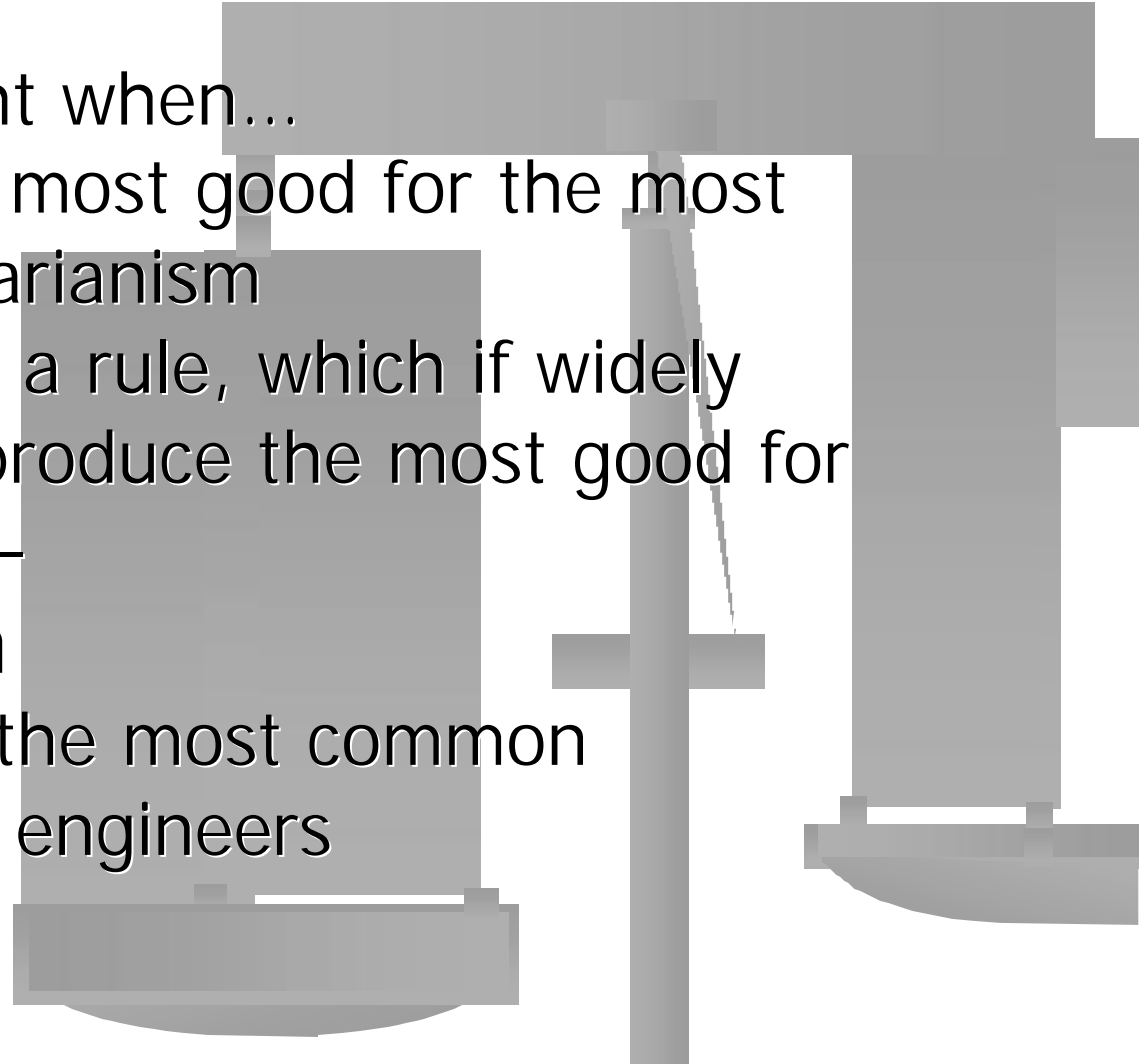
Utilitarian theories

Acts are morally right when...

- They produce the most good for the most people—Act utilitarianism
- They follow under a rule, which if widely followed, would produce the most good for the most people—

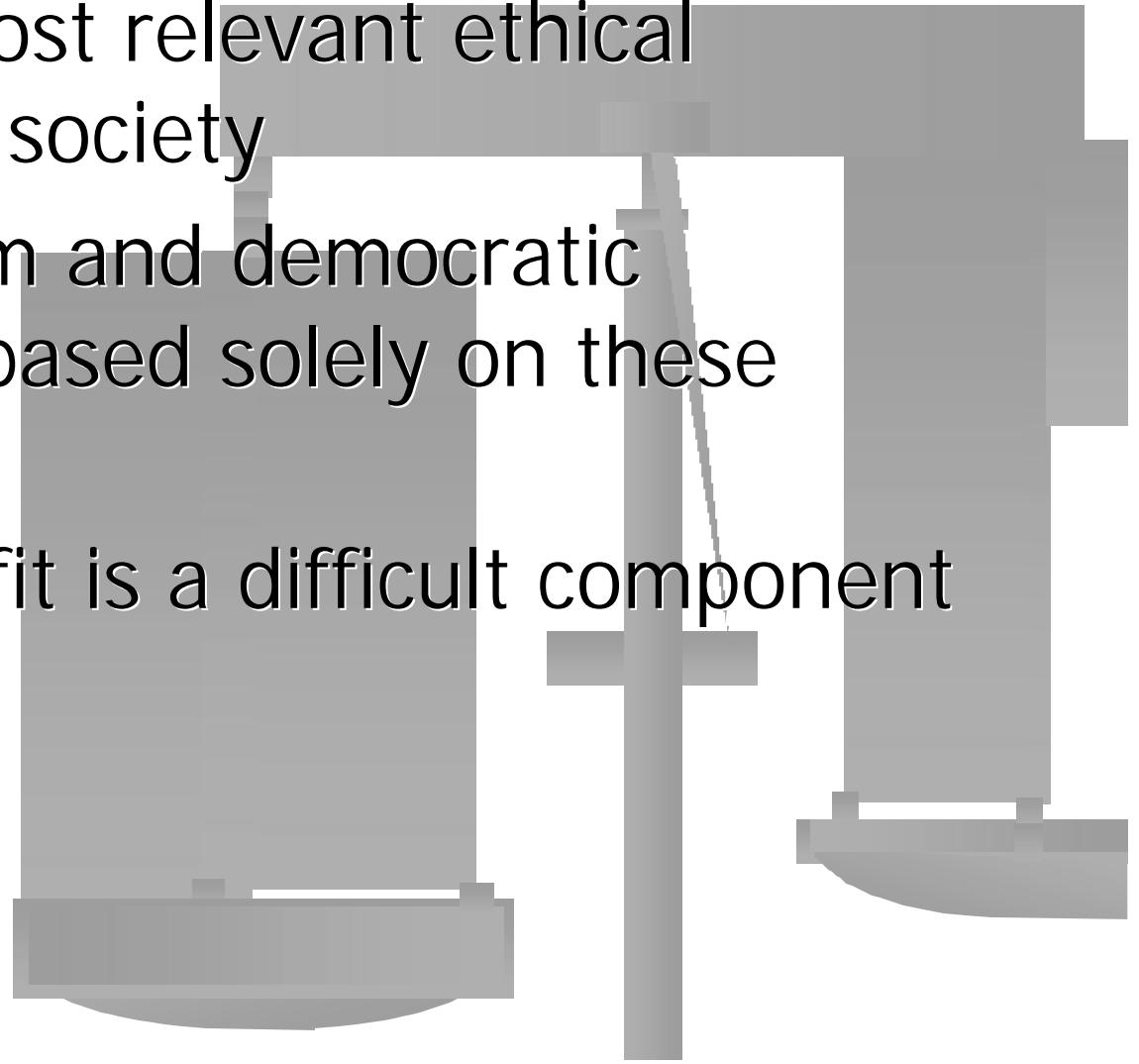
Rule utilitarianism

These are probably the most common approaches used by engineers



Mills Utilitarianism

- Arguably the most relevant ethical standard in our society
- Our legal system and democratic government is based solely on these principles
- Maximum benefit is a difficult component to calculate



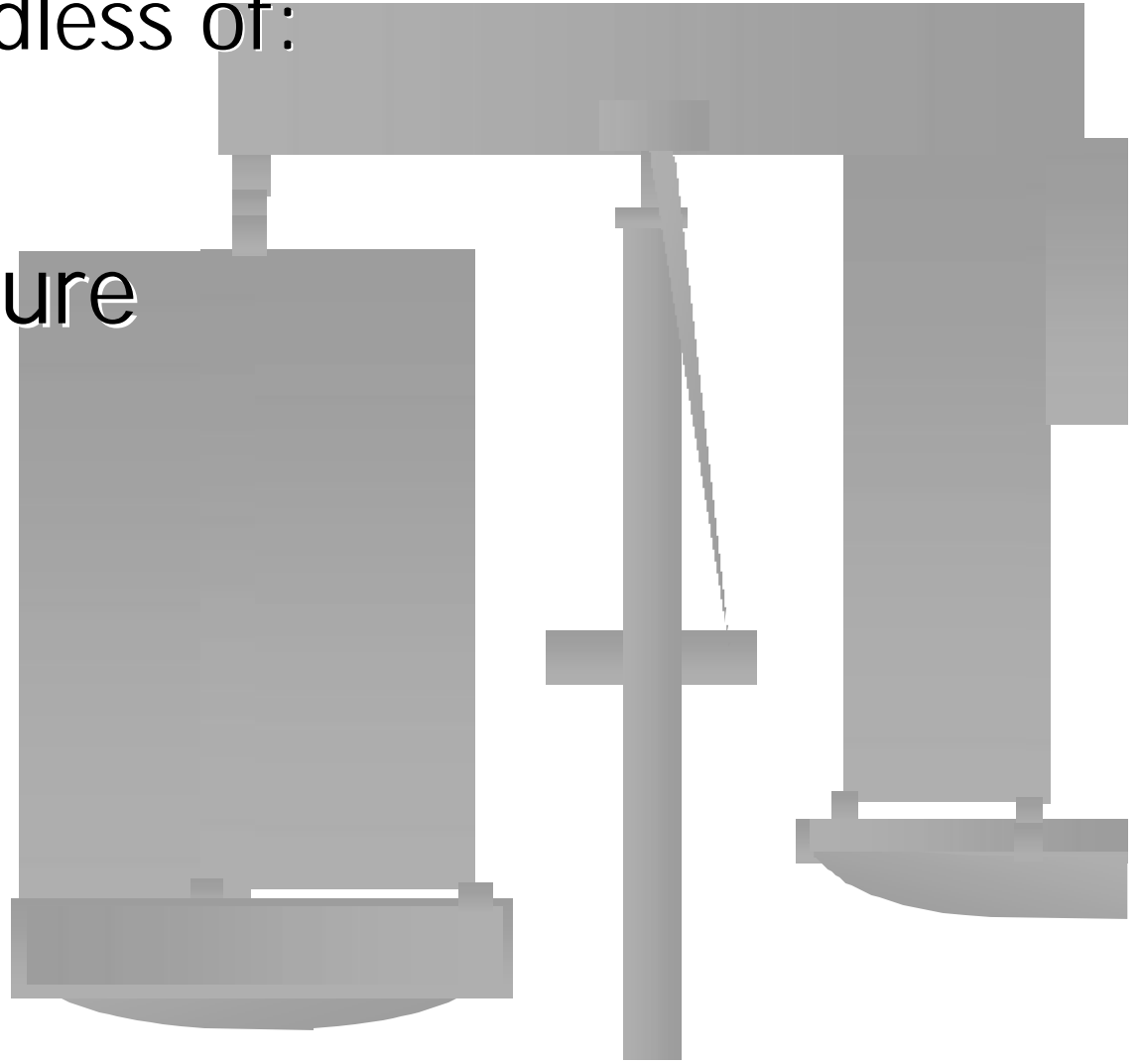
Mills Utilitarianism

- 3 components

- **Intensity:** the intensity of the benefits received played an important role in deciding the correct course of action
- **Duration:** the duration of these benefits are also a factor when comparing alternatives
- **Number:** the total amount of people who would benefit from the alternatives

Mills Utilitarianism

- This model holds that all people possess the same value, regardless of:
 - Class
 - Social Structure
 - Gender
 - Race
 - Religion



Mills Utilitarianism

- This theory works in reverse:
 - The greatest avoidance of pain to the greatest number of individuals is morally correct solution
 - The Less damage to the least amount of people is the ideal solution
 - Utilitarianism is the most widely accepted form of ethics

Kant's Formalism

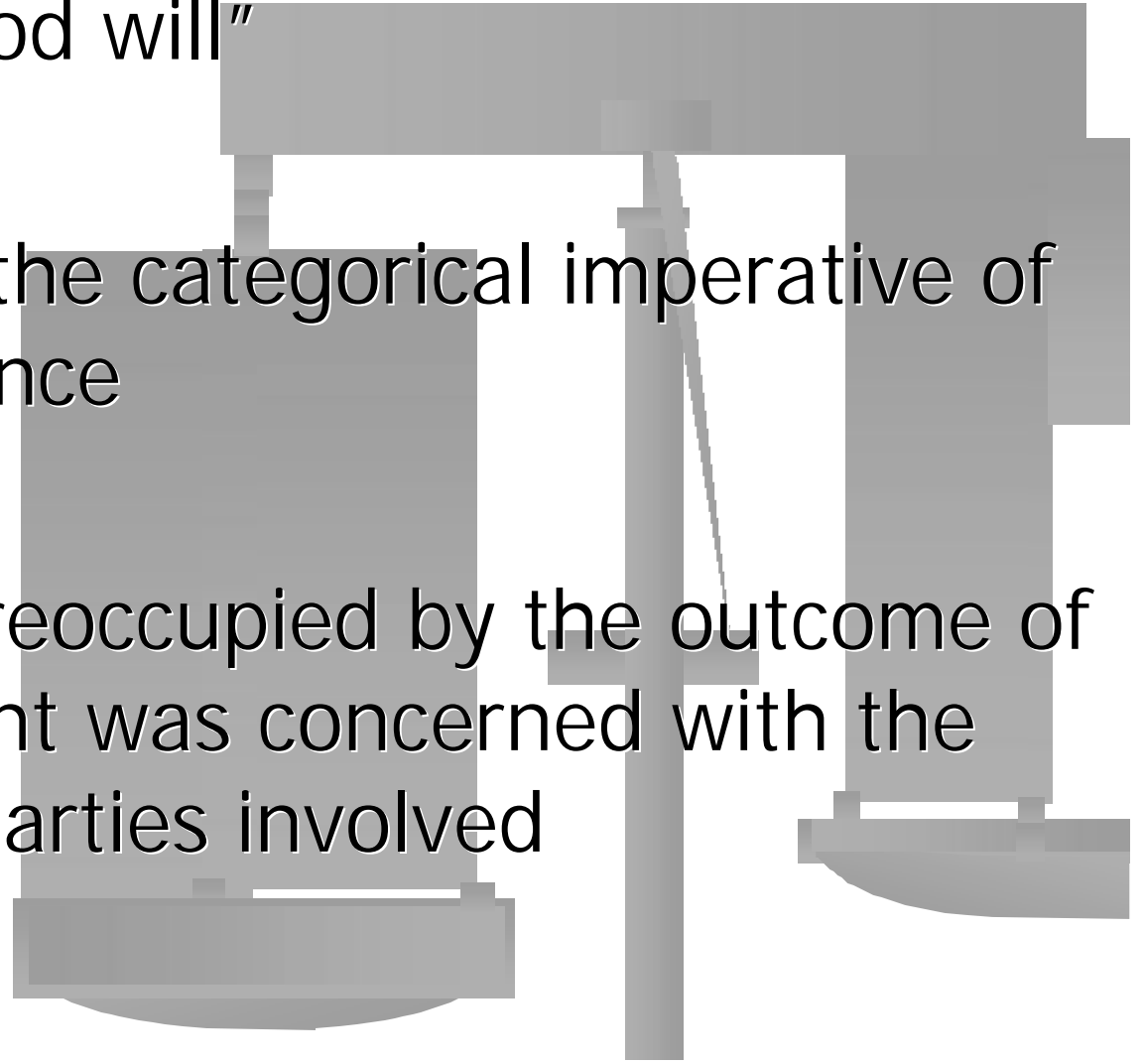
Designed by Immanuel Kant

Also referred to as theory of duty ethics

- **Stated every individual's duty was to behave in an ethical manner**
- Kant realized that there need to be a universally acceptable code of conduct
- He developed a system based upon appropriate responsibilities

Kant's Formalism

- Based around "good will"
- Seeking to follow the categorical imperative of one's own conscience
- While Mill's was preoccupied by the outcome of each situation, Kant was concerned with the intentions of the parties involved



Kant's Formalism

- Theory states that each individual must perform their moral duty, irrelevant of short term negative results
- As the individual continued to follow their moral conscience, they would grow happier and gain a newfound respect for their surroundings
- Kant believed that sustaining life was the primary goal and anything that posed an obstacle was deemed unethical

Duty Theories

Acts are morally right when...

- They fall under principles which respect the autonomy and rationality of persons, and which can be willed universally to all people (Kant)

LOCKE'S RIGHTS ETHICS

- It states that everyone has rights that arises from one's very existence as a human being.
- The right of an individual must be recognized by others .
- Political thoughts in Britain, France and United State were influenced by the writing of LOCKE
- Basic human right are embedded in Canadian Charter of Rights and freedoms

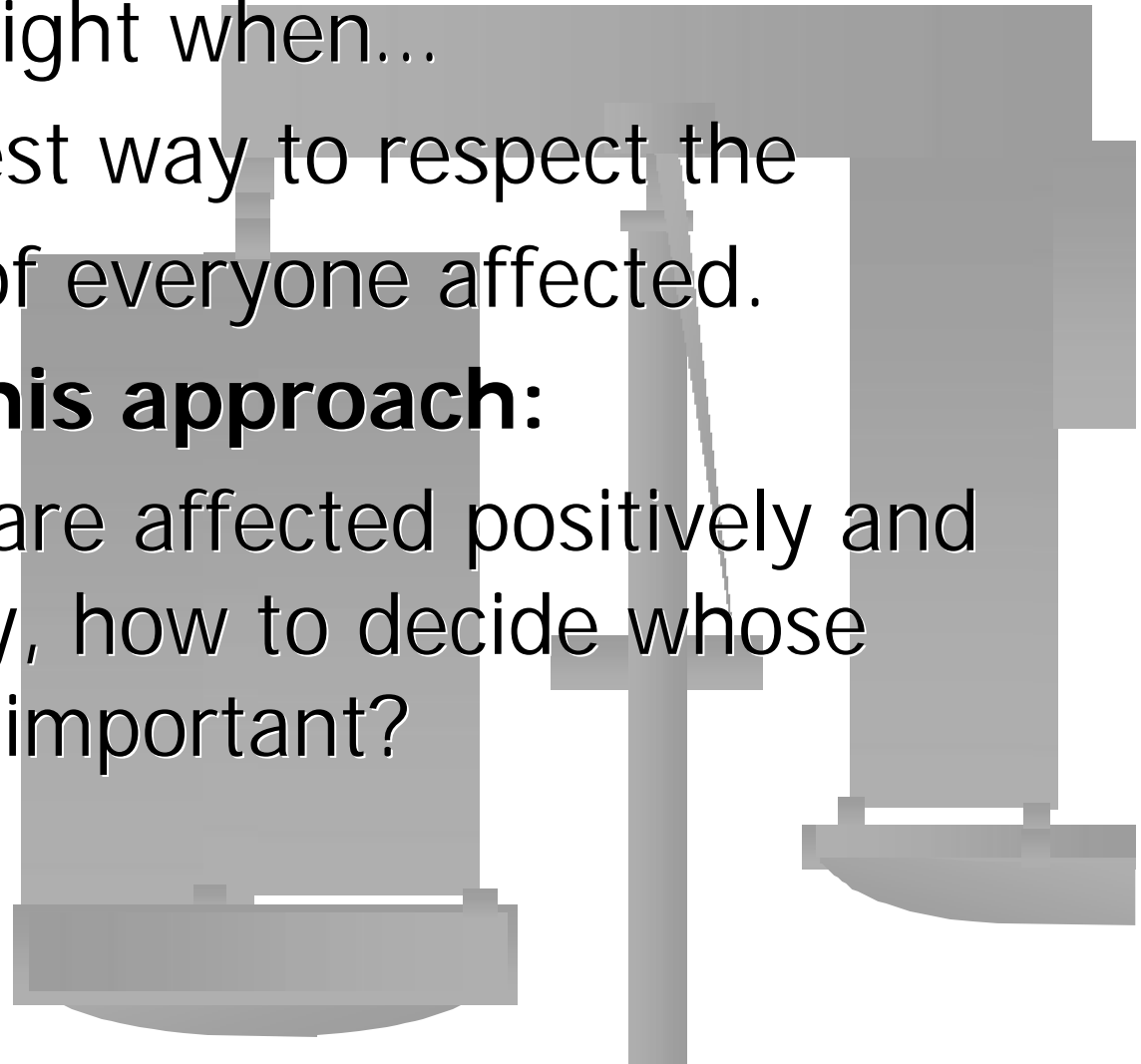
Rights Theories

Acts are morally right when...

- They are the best way to respect the human rights of everyone affected.

Problem with this approach:

- if some people are affected positively and some negatively, how to decide whose rights are most important?



Virtue Theory

Based on Aristotle's Nicomachean
Ethics

Also known as Neo-Aristotelianism



Virtue Theory

- Virtue theorists focus on character and are interested in the individual's life as a whole.

The central question for virtue theorists is

HOW SHOULD I LIVE?

The answer to this question is

CULTIVATE THE VIRTUE

Virtue Theory

It is only by cultivating the virtue that you will flourish as a human being .

According to Aristotle

Everyone wants to flourish

Flourishing = eudaimonia = happiness =
better to use TRUE HAPPINESS

Aristotle believed that certain way of living promotes flourishing, just as certain ways of caring for a cherry tree will lead to grow, blossom and fruit

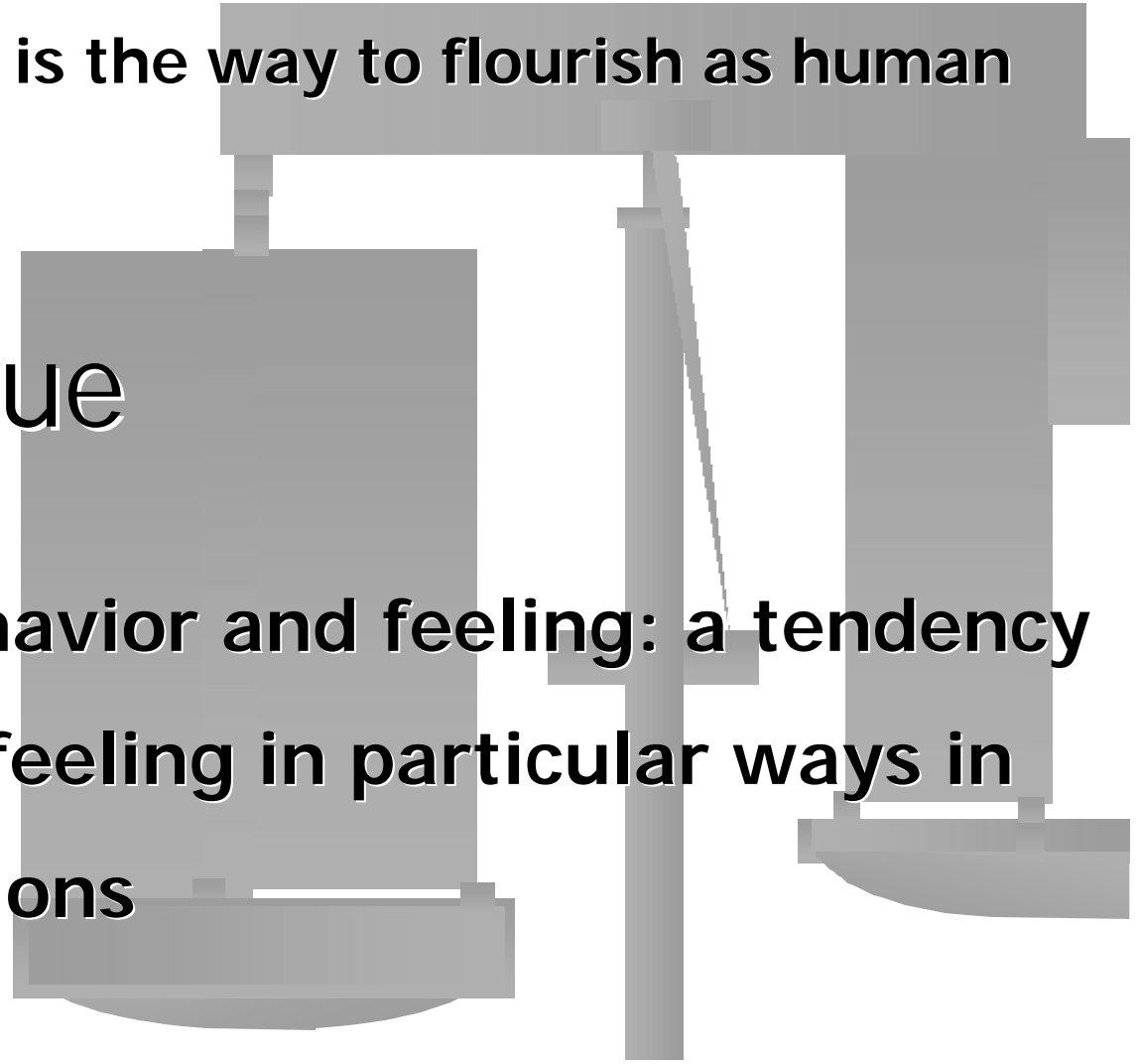
Aristotle

- Aristotle

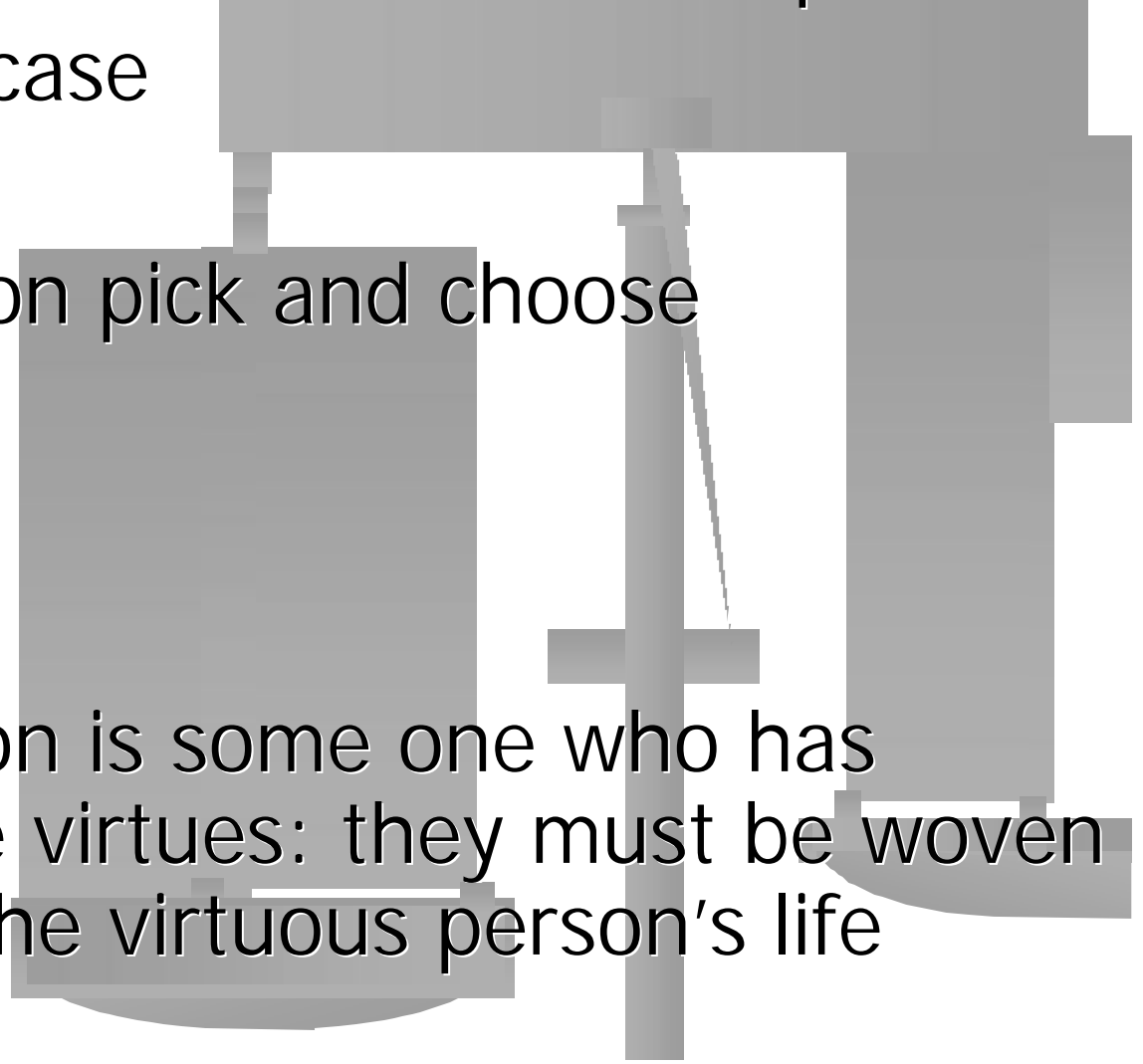
Cultivating the virtues is the way to flourish as human being.

- What is a virtue

It is a pattern of behavior and feeling: a tendency to act, desire and feeling in particular ways in appropriate situations



- Some one who has the virtue of being generous would ,in appropriate situations, feel and act in a generous way. This would involve the judgment that the situation and response
- Virtue of courage case
- Can Virtuous person pick and choose
- Aristotle
- The virtuous person is some one who has harmonized all the virtues: they must be woven into the fabric of the virtuous person's life



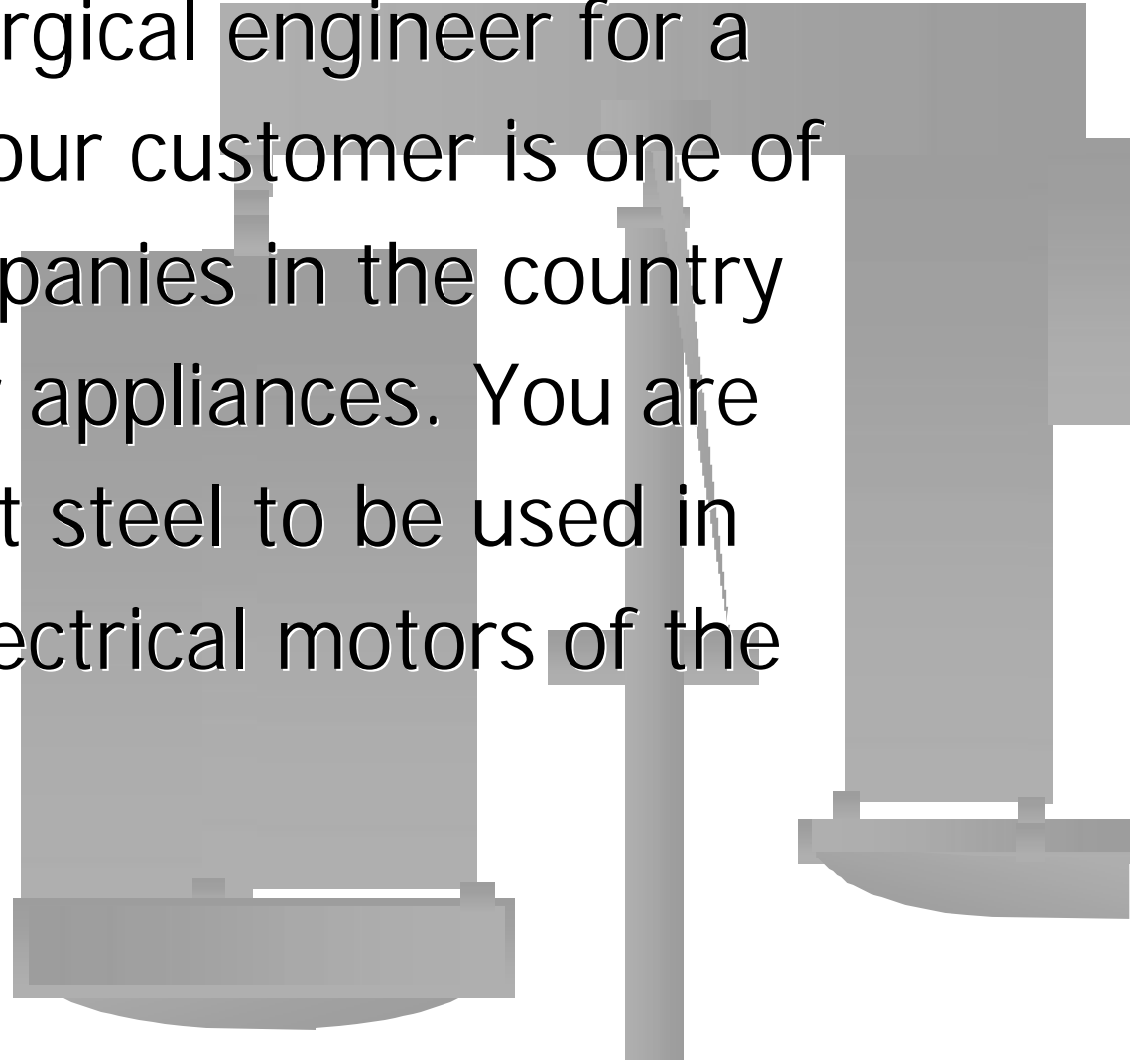
Virtue Theories

Acts are morally right when...

- They most fully manifest or support relevant virtues, where virtues are traits of character making possible the achievement of social goods
- This approach does not concentrate on how to make good decisions, but on how to be a good person. It assumes that good people will make good decisions.

Analyzing a specific case study

You are a metallurgical engineer for a steel company. Your customer is one of the 5 largest companies in the country making consumer appliances. You are selling them sheet steel to be used in the core of the electrical motors of the appliances.



Case Study (continued)

- Being a large company, the specifications for the steel were written by engineers at a site about 200 miles away from the customer's production facility.
- If you meet the specification for hardness, then the steel will not physically work in the customer's press.
- If you make a softer steel that can be fabricated in the presses then it will not meet the customer's written specifications.

Case Study (continued)

Do you

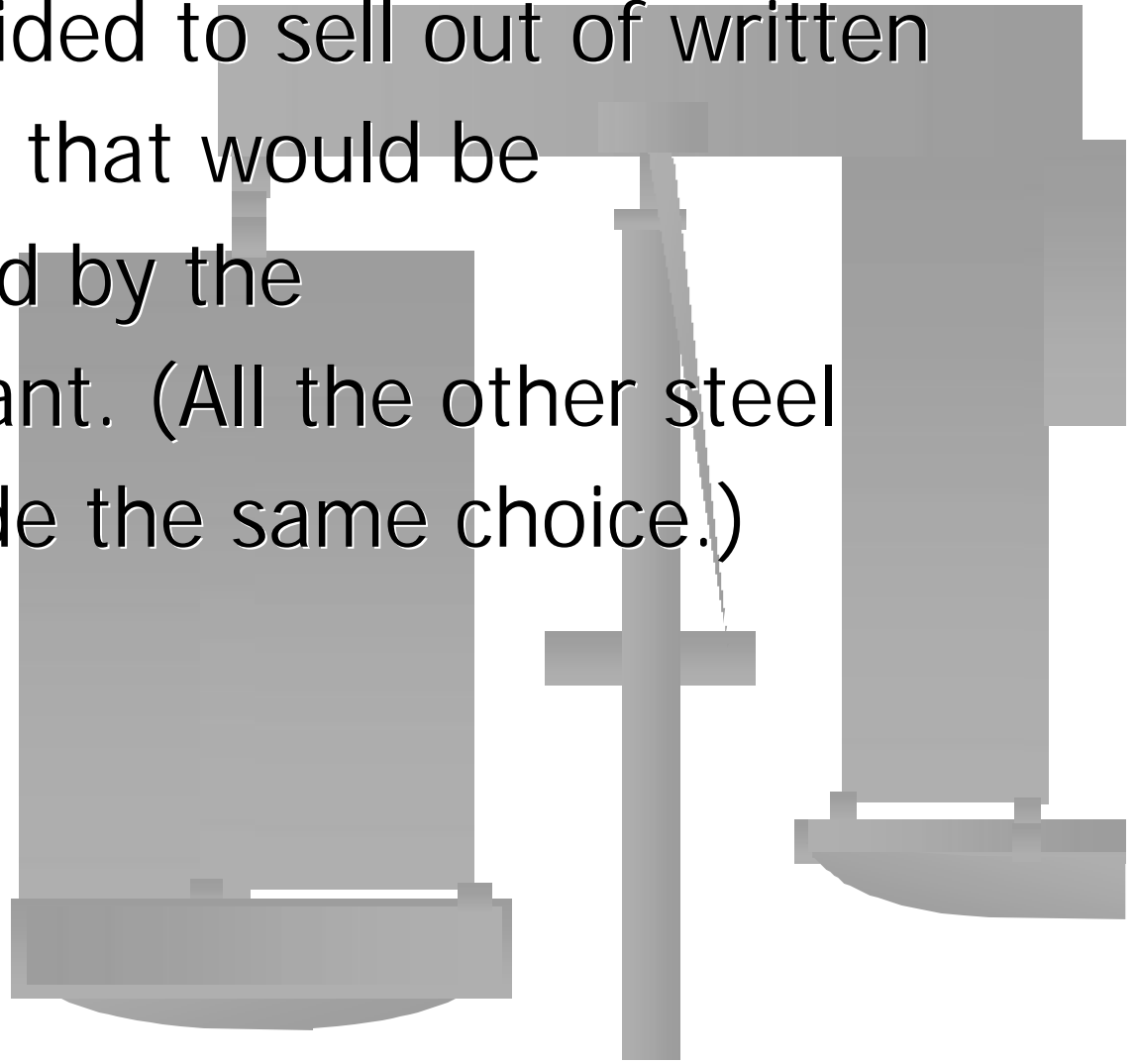
- (a) Make steel that meets the written specifications
- (b) Make steel that will make the part but fail the specifications.
- (c) Stop selling steel to the customer since you cannot both satisfy specifications and make the part
- (d) Some other alternative (specify what that is)

Actual Solution to Problem

- This occurred in first author's (William Jordan) company
- Author(William Jordan) played a role in the process, but did not make the final decision
- The company chose option (d), and attempted to work things out between the 2 different parts of the company
- They were told by the engineers that they would not change their standards, and that the problem was with the manufacturing plant people who were incompetent

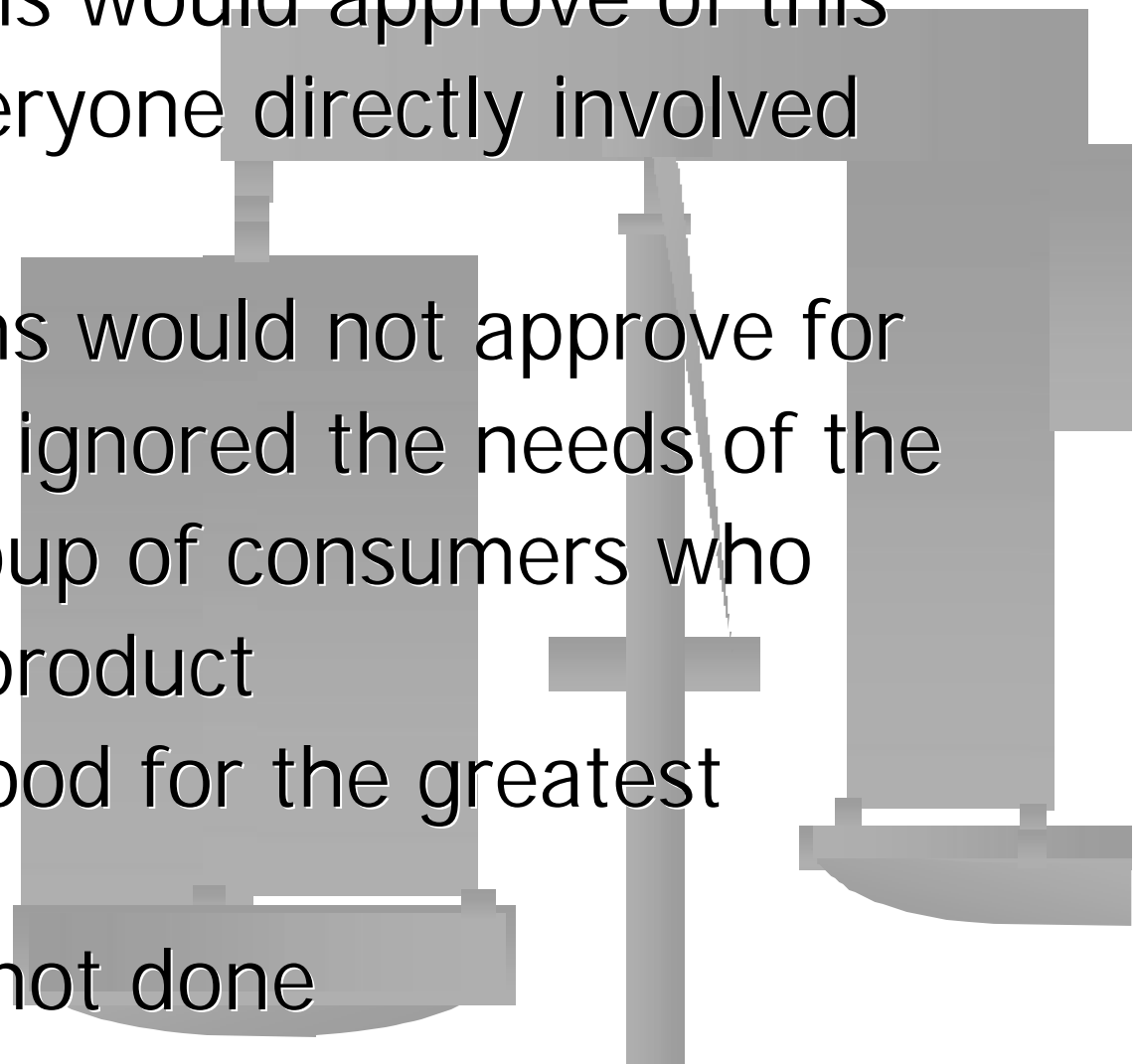
Actual Solution to Problem

- They finally decided to sell out of written specification steel that would be accepted and used by the manufacturing plant. (All the other steel mill suppliers made the same choice.)



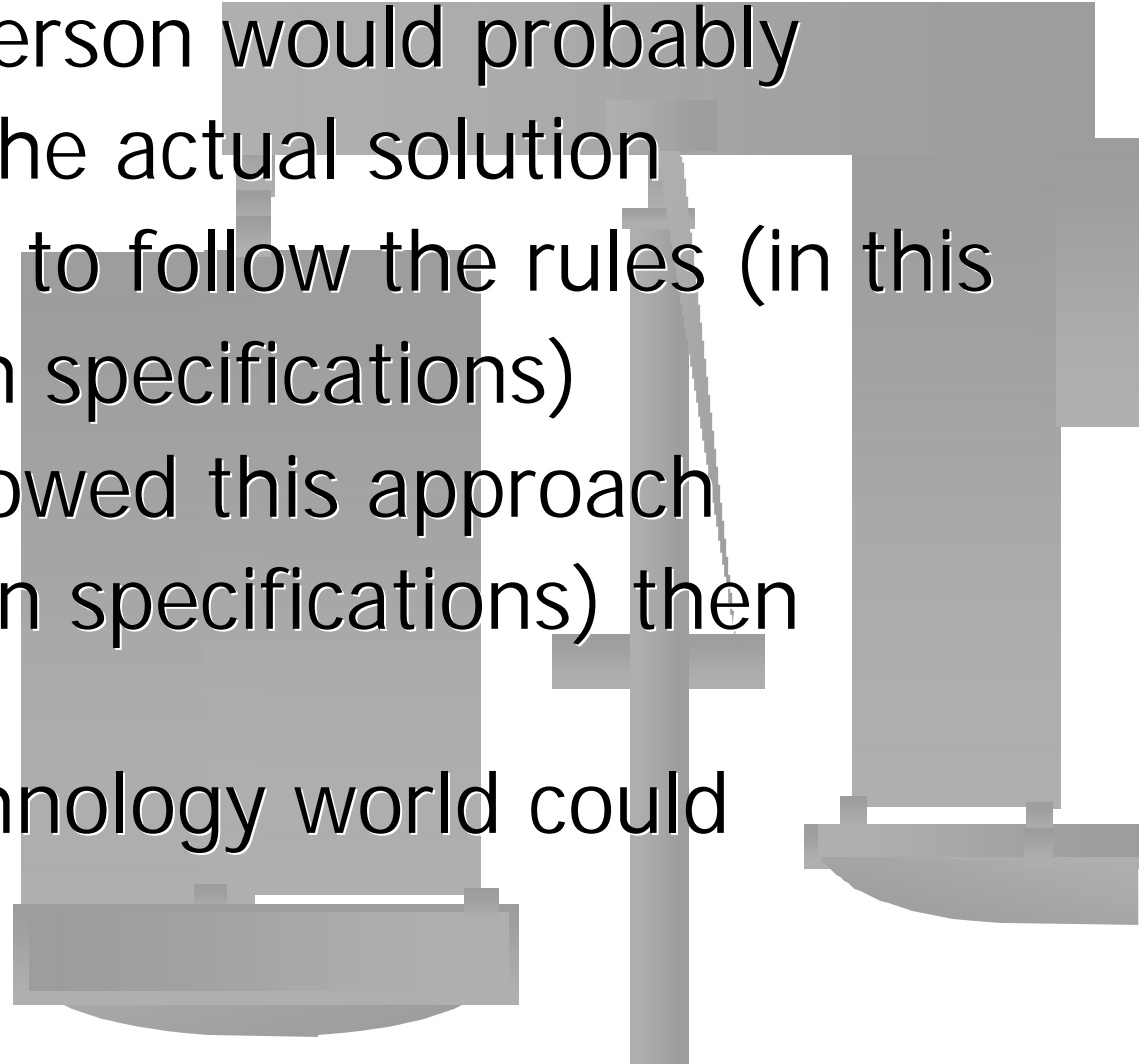
A Utilitarian Analysis of Case Study

- Some Utilitarians would approve of this solution for everyone directly involved was satisfied
- Some Utilitarians would not approve for this solution for ignored the needs of the much larger group of consumers who would buy the product
- The greatest good for the greatest number of people was not done



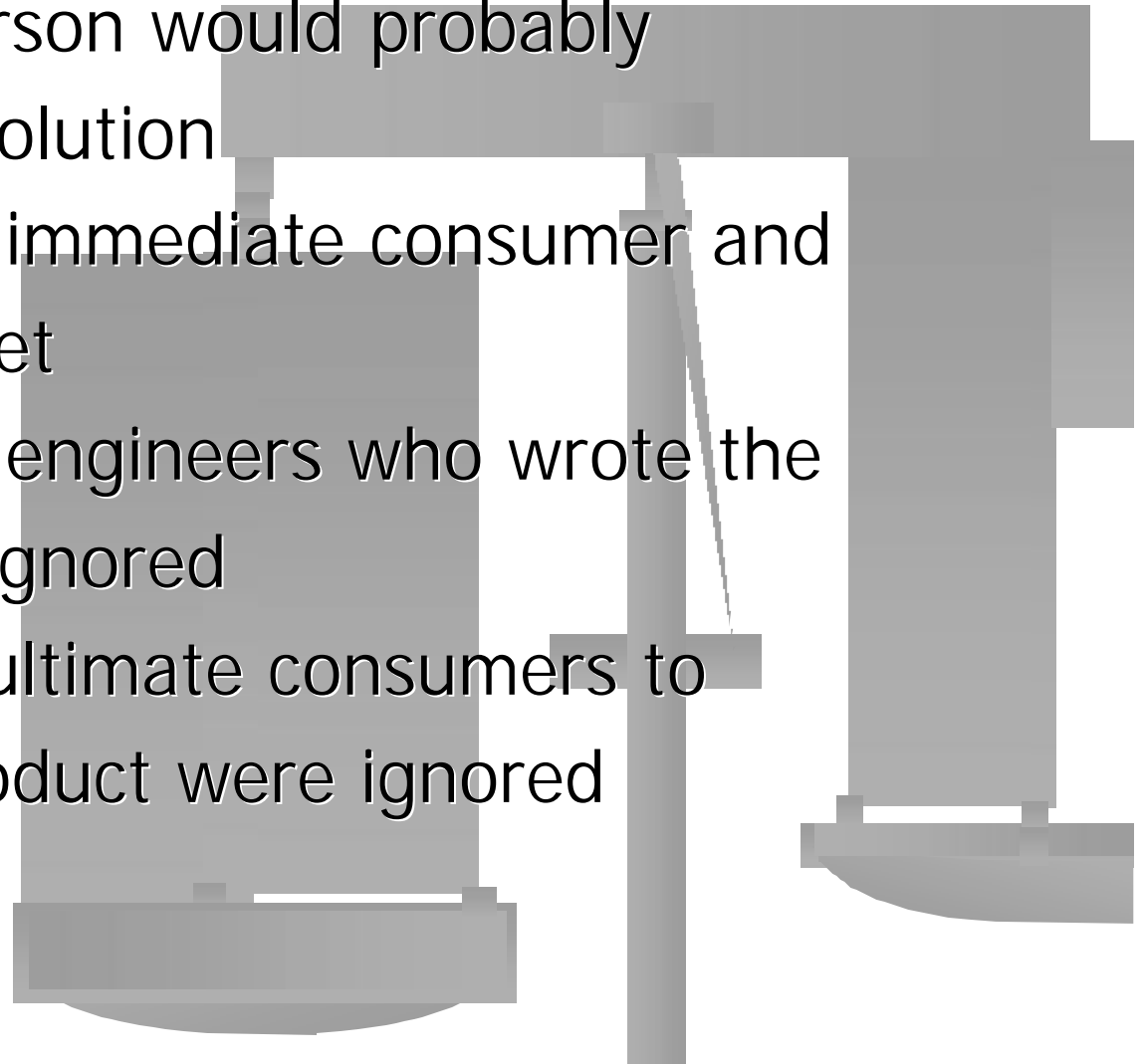
A Duty Theory Analysis of Case Study

- A duty theory person would probably not approve of the actual solution
 - We have a duty to follow the rules (in this case the written specifications)
 - If everyone followed this approach (ignoring written specifications) then much of our high technology world could collapse



A Rights Theory Analysis of Case Study

- A rights theory person would probably criticize this actual solution
 - The rights of the immediate consumer and the supplier were met
 - The rights of the engineers who wrote the specifications were ignored
 - The rights of the ultimate consumers to have an efficient product were ignored



A Virtue Ethics Analysis of Case Study

- A virtue ethics person would criticize this actual solution
 - Solution is based on short term greed (for both companies to have profits) and not Long term needs to consumers
 - Solution is based on deliberately ignoring written specifications, which is not promoting the character trait of honesty
 - This solution reinforces character flaws

Significance of Codes of Conduct

- **Professional societies codes can only be enforced on their members**

Highest penalty is expulsion and publication of expulsion

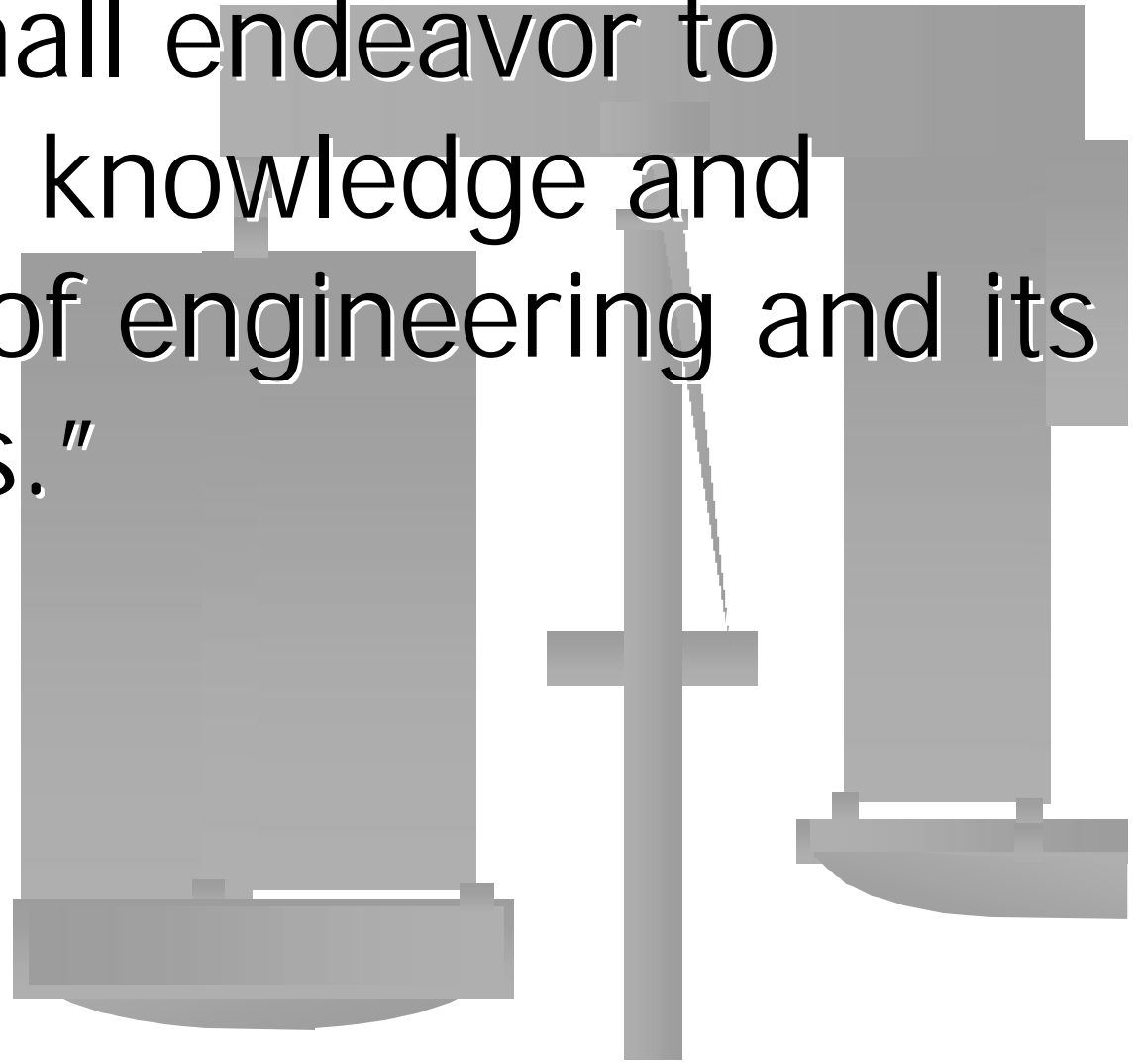
- **Codes are legally binding on all working engineers**

- Violation of code can lead to fine and/or loss of license to practice engineering

- **Similarity between codes means that if you violate your provincial's code you are probably also violating the National code... of your country.**

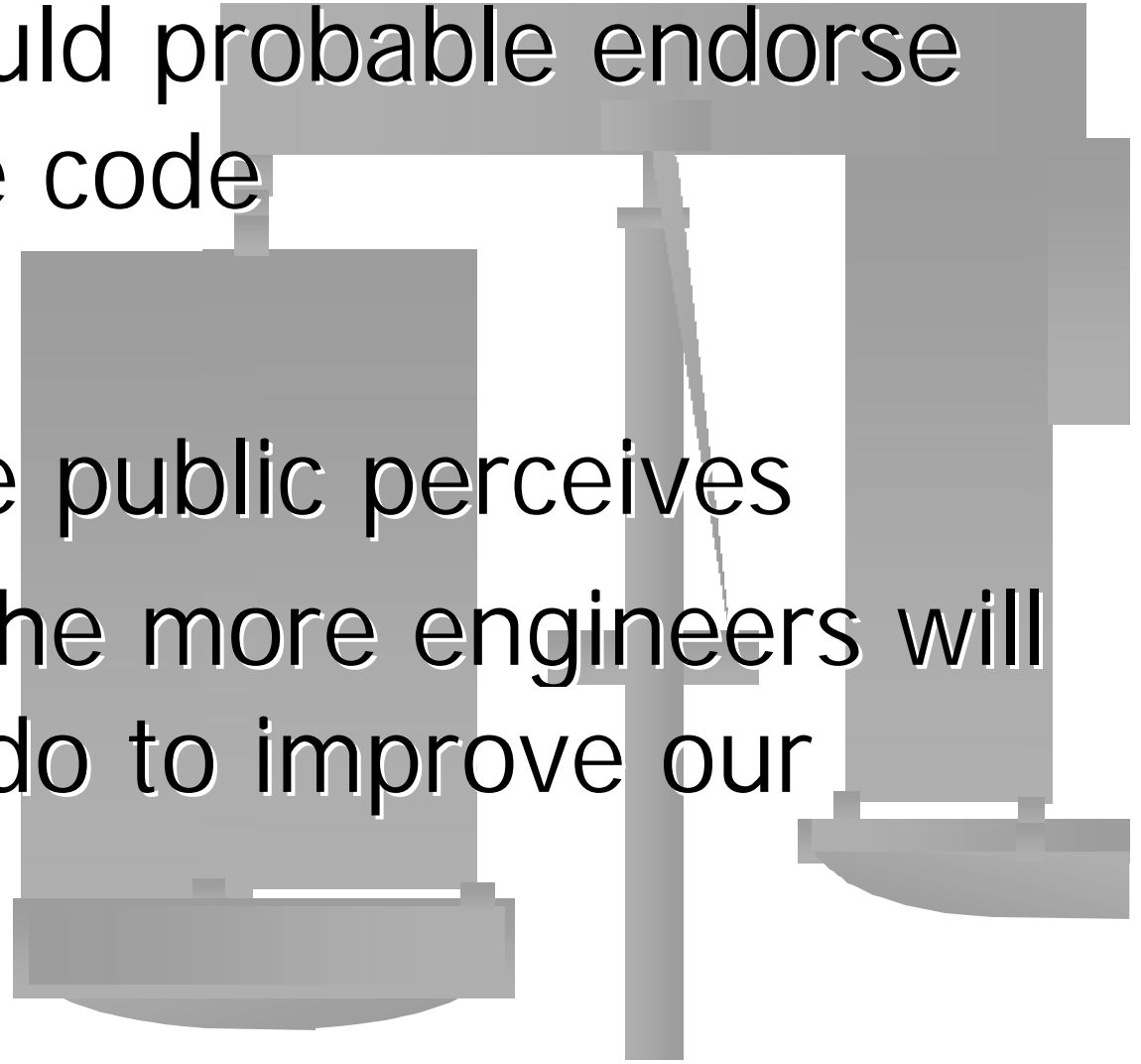
Most Engineering Code suggests that

- “Engineers shall endeavor to extend public knowledge and appreciation of engineering and its achievements.”



A Utilitarian Analysis of Code of Conduct

- Utilitarians would probably endorse this part of the code
- The better the public perceives engineering, the more engineers will be allowed to do to improve our society



A Duty Theory Analysis of Code of Conduct

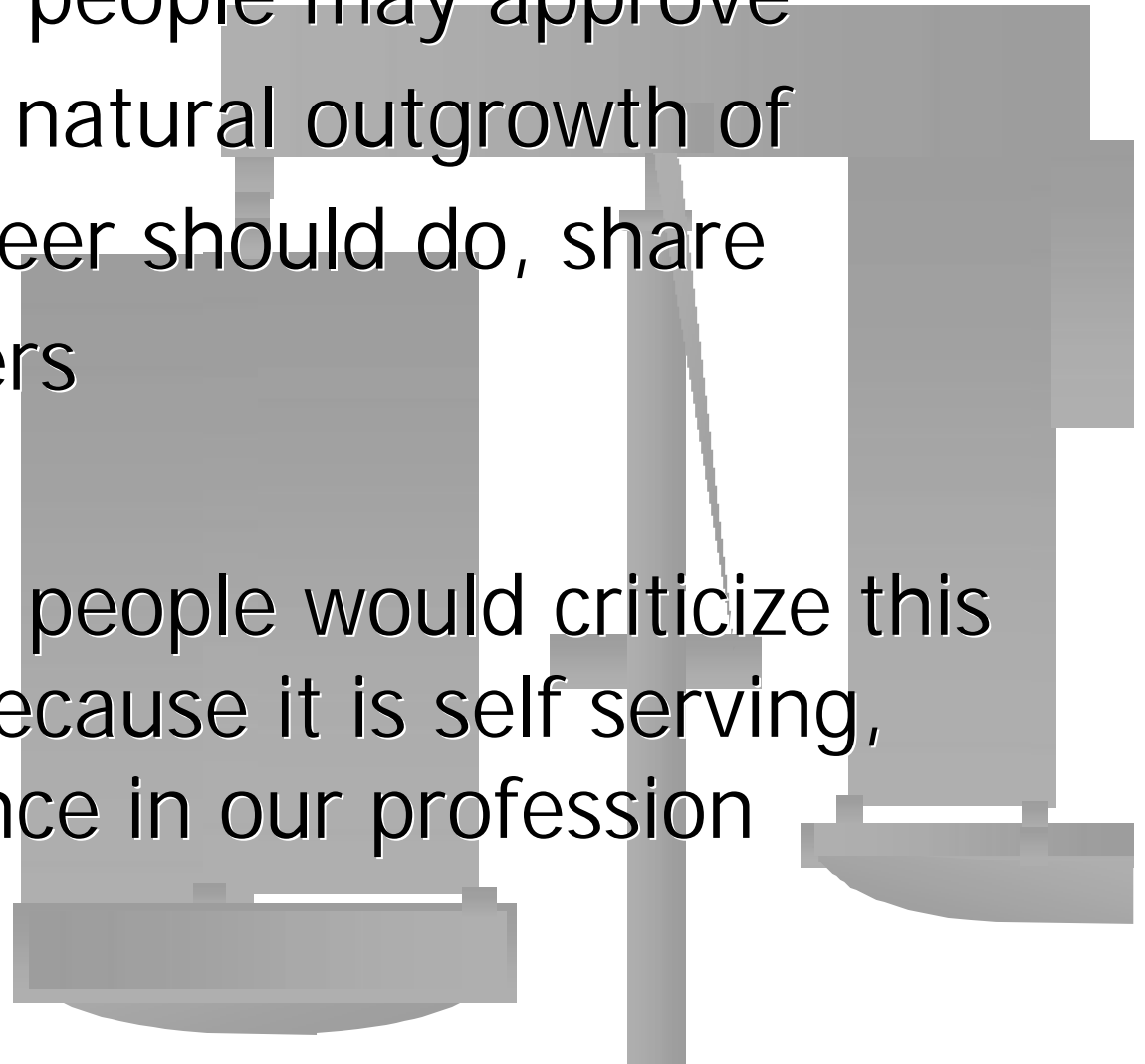
- A duty theory person would probably have mixed feelings about this part of the code
- Engineers do have a duty to do good engineering and help society
- Engineers may not have any duty to make others appreciate what we do

A Rights Theory Analysis of Code of Conduct

- A rights theory person would probably criticize this approach
- The part of the code may restrict the rights of the public to have an honest debate about controversial projects that involve engineers
- This is because this code makes it more difficult for one engineer to publicly criticize another

A Virtue Ethics Analysis of Code of Conduct

- Some virtue ethics people may approve of this, for it is the natural outgrowth of what a good engineer should do, share her work with others
- Some virtue ethics people would criticize this part of the code because it is self serving, promoting arrogance in our profession



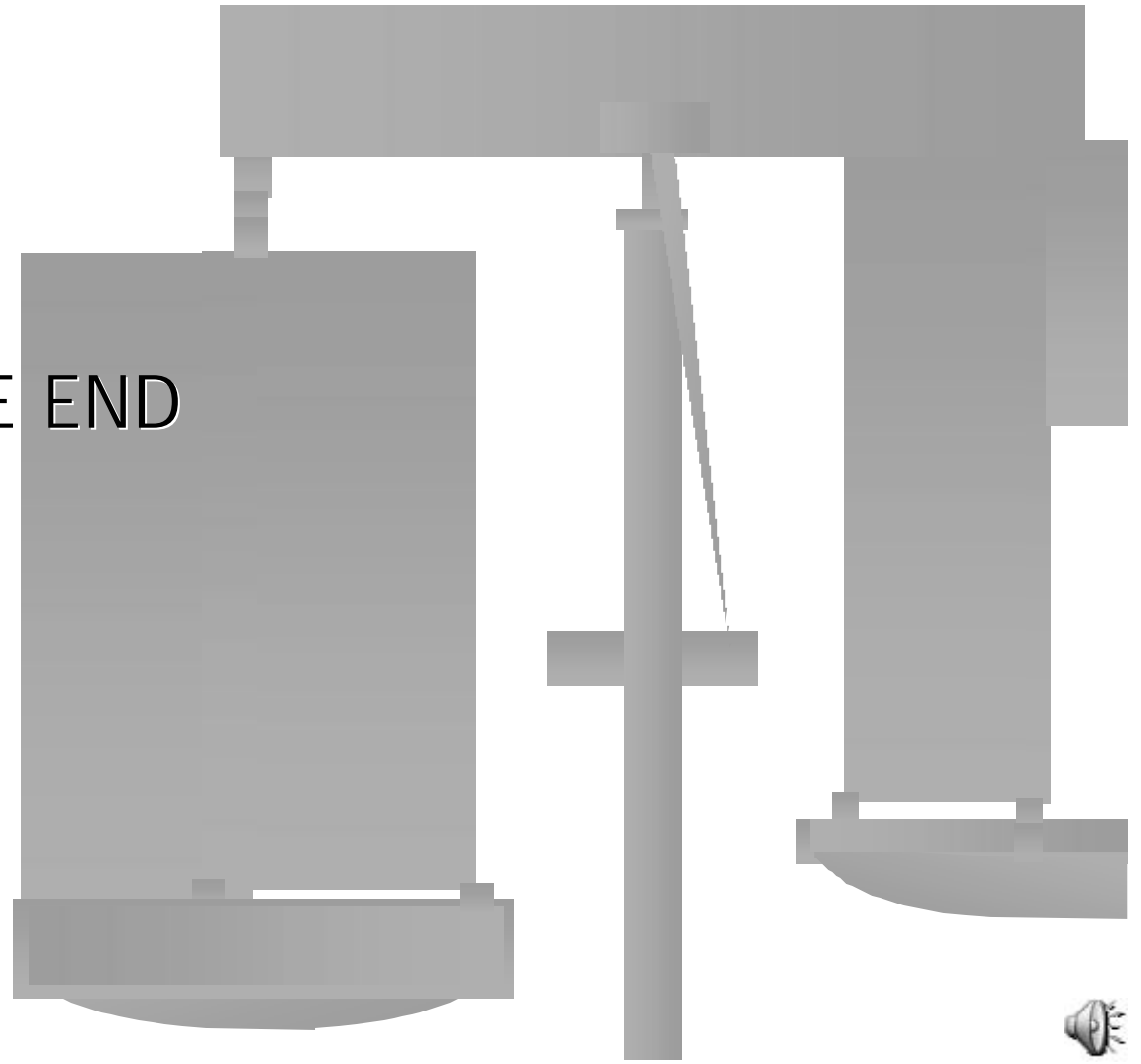
Conclusions

- Engineering codes of conduct are not absolute standards which cannot be questioned
- Moral theories can be used to evaluate these codes of conduct
- Some parts of the codes cannot be justified by the moral theories and ought to be changed
- We still need to treat the codes with respect, since they have the force of law behind them.

BELIEF

Is a good thing

- THE END



References

- This presentation is put together from, course books , other presentations as well as various websites in the forms of text, photos, audio and video clips.
- All the references will be given in the general reference section on the web Ct

A black and white photograph capturing two dolphins in mid-leap above the ocean's surface. The dolphins are silhouetted against a bright, low sun on the horizon, which creates a strong lens flare and illuminates the water's surface. The sky is filled with dramatic, textured clouds. The dolphins' bodies are curved in mid-air, with splashes of water visible at their points of exit from the water. The overall mood is serene and majestic.

THE END