

ENGINEERING ETHICS

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FOURTH LECTURE 4/4

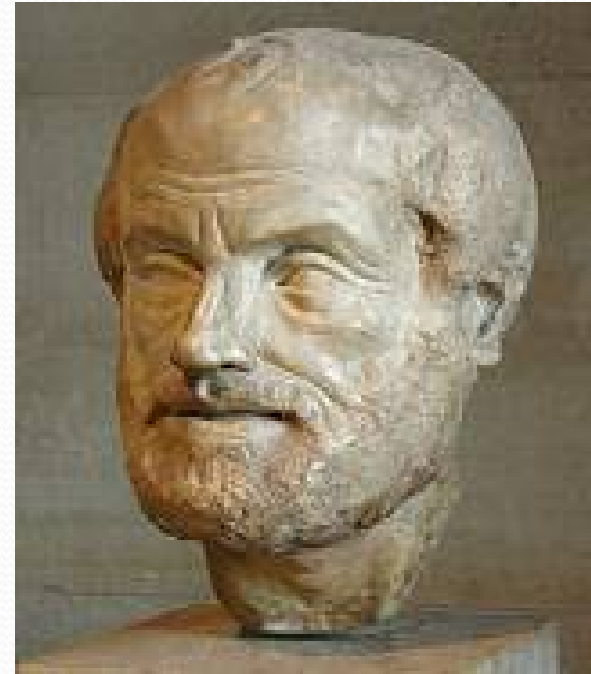
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In this last lecture we'll consider in more detail two ethical traditions, one Western and one Eastern.

As considered from the first lecture,
ethics is based in practical reason.
Practical reason attempts to find the best
means towards *goals*.

We've already considered briefly the virtue ethics of the philosopher, Aristotle (384-322 B. C. E.), who profoundly influenced the European tradition. His ethical theories were exported, with European culture, to North and South America.



Aristotle
384-322 B. C. E.

In this talk we'll consider in more detail Confucius (551 - 479 B. C. E.). The Confucian tradition is no less influential in China, than Aristotle in the West. Confucianism also was exported culturally through the influence of China to Japan, Korea, Viet Nam and Singapore.



Confucius
traditionally 551-479 B. C. E.



Confucius

Kǒng fū zǐ, trans.: '*Master Kong*'

Confucianism also proposes virtues.
We'll consider the most developmental and overriding
ones.



Confucianism: Virtue #1

Filial Piety

‘Filial piety,’ that is, respect especially for parents, but also for grandparents and ancestors, Confucius maintained, is at the root of morality.



Confucianism: Virtue #1

Filial Piety

A look at the Chinese Character, xiào. It's a pictogram.

old man + child = filial piety

老 + 子 = 孝

The top part originally portrayed an old man with hunchback and long hair. The lower part was a child. The old man has put his hand on the head of the child, and the child is supporting him while walking.



Confucianism: Virtue #1

Filial Piety

Consider *Analects*, 2:7: “Tzu Lu asked about the meaning of filial piety. Confucius said, ‘Nowadays filial piety means being able to feed your parents. But everyone does this for even horses and dogs. Without respect, what's the difference?’”

See *Analects* also 1:2, 1:6, 1:9, 1:11, 2:5.



Confucianism: Virtue #1
Filial Piety
xiào
QUESTION

Why do you think Confucius taught that filial piety was at the root of morality?

Hint: How is *respect* elemental to ethical behavior?

Confucianism: Virtue #2: Propriety 'li'



Basic meaning of 'li' is 'ritual' or 'proper rites.' The teachings of Confucius are known as a "religion of li." 'Proper rites' has an extremely broad sense.

Confucianism outlines proper relations between fathers and sons, elder siblings and younger siblings, husbands and wives, older and younger friends, and rulers and subjects.

Confucianism: Virtue #2: Propriety 'lǐ'



Confucius also describes proper rites for civil ceremonies, such as, drinking festivals, archery contests, among many other activities. The point of the rites was to induce a order and courtesy among the people. Confucius maintained that a well-ordered society was required for people to express their humanity.

See *Analects*: 1:12, 6:16, 12:1, 12:14.

Confucianism Virtue #2: Propriety 'lǐ'

Confucius often compares *lǐ* or propriety to music.

As propriety is the earthly manifestation of social order, so music is the heavenly manifestation of social order.





Confucianism: Virtue #2: Propriety 'lǐ'

Confucius maintained the doctrine of the mean was overriding rule to 'proper rites.' Confucius wrote a book dedicated to the topic. Here, Confucius and Aristotle are in agreement. They both taught that proper action is the way between extremes. Arguably, both philosophers, in spite of no direct connection with each other, discovered the same truth regarding means/end reasoning, or practical reasoning.



‘Confucianism Virtue #2: Propriety ‘li’

Analects: 1:12. “Yu Tzu said, ‘Among the function of propriety (*li*) the most valuable is that it establishes harmony. The excellence of the ways of ancient kings consists of this. It is the guiding principle of all things great and small. If things go amiss, and you, understanding harmony, try to achieve it, without regulating it by the rules of propriety, they will go amiss.”

QUESTION:

How does Confucius’ virtue of propriety correspond to Aristotle’s virtue of self-restraint, that is, how to behave regarding sensuous desires.



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Confucianism: Virtue #3: 'ren' 'Humane-ness'

In Confucianism, the supreme virtue for the fully realized human being is 'ren' (*ren*). It is fully realized humanity, or 'humane-ness.' A person begins to realize 'ren' through filial piety (1:2). It is developed through 'propriety' or *li* (12:1) and presumes a love of human beings. The analogy is often given from the *Book of Odes*: Consider a carpenter trying to make an axe-handle. All he needs to do is look at the handle in his own hand for a model.

See *Analects*

1:2, 4:2, 4:3, 4:4, 4:6, 6:5, 7:29, 12:1.

QUESTION:

Why do think that Confucius says that only the *ren* person can really like or dislike others (4:3)?



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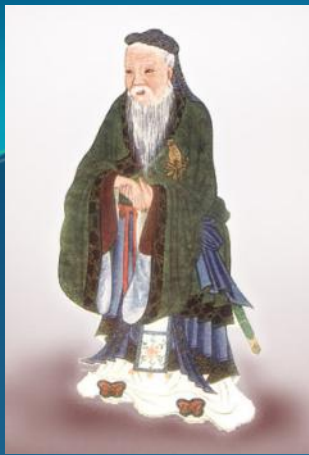
Confucianism Virtue #3: 'rén' (pinyin) 'Humane-ness'

The Chinese character

仁

The part of the pictogram
again suggest its meaning.

(man) + (two) = humane-ness
ren 人 + er 二 = ren 仁



Virtue #3, 'ren,' 'humaneness', fully realized is in sympathy with Heaven and Earth

“Only those who are absolutely sincere can fully develop their nature. If they can fully develop their nature, they can then fully develop the nature of others. If they can fully develop the nature of others, they can then fully develop the nature of things. If they can fully develop the nature of things, they can then assist in the transforming and nourishing process of Heaven and Earth. If they can assist in the transforming and nourishing process of Heaven and Earth, they can thus form a trinity with Heaven and Earth.”

Confucius, *The Doctrine of the Mean*, #22, in Chan, Wing-Tsit, *A Source Book in Chinese Philosophy*, (Princeton, NJ: Princeton University Press, 1963), p. 107-8.

Virtue #3, 'ren' 'humane-ness' continued

The person who has 'ren' (humaneness)' will be a natural leader and will be willingly followed by people without force or coercion.

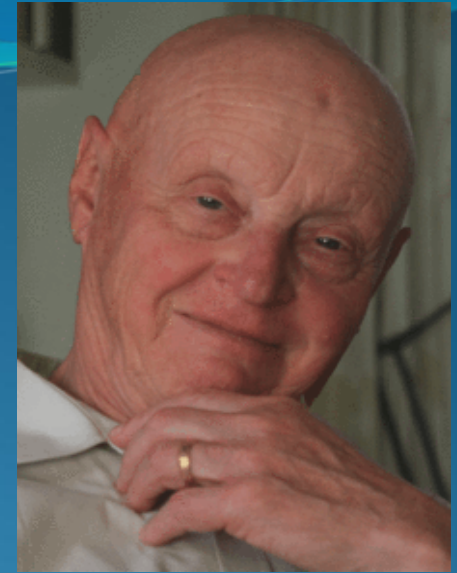
**See *Analects*
2:1, 2:3, 2:19, 12:19.**

The Relevance of Confucianism in the Far East Today

Dr. Geert Hofstede, a Dutch social psychologist, conducted perhaps the most comprehensive study of how values affect people in the workplace.

In explaining the Chinese and far East work ethic, he came to recognize what he called 'Confucian dynamism.'

1. Hofstede, G. and Bond, M.H., The Confucius Connection: From cultural roots to economic growth, Organisational Dynamics, Spring 1998, 5-21.



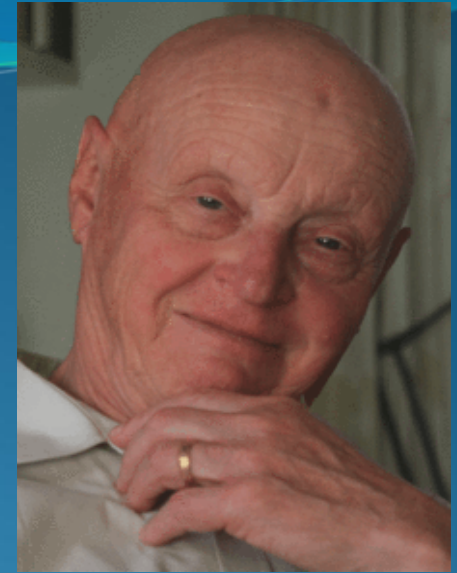
Geert Hofstede

The Relevance of Confucianism in the Far East Today

Confucian Dynamism (also called 'long-term orientation') has the following traits:

- ✓ **persistence**
- ✓ **ordering relationships: strong hierarchies that people observe carefully**
- ✓ **thrift**
- ✓ **a sense of shame**

1. Hofstede, G. and Bond, M.H., The Confucius Connection: From cultural roots to economic growth, *Organisational Dynamics*, Spring 1998, 5-21.



Geert Hofstede

Geert Hofstede rates countries according to 'Confucian Dynamism' or 'Long-Term Orientation.' The greater number implies the greater prevalence of the traits: persistence, ordering relations, thriftiness and sense of shame.

China	118	Netherlands	44	United Kingdom	25
Hong Kong	96	Sweden	33	Zambia	25
Taiwan	87	Australia	31	Norway	20
Japan	80	Germany	31	Philippines	19
South Korea	75	New Zealand	30	Ghana	16
Brazil	65	United States	29	Nigeria	16
India	61	Ethiopia	25	Sierra Leone	16
Thailand	56	Kenya	25		
Singapore	48	Tanzania	25		

Adapted from Website: Making Sense of Cross Cultural Communication, <http://www.clearlycultural.com/geert-hofstede-cultural-dimensions/long-term-orientation/>

NOTE: The traits of persistence, ordering relations, thriftiness and sense of shame, with the possible exception of thriftiness, are primary values in Confucian philosophy.

Consider for example *Analects*, 2:3:

"If you govern the people legalistically and control them by punishment, they will avoid crime, but have no personal sense of shame. If you govern them by means of virtue and control them with propriety, they will gain their own sense of shame, and thus correct themselves."

Let us return to perhaps the central question:

WHY BE ETHICAL?

**One fundamental answer emerged from the
Aristotelian tradition:**

**ETHICAL BEHAVIOR LEADS TO
HAPPINESS AND WELL-BEING**

WHY?

Basic Human Virtues According to Aristotle

Issue	Excess	Middle=Virtue	Deficiency
Fear	Cowardice	COURAGE	Rashness
Pleasure of touch & taste	Wantonness	SELF - RESTRAINT	Insensibility
Fame, Reputation	Overly Ambitious	SELF RESPECT	Lacking in self respect

How do virtues such courage, self-restraint, and self-respect lead to happiness and well-being?

Courage protects people in the community and at the same time wins their respect.

Self-respect supports your accomplishing your goals and at the same time reduces conflicts with others in the community.

Self-respect validates and reinforces your accomplishing your goals and at the same time earns the respect of the community because you're neither too humble nor unduly ambitious, but rightly self-evaluating.

Further Human Virtues According to Aristotle

Issue	Excess	Middle=Virtue	Deficiency
Telling the truth about oneself	Boastfulness	TRUTHFULNESS	Self-belittling
Attitude toward the achievement Of others	Envy	ADMIRATION	Self-satisfaction
Social relations (in general)	Obsequiousness	FRIENDLINESS	Sulkiness

How do virtues such as truthfulness, admiration of worthy people, and friendliness lead to happiness and well-being?

Truthfulness leads you to better understand your self. It allows to acknowledge own strengths and correct your weakness. It leads people you know to trust you and seek your association.

Admiration of others who deserve it correctly directs others in the community to who's worthy of respect and at the same time affords you a worthy model for self-improvement

Friendliness opens the door to cooperative activities of all sorts. Friends help you to understand yourself better. They extend the scope of your own life as you participate indirectly in the lives of your friends.

What is the Confucian answer to:

WHY BE ETHICAL?

Unlike Aristotelianism which approaches the question according to the behavior of the individual, Confucianism understands well-being to be based in social harmony, established by 'proper rites' (*li*) and a growing capacity to distinguish and respect the humanity of others, (*ren*).

As a result, the distinction between self-centered motivation and ethical motivation increasingly is undone. The non-ethical motivations and desires are increasingly stripped away. One becomes an increasingly socially interconnected person, and as such a more self-respected and other-respected person.

But apart from the longstanding – and still culturally influential -- Aristotelian and Confucian traditions, what do current philosophers, who propose fundamental cross-cultural virtues have to say?



Alasdair MacIntyre (1929-)
highly influential virtue ethicist

MacIntyre argues there are three key virtues:

- honesty
- justice
- courage

MacIntyre Alasdair, *After Virtue*, 2nd edition, (Notre Dame, IN: U. of Notre Dame Press, 1984), pp. 188ff.

Why honesty, justice and courage?

This analysis is adapted from MacIntyre Alasdair, *After Virtue*, 2nd edition, (Notre Dame, IN: U. of Notre Dame Press, 1984), pp. 188ff.

MacIntyre explains that all practices – and by practices he means “any coherent and complex socially established human activity” that may be performed as an end in itself – will require honesty, justice and courage. Else the practice will not be possible.

This analysis is adapted from MacIntyre Alasdair, *After Virtue*, 2nd edition, (Notre Dame, IN: U. of Notre Dame Press, 1984), p. 187.

‘Practices’ include all the arts and sciences as well as games. So various techniques and styles of portrait painting are practices. So are chess, basketball and soccer are practices. *And, so are all types of engineering.*

This analysis is adapted from MacIntyre Alasdair, *After Virtue*, 2nd edition, (Notre Dame, IN: U. of Notre Dame Press, 1984), p. 187.

Why must all practices require honesty, justice and courage?


This analysis is adapted from MacIntyre Alasdair, *After Virtue*, 2nd edition, (Notre Dame, IN: U. of Notre Dame Press, 1984), pp. 188ff.

“ . . . the kind of cooperation, the kind of recognition of authority and of achievement, the kind of respect for standards and the kind of risk-taking which are characteristically involved in practices” demand *justice and honesty* in judging oneself and others . . .”

Obtaining an engineering degree, and conducting an engineering career are *practices*. Would it be possible to engage in such practices without the belief that the authorities who confer engineering degrees and who regulate the engineering profession make judgments which are, by and large, fair and truthful? If their judgment were understood as methodically unfair and untruthful, their judgments would be ignored. Their role in the practice would be eliminated.

MacIntyre Alasdair, *After Virtue*, 2nd edition, (Notre Dame, IN: U. of Notre Dame Press, 1984), p. 193.

Same goes for the recognition of achievement and kinds of risk-taking. Would it be possible to conduct the *practice* of engineering with methodically unfair and false recognitions of achievement. Matters would be even more disastrous for risk-taking. If risk-taking was methodically unfair and false, unsafe conditions and poorly designed projects would be the rule. The engineering profession, as a whole, would lose its trustworthiness.



**Why must all practices require
courage?**

“We hold courage to be a virtue because the care and concern for individuals, communities and causes which is so crucial to so much in practices requires the existence of such a virtue. If someone says that he cares for some individual, community or cause, but is unwilling to risk harm or danger on his, her or its own behalf, he puts in question the genuineness of his care or concern.”

MacIntyre Alasdair, *After Virtue*, 2nd edition, (Notre Dame, IN: U. of Notre Dame Press, 1984), p. 193.

Once again the relation between virtues and well-being:

“Someone who achieved excellence in a practice, who plays chess or football well or who carries through an enquiry in physics [or completes an engineering project well] or an experimental mode in painting with success, characteristically enjoys his achievement and his activity in achieving. So does someone who . . . plays or thinks or acts in a way that leads toward such a breaking of limit.”

MacIntyre Alasdair, *After Virtue*, 2nd edition, (Notre Dame, IN: U. of Notre Dame Press, 1984), p. 197.

**Once again the relation between virtues
and well-being according to this
current account of virtue ethics:**

**For the engineer, honesty, fairness and courage
become elemental to achieving a job well-done
and that achievement will be enjoyed.**

MacIntyre Alasdair, *After Virtue*, 2nd edition, (Notre Dame, IN: U. of Notre Dame Press, 1984), p. 197. F

Sources for pictures in previous powerpoint:

1.Slide #4, picture of bust of Aristotle,

http://images.wikia.com/psychology/images/a/a4/Aristoteles_Louvre.jpg&imgrefurl

2.Slide #5, picture of Confucius, en.wikipedia.org/wiki/File:Confucius_Tang_Dynasty.jpg

3.Slide #6, picture of Confucius, <http://www.all-famous-quotes.com/images/uploads/confucius1.jpg>.

4.Slides #7-10, picture of Confucius, <http://blogs.reuters.com/wp-content/uploads/2006/09/confucius300.jpg>.

5.Slides #11=15, picture of Confucius, http://1.bp.blogspot.com/_UCX9YZuA81Q/TQ1-kFei9aI/AAAAAAAAACU/RzZUTE7fXQw/s1600/dragon%2B2.jpg

6.Slides #16-17, picture of Confucius, http://blog.shunya.net/shunyas_blog/2008/09/what-confucius.html&usq

7.Slide #18, picture of Confucius,

http://images2.wikia.nocookie.net/_cb20060829192357/uncyclopedia/images/6/60/Confusinghands.jpg&imgrefurl