



UNIVERSITY OF THE AEGEAN DEPARTMENT OF ENVIRONMENT

LABORATORY OF REMOTE SENSING & GIS

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Philosophy and education for a better democracy

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Philosophy and science

• Μηδείς αγεωμέτρητος εισίτω (Do not enter if you do not know geometry)

The study of philosophy develops analytical rigour and the ability to criticise and reason logically http://www.philosophy.ox.ac.uk/admissions

For 1500 years philosophy is separated from science **Philosophy without scientific evidence is dead**

Healthy mind model of Plato

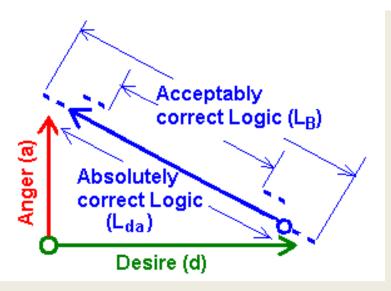
- If the body is out of balance is sick and needs medical therapy
- If the mind is out of balance is sick needs EDUCATION
- Three representative states of mind
- (a) Logic
- (b) Desire
- (c) Anger
- Healthy mind = The Logic keeps in balance desire and anger

Acceptable healthy mind model of Aristotle and Human error model – Democratic procedures

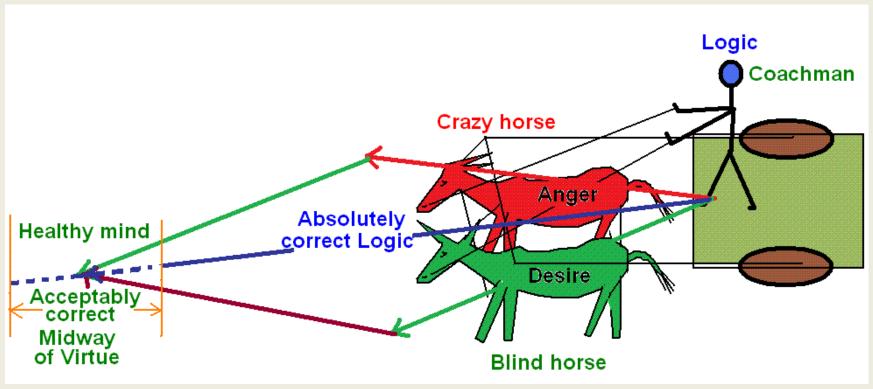
- virtue is a "mesotita = midway" (not a mean !!!) which means it is found in midway between two extreme actions, or, badness.
 - One extreme is towards deficiency
 - The other extreme is towards excess
- Aristotle's example : "If bravery is a virtue then the brave person is to be found in midway, between the provocative and the coward person
- thrifty as a virtue that is to be found in midway between stinginess and overspending
- Midway of virtue = error variance → Design variable of universe
- democratic procedures are the process to locate the midway of virtue (healthy mind with minimum bias).

Education and training

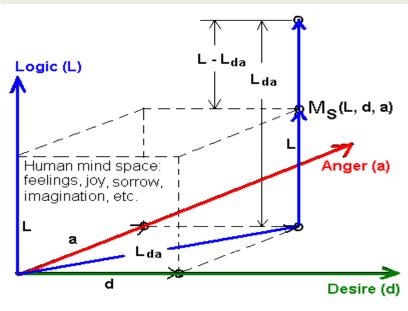
- virtue is the effort to maintain actions within the midway bounds
- Education is "The effort to develop a healthy mind to the virtuous person"
- Training is the effort to develop skills to the person with education, which will be use for better life quality for the public and for exploration.



Absolute correct and acceptable correct



Mind space and Human error



$$L_{da} = \sqrt{d^2 + a^2}$$

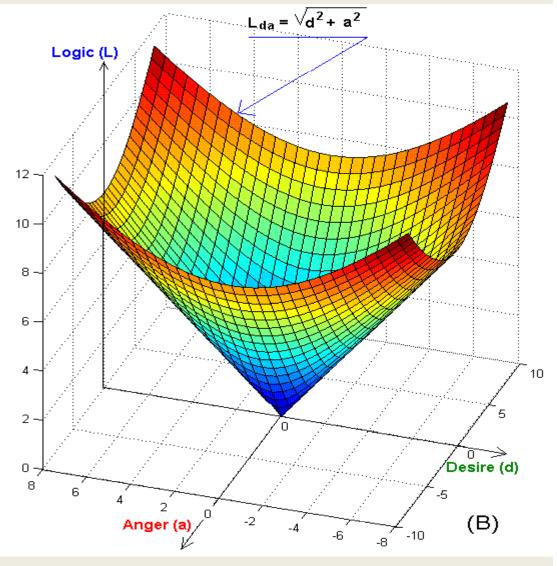
M_S = Current state of human mind

L_{da} = Absolutely correct Logic

L - L_{da} = Human error

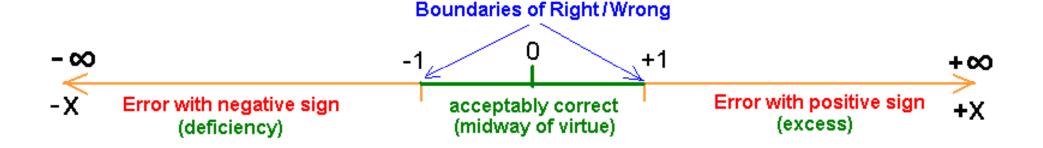
L = Current Logic



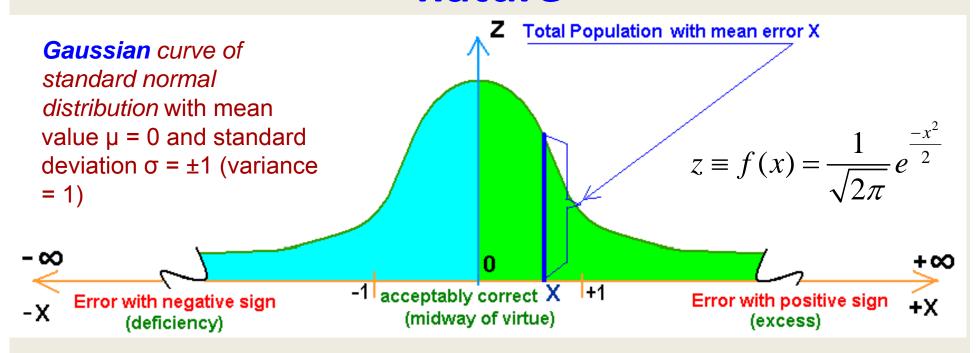


Boundaries of right and wrong

- X = Human error
- Y = Acceptable human correct
- X = 1/Y
- On the boundary X = Y
- $X = 1/X \rightarrow X^2 = 1 \rightarrow X = \pm 1 \rightarrow |X| = 1$



Mind performance as designed? by nature



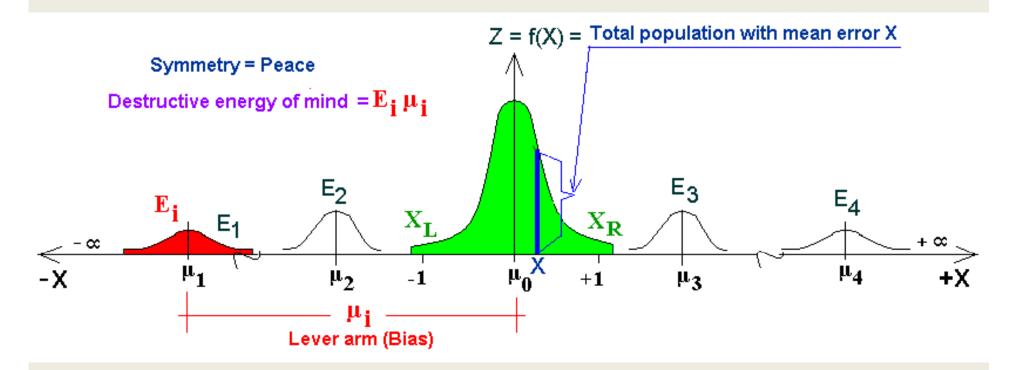
$$\sigma = \pm 1 \rightarrow 68.26\%$$
 of the total population – best democracy

$$\sigma = \pm 2 \rightarrow 95.45\%$$
 of the total population

$$\sigma = \pm 3 \rightarrow 99.73\%$$
 of the total population

Out of bounds 0.27% of the total population (self defense)

Mind performance of real world (false evolution? Against nature?)

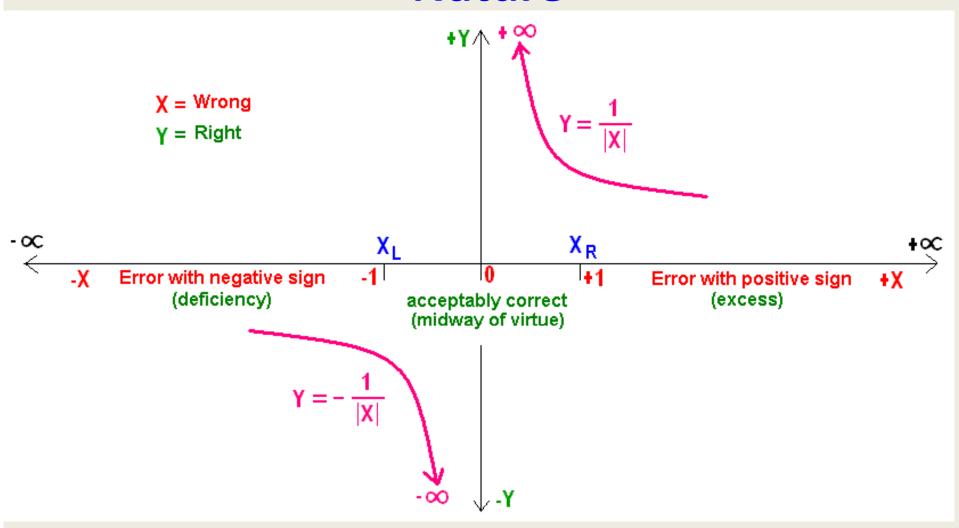


Bias falsified Democracy

Best Democracy

Bias falsified Democracy

The absolutely right performance of Nature



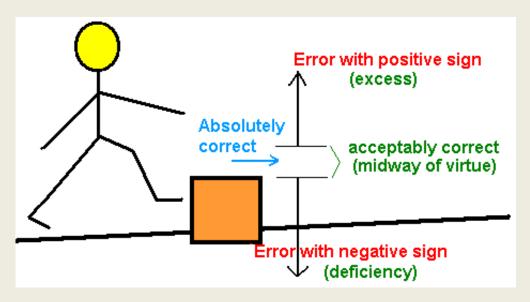
Nature

- Establishing and maintaining the nature Laws and rules
 - Gravity
 - Light
 - Biology
 - **–** . . .
- Nature: Sees through our eyes?
- Nature: Understands through our minds?
- Human destination: Quality in Life, Exploration?

Immortality of mind developments

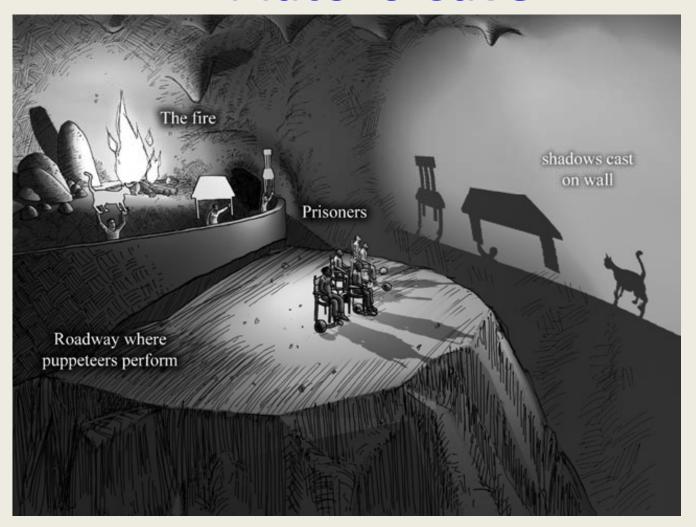
- Mortal = Time dependency
- Immortal = Indepedent of time
- Electronic computers
 - Hardware → mortal
 - Software → immortal
- The books we read carry the immortal developments of the writer's mind

Neural structure of the brain hosting human mind



- (a) Definition of boundaries of right and wrong.
- (b) first time may have a false step.
- (c) next time will have a better performance
- (d) wrong and right coexist and their boundaries are located at a point where the error value is bellow a threshold limit.
- (e) Midway of virtue = error variance
- (f) There is unlimited freedom within midway
- (g) False step (non health limitations) = uneducated, or, bias

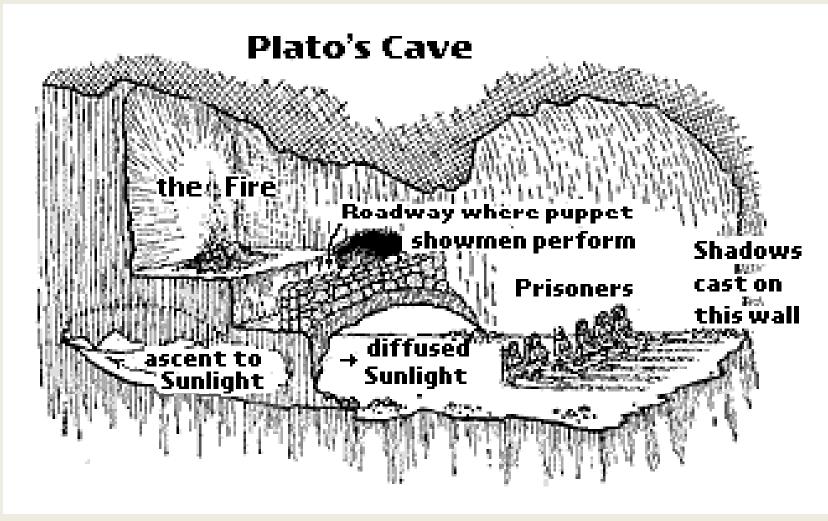
Plato's Cave



http://t1.gstatic.com/images?q=tbn:ANd9GcQx0e-jdRwZM3YPvxI8ZXYOqmfaS1P9iVxUBbUjvpDom9LsfboyJA

Plato's Cave

http://www.youtube.com/watch?feature=endscreen&NR=1&v=aHLASQstKVQ



PROTERRA – Jubilee on Naxos October 2012- Prof. J. N. Hatzopoulos

Levels of Slavery to maintain human actions against nature rules

- 1. Increasing the anger (wildfication mechanisms)
- 2. Increasing the desires (Marketing)
- 3. Neutralizing Logic (Excess faith and Excess mutual support)
- 4. Fanashism (Doing all three above)
- 5. Limiting Logic (decisions with insufficient supporting arguments)
- 6. Too much logic (discussions to nowhere, loops)

Conclusions

- 1. Philosophy must reunite with Science
- 2. The boundaries of wrong and right must be further developed on scientific bases
- 3. Human mind models and Human error analysis must be further studied and adopted by human sciences
- 4. There must be an effort so that groups of people with excess bias to focus on the cultural part of their group and minimize bias
- 5. Better Democracy: It is the effort of the voters to maintain a balanced (healthy) mind with minimum bias.
 - It is to understand the value of the sunlight and free people from slavery of the Plato's cave.
 - It is to help people understand the nature rules.
 - It is to understand human destination as the quality in life and exploration.

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Thank You Ευχαριστώ



This goat is about four meters over the ground eating whatever is left from a fig tree