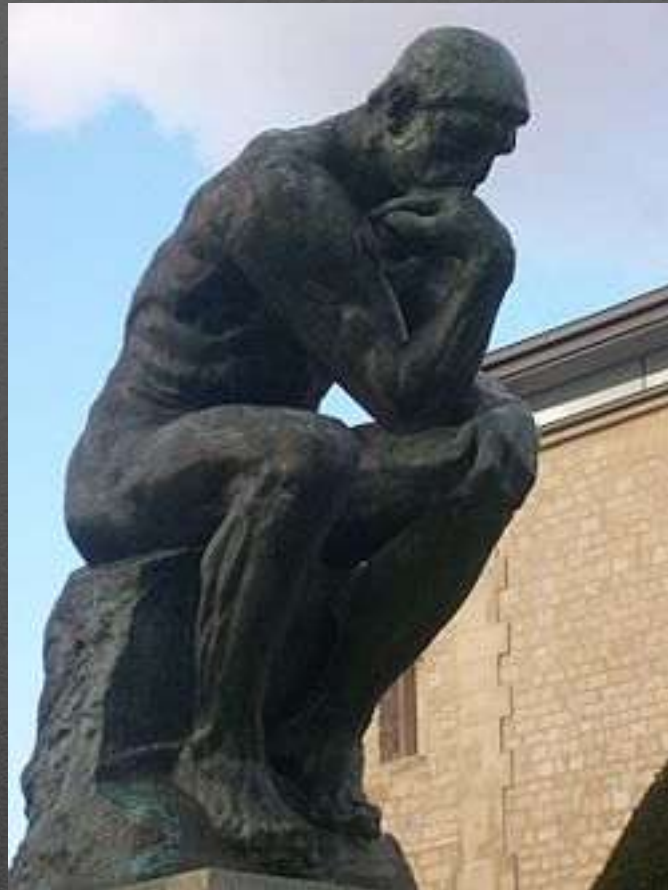




O.N.T.O.L.O.G.I.A

Oleh: Dr. Ir. A. Rudyanto Soesilo MSA



**Entering the
Scientific
Community**



**Philosophy of
Science,
E.T.H.I.C.S,**
*Ontology-
Epistemology-
Axiology
*Humanism



POSTGRADUATE

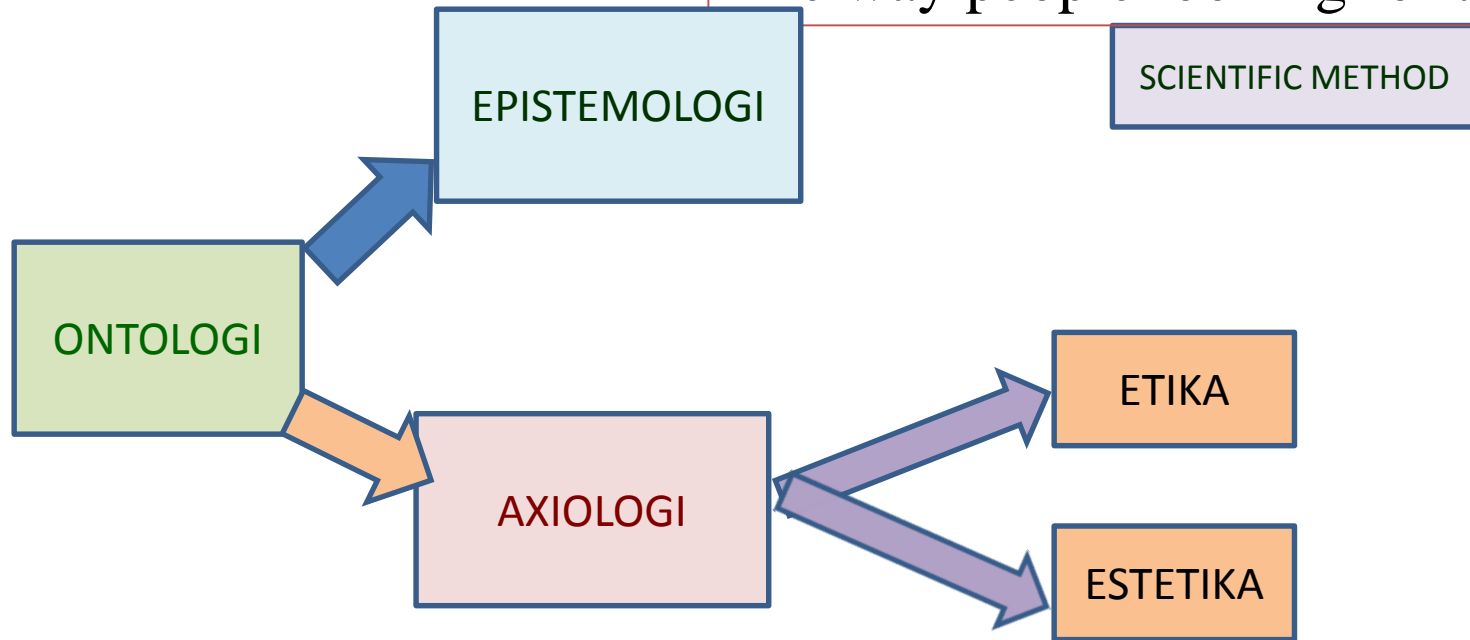
Graduate community

Scientific community

I.n.d.o.n.e.s.i.a.

modern

The way people looking for truth



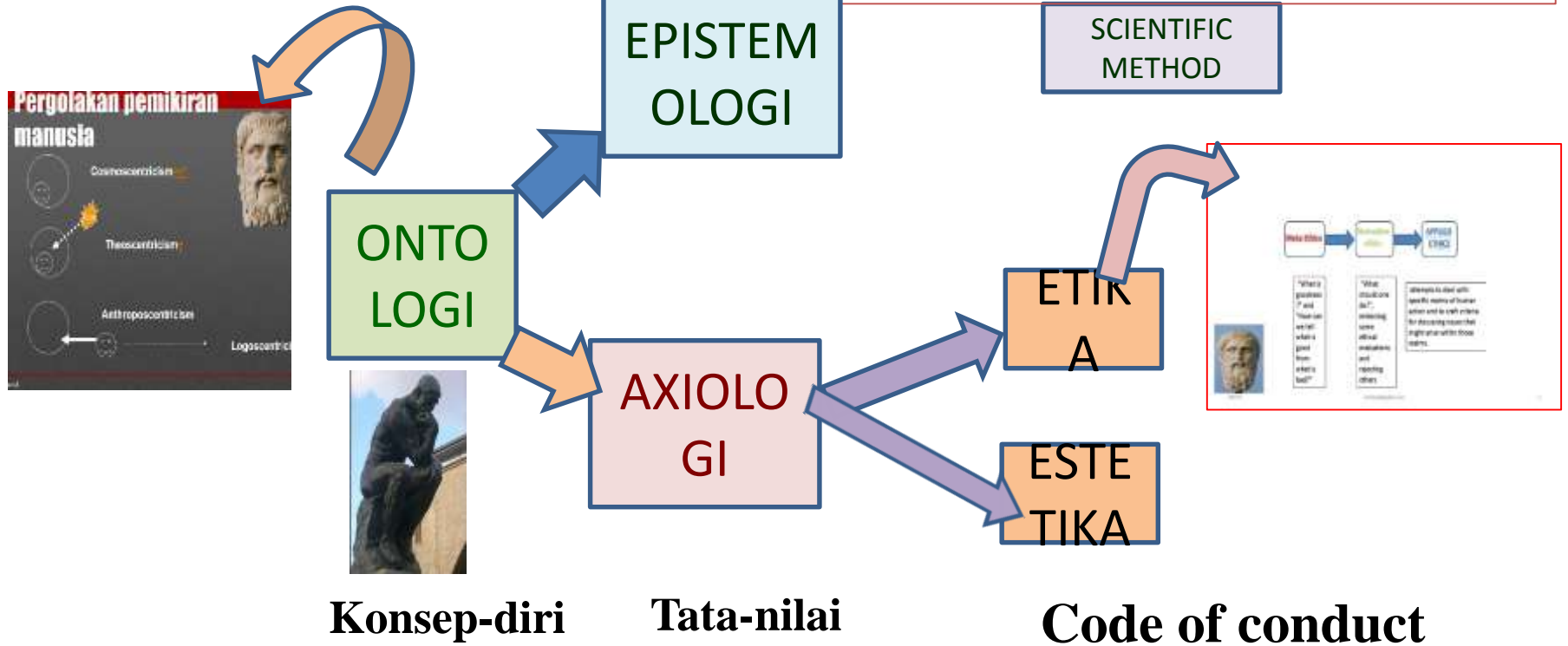
Konsep-diri

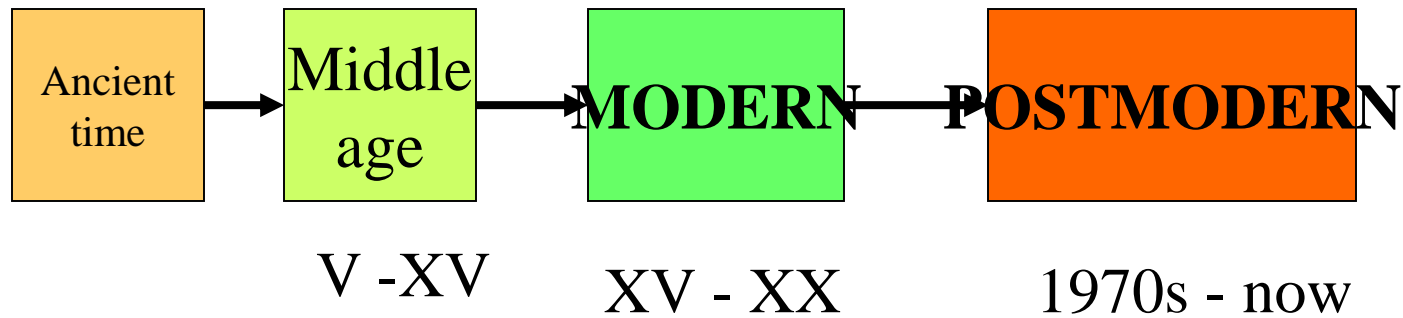
Tata-nilai

Code of conduct

Filsafat ilmu modern

The way people looking for truth





there is no truth, but only versions of it

O.N.T.O.L.O.G.I.A



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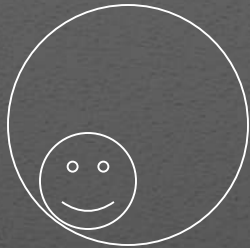
Wilayah Filsafat



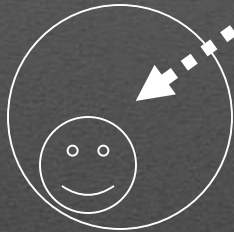
- 9. (Filsafat) Manusia

1. Metafisika
2. Ontologi
3. Epistemologi
4. Logika
5. Metodologi
6. Filsafat Ilmu
7. E.t.i.k.a.
8. Estetika

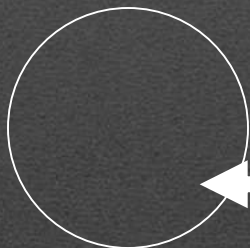
Pergolakan pemikiran manusia



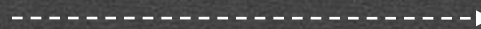
Cosmocentricism =+*



Theoscentricism +



Anthroposcentricism Three "ages":



Logoscentricism +

Alur Historis

Abad	Mesir	India	Cina	Arab	Yahudi	Barat
VIII	A K N O	P H O I	K T O A	M	M o Y	Yunani : Mitologi - Kosmogoni
VII	I S M M	L N I D	S O M	n o	n A H	
VI	I O S Sen M tris	T U E I B	O Con Sen tris fu sia nis	e I s m e	e D I I s m e	LOGOS : Socrates-Plato-Aristoteles Agnostisis-Ateistis
V	E	S U M D E A				
Masehi						Masehi
I						
II						
III						
IV						
V				I		
XV				S		Dark-ages 1000thn
XVI				L		Renaissance Rediscovery of man
XVII				A		Filsafat Ilmu
XVIII				M		Aufklarung
XX						Revolusi Industri
XXI						Modernisme PostModernisme
N.O.W the time being						



O.N.T.O.L.O.G.I.A.

INDIA	CINA	YUNANI	TIMUR TENGAH
BRAHMAN ATMAN	TAO YIN-YANG	Jalan lurus untuk berfikir ttg hidup (LOGIKA)	
BUDISME Tidak eksplisit	CONFUCIUS (Etika)	Jalan lurus hidup sesuai ajaran ttg hidup (ETIKA)	
		LOGOS (Budi) ADA / Kebaikan	ALLAH (Transenden) IBRAHIMISME
			ALLAH (Transenden) IBRAHIMISME

B.R.A.H.M.A.N.

Prinsip semua Dewa

Mengejar Persatuan

ASKESE, TERHADAP DUNIA LUAR
Melepaskan diri dari yang Fana

A.t.m.a.n

Pemikiran Hindu Awal

- Omnipresent
- Omnipotent
- Anthropomorphic

T.h.e.o.s.

- For thousands of years they deified
 - animals,
 - stars,
 - idols of any kind... and
 - practiced Spiritism,
 - witchcraft,
 - divination,
 - astrology... and they used
 - magic,
- spells,
- enchantments,
- superstitions,
- prayers,
- amulets,
- talismans,
- charms... often with
- the worship of an Absolute, or the Great One...

Animism1:

- The "Primitive Religions" were born in the five Continents, more than 3,000 years ago,
- mostly in the form of "Animism", because they believed that everything has a "soul", an "anima" in Latin, a "spirit"..
- including animals, plants, rocks, mountains, rivers, stars... each "anima" is powerful, spiritual,
- that can help or hurt them, including the souls of the dead, the "ancestors".

Animism:



- Pantheism is the next obvious consequence:
- There are thousands of gods... the concept of 333 million deities is believed to emphasize the fundamental doctrine of Animism,...

Pantheism

- "Myths of origin" or "creation myths" represent an attempt to render the universe comprehensible in human terms and explain the origin of the world.
- The most widely accepted account of beginning of things as reported by Theogony, starts with Chaos, a yawning nothingness.

Cosmogony and cosmology

Polytheism is the belief in or worship of multiple deities, such as gods and goddesses.

- These are usually assembled into a pantheon, along with their own mythologies and rituals.
- Many religions, both historical and contemporary, have a belief in polytheism, such as
 - Hinduism,
 - Shinto, Chinese folk religion,
 - Neopagan faiths,
 - Anglo-Saxon paganism and
 - Greek paganism.

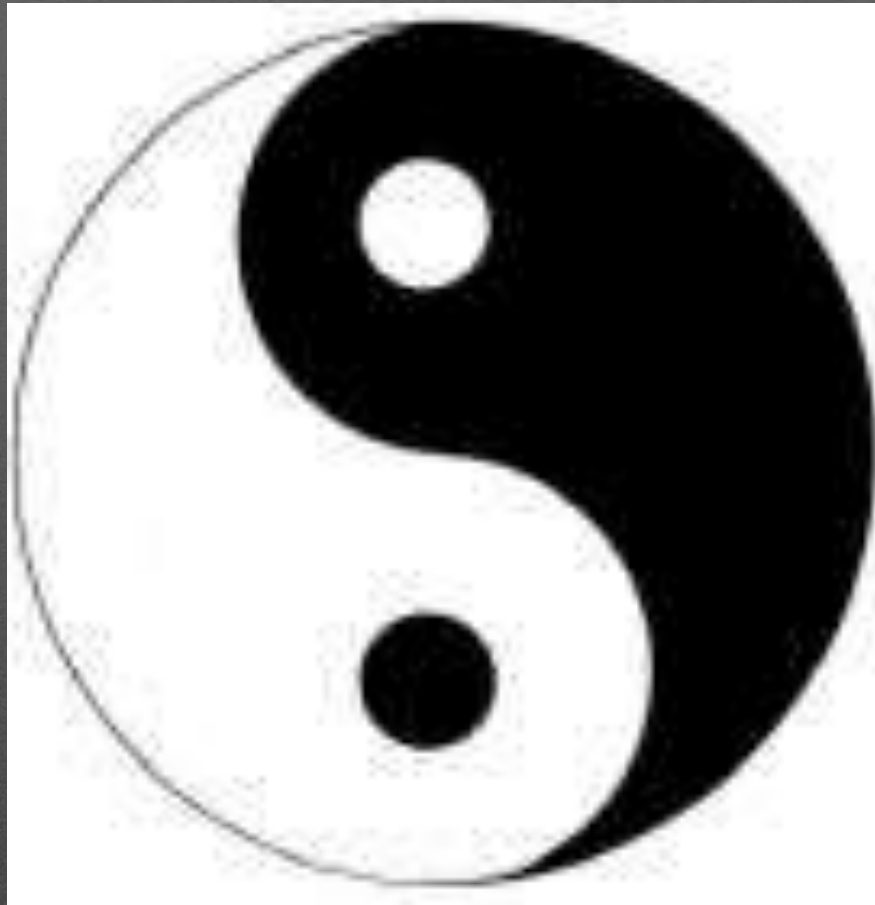
P.o.l.y.t.h.e.i.s.m..

- The deities of polytheistic religions are agents in mythology,
- where they are portrayed as complex personages of greater or lesser status,
- with individual skills, needs, desires and histories.
- These gods are often seen as similar to humans (**anthropomorphic**) in their personality traits,
- but with additional individual powers, abilities, knowledge or perceptions.

anthropomorphic

- Polytheism cannot be cleanly separated from the animist beliefs prevalent in most ethnic religions.
- The gods of polytheism are in many cases of a continuum of supernatural beings or spirits,
- which may include **ancestors**, demons, wights and others.

God, the highest order



Yin – Yang



Monotheistic, Ibrahimism

The Abrahamic Faith



- Abrahamism is belief in the one God, creator of the universe. He is the same God of Abraham, Jesus and Muhammad.
- The Jews descended from Isaac, son of Abraham by Sarah; the Muslims descended from Ishmael, son of Abraham by Hagar; the Christians spiritually descended from Jesus who came from the lineage of David who came all the way from the descendants of Abraham.
- The three great monotheistic religions may differ in their rituals, ceremonies and observances, but they worship the same God, creator of the universe.
- He is Yahweh, Allah, God.

- the Classical civilization of Antiquity,
- the Middle Ages, and
- the Middle Ages, the Dark Ages, dated from the fall of the Western Roman Empire in the 5th century to the beginning of the Early Modern Period in the 16th century,
- the Modern period.

Three "ages":



the Middle Ages , the Dark Ages

Galileo Galilei

15 February 1564 – 8 January 1642



- Galileo's championing of Copernicanism was controversial within his lifetime.
- The geocentric view had been dominant since the time of Aristotle, and the controversy engendered by Galileo's presentation of heliocentrism, because it was not empirically proven at the time and was contrary to the literal meaning of Scripture.
- Galileo was eventually forced to recant his heliocentrism and spent the last years of his life under house arrest on orders of the Roman Inquisition.

- The Protestant Reformation was a reform movement in Europe that began in 1517, It began with Martin Luther and may be considered to have ended in 1648.

The Reformation

Calvinism

- Hard working
- Plain living
- Big saving
- God blessing



The Renaissance,

- After thousand years in Medieval Dark Ages, lived in Theocentric Era, Europe entered the Renaissance in the 15th century.
- The Rebirth, rediscovery of man, back to ancient Greek's manuscript of Socrates, Plato and Aristotle.
- The Renaissance lead Europe to enter the Reformation era, the Rise of Protestantism, led by Martin Luther and John Calvin, as the embryo of Capitalism (Weber).

- The Renaissance (from French *Renaissance*, meaning "rebirth")
- Rediscovery of man
- Humanism
- Individualism
- Liberalism



Renaissance

- the Renaissance could be viewed as an attempt by intellectuals
- to study and improve the secular and worldly,
- both through the revival of ideas from antiquity,
- and through novel approaches to thought.

Renaissance

- The works of ancient Greek and Hellenistic writers (such as Plato, Aristotle, Euclid, Ptolemy, and Plotinus) and
- Muslim scientists and philosophers (such as Geber, Abulcasis, Alhacen, Avicenna/Ibnu Sinna , Avempace, and Averroes/Ibn Rusyd), were reintroduced into the Western world, providing new intellectual material for European scholars.
- Particularly in the case of mathematical knowledge, most of the work of Muslim mathematicians assimilated into the world and can be attributed to many different fields.

Renaissance- Muslims scientist

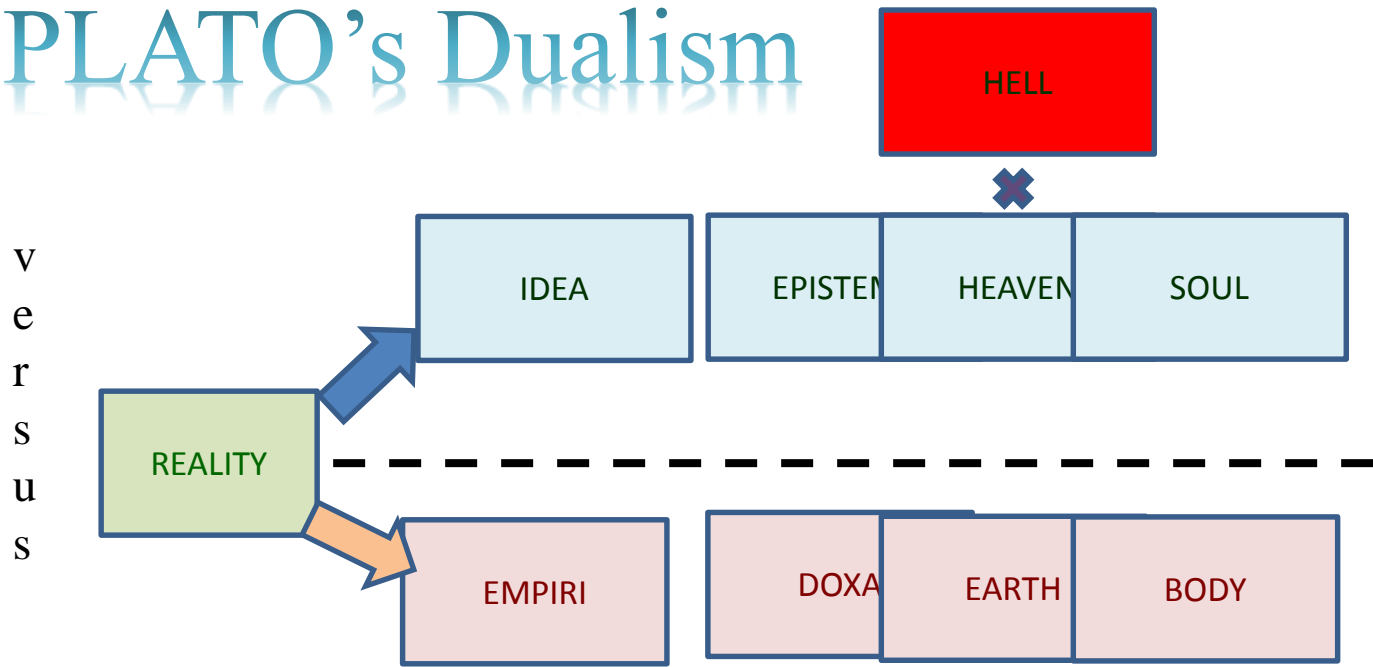
- These scholars brought with them texts and knowledge of the classical Greek civilization which had been lost for centuries in the West and they transmitted the art of exegesis.
- the word Renaissance, implying an unambiguously positive rebirth from the supposedly more primitive "Dark Ages" (Middle Ages).

Renaissance

- The earth was not seen as a vale of tears anymore, but as a place where it was “a pleasure to live.”
- the physical world is not as merely transitory and insignificant in comparison with life after death, but as a cosmos that deserved their full attention and admiration.
- The naked human body became a prominent subject of Renaissance painting and sculpture. Painters and art patrons did not think of it as sinful and in need of being covered up, but as something to be respected and cherished.

Renaissance a new
worldliness of life.

PLATO's Dualism



ARISTOTLE's Monism

Idea= abstraction

- The Scientific Revolution of the late Renaissance was significant in establishing a base for many modern sciences as well as challenging the power of the Ruling Elite.
- Scholars look at the world in a different light. Religion, superstition, and fear were replaced by reason and knowledge”.
- Challenge to dogma,

The Scientific Revolution

- a phase in Western philosophy and cultural life centered upon the eighteenth century, in which Reason was advocated as the primary source and basis of authority.
- The signatories of the American Declaration of Independence, the United States Bill of Rights and the French Declaration of the Rights of Man and of the Citizen were motivated by "Enlightenment" principles

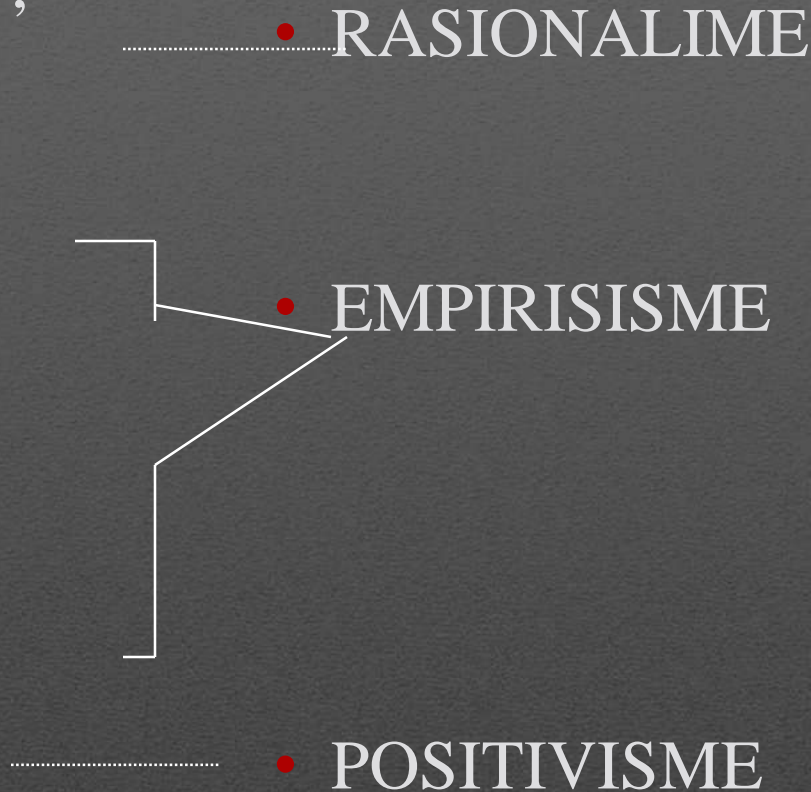
Aufklärung, The Enlightenment

- Descartes' *Discourse on the Method*, published in 1637
- the revolution of knowledge, by René Descartes and Isaac Newton,
- Enlightenment thinkers believed that systematic thinking might be applied to all areas of human activity, and carried into the governmental sphere, in their explorations of the individual, society and the state.
- Its leaders believed they could lead their states to progress after a long period of
- tradition,
- irrationality,
- Superstition, and
- tyranny which they imputed to the Middle Ages.

the Age of Reason or Age of Rationalism

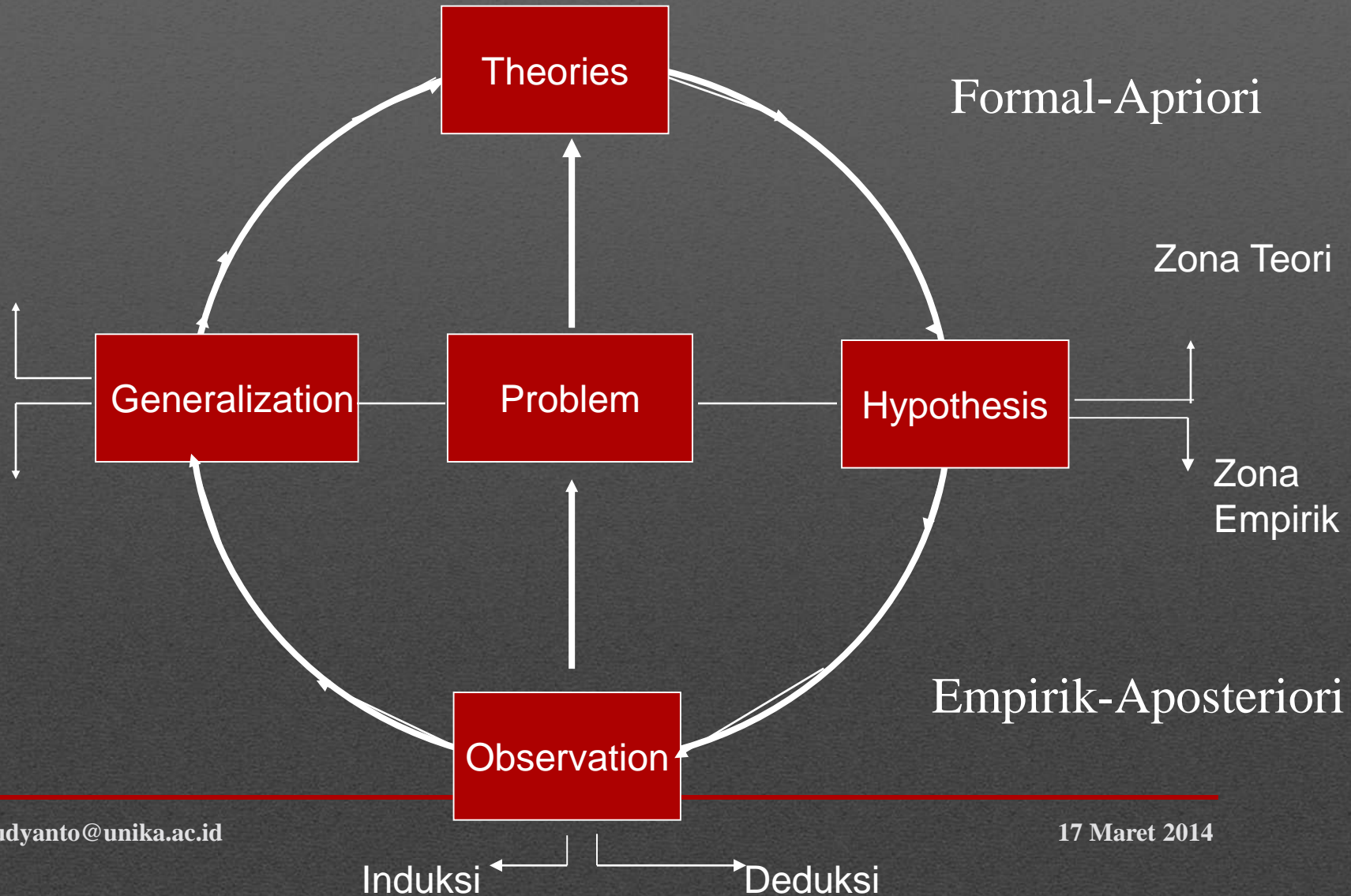
Towards Positivism

- Rene Descartes ,
 - 1596 - 1650
- David Hume
 - 1711 - 1776
- John Locke
 - 1632 1704
- George Berkeley
 - 1685 - 1753
- August Comte
 - 1685 - 1753



Metoda Ilmu Pengetahuan :

Siklus Empiris, Hipotetiko Dedukto Verifikatif



ILMU : explanatoris POSITIVISTIK
 prediktif

- Obyektif
- Fenomenalis (anti Metafisis)
- Reduksionalis : Fakta
- Naturalistis : Mekanistis-Deterministis-alami

- UNIFIED SCIENCE : paradigma tunggal
- UNIFIED LANGUAGE : Positivisme Logis
- UNIFIED METHOD : Metode verifikasi empiri

Positivism

August Comte

August Comte :

3 Tahap perkembangan Sejarah :

- Teologis
 - Animisme - Politeisme - Monoteisme
- Metafisik
 - Alam - Panteisme
- Positif
 - Sains-Teknologi, Metodologi ilmiah
 - Atheisme-Agnostisme-Deisme
 - MODERNISME- Humanisme, Individualisme-Liberalisme

Jenis2 Positivisme :

- Positivisme Sosial : Comte
 - J. Bentham & J.S. Mill, Masyarakat & sejarah
- Positivisme Evolusioner
 - C.Darwin-H.Spencer, Fisika - Biologi, Evolusi Universal, Progresif
- Positivisme Kritis : Kritisisme Empiris > Positivisme Logis
- Positivisme Logis :
 - 1920 Wienerkreis, R.Carnap > Manifesto
 - 1940an Wittgenstein: Tractatus Logicus Philosophicus > Verifikasi > Teori gambar
 - Bebas dr Teologi & Metafisika > Ilmu2 alam = Unified Science

Landasan Ontologi Filsafat Ilmu



S.e.k.u.l.a.r.i.s.a.s.i

- Saeculum = the present age, dunia
- Protestanisme, Martin Luther dan John Calvin
- Teosentris, semua kegiatan dikontrol agama
- Pemisahan antara wilayah agama > pribadi, disiplin tersendiri, dengan wilayah publik
- Humanisasi, HAM, Demokrasi, Toleransi
- Desakralisasi hidup, Otonomi Manusia
- Menolak Transendensi
- Penolakan atas Teleologi Sejarah perkembangan Umat manusia, Eskatologi

S.e.k.u.l.a.r.i.s.a.s.i 2

- **Fisika** : Copernicus (1473-1543), Galilei (1564-1642), Geosentrisme
 - Newton, (1642-1747), Alam = Atom, dng Hukum² tersendiri
- **Biologi**, C. Darwin (1809-1882), Evolusi , Natural selection
- **Historis**, Kitab² bukan langsung dari atas, ttp sesuai perkembangan manusia pengikutnya
- **Psikologi**: Freud (1856-1939), Eksistensialis, dorongan bawah sadar
- **Sosiologi** : dorongan kebutuhan hidup, Materialisme Historis
- **Negara** : suatu kontrak sosial, agama tanpa tuhan.

Secularization

- The word 'Secular' came from the Latin word *saeculum* , means “*this present age*” ,
- Harvey Cox wrote in his book ‘*The Secular city*’, : *Secularization occurs when man turns his attention away from worlds beyond and toward this world and this time.*

Theisme

- Panteisme
- Teisme : Politeisme
- Monoteisme
- Platonis : Dualisme : dunia
Ide><Nyata
- Descartes, Deisme

Rudolf Otto

“**tremendum et fascinans**”

- He describes it as a mystery (Latin: *mysterium*) that is at once terrifying (*tremendum*) and fascinating (*fascinans*).
- Otto felt that the *numinous* was most strongly present in all religions

Pergeseran Landasan Ontologi

- Theisme
- Deisme
- Agnostisisme
- Atheisme

D.e.i.s.m.e.

- *Deus* , Tuhan
- Watchmaker God
- Hukum² alam, berlaku di alam semesta, tanpa campur tangan Adi-Kodrati.
- Harmonia praestabilisata, keselarasan sejak awal mulanya.

Agnostisisme

- Tuhan tak dapat diketahui
- Kepercayaan = selera pribadi individual
- Hasrat spiritualitas
- Relativisme agama
- Sekularisasi

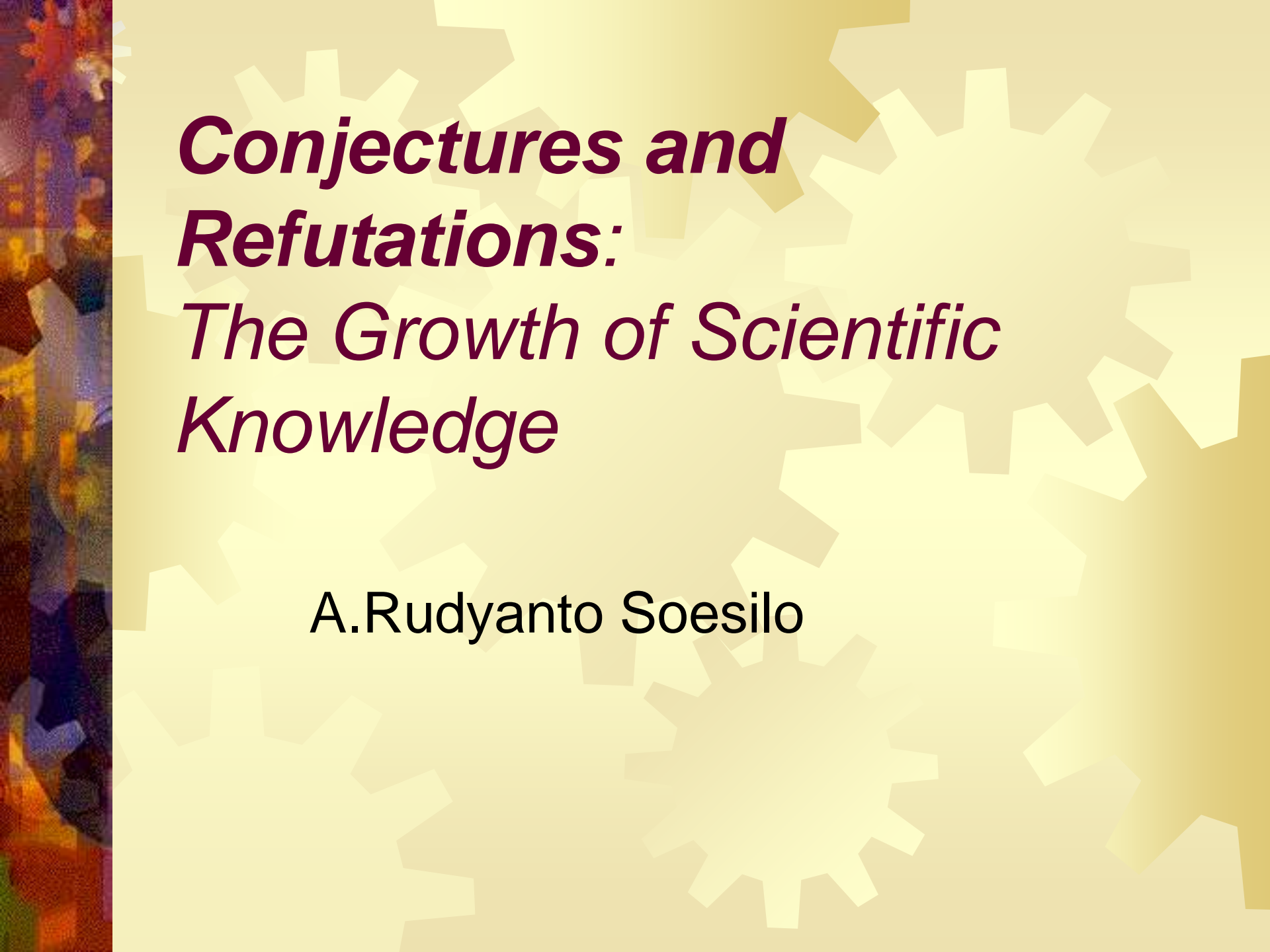
Atheisme :

- Aufklärung, Enlightenment
- Anthropomorfisme, Politheisme,
- Pantheism
- Teoritis - Praktis > Agnostisisme
(Scientisme – metoda ilmiah)
- THEODICEA, Adanya kejahatan,
otoritas alam (Naturalisme), otoritas
Manusia

• E.v.o.l.u.s.i.

A.t.h.e.i.s.m.e. :

- Sartre, Eksistensialis
- Karl Marx, Agama = candurakyat
- Nietzsche, Tuhan telah mati
- Freud, agama = pelarian neurotis infantil"*
—
- Feurbach, Tuhan ciptaan manusia**
—

The background features a light yellow-to-gold gradient with several semi-transparent gears of various sizes scattered across it. On the left side, there is a vertical strip with a colorful, abstract, and textured appearance, possibly representing a microscopic view or a complex scientific structure.

***Conjectures and
Refutations:
The Growth of Scientific
Knowledge***

A.Rudyanto Soesilo

Conjectures and Refutations: The Growth of Scientific Knowledge

- ✦ is a book written by philosopher Karl Popper. Published in 1963 ,
- ✦ Popper suggested that all scientific theories are by nature conjectures and inherently fallible,
- ✦ refutation to old theory is the paramount process of scientific discovery. Should any new theory survive more of such refutations, it would have a higher verisimilitude and therefore, closer to truth.

Conjectures and Refutations

- ✦ Conjectures and Refutations is acute insight into the way scientific knowledge grows, but also for applying those insights to politics and to history.
- ✦ It provides one of the clearest and most accessible statements of the fundamental idea that guided his work: not only our knowledge, but our aims and our standards, grow through an unending process of trial and error.

a fascinating range of important problems

- ☀ Popper goes on to apply this bold theory of the growth of knowledge to a fascinating range of important problems, including
 - ✿ the role of tradition,
 - ✿ the origin of the scientific method,
 - ✿ the demarcation between science and metaphysics,
 - ✿ the body-mind problem,
 - ✿ the way we use language,
 - ✿ how we understand history, and
 - ✿ the dangers of public opinion.

conjectures remain conjectures

- ☀ Popper demonstrates how knowledge grows by guesses or conjectures and tentative solutions, which must then be subjected to critical tests.
- ☀ Although they may survive any number of tests, our conjectures remain conjectures, **they can never be established as true.**



Taman Jepang



Taman Versailles



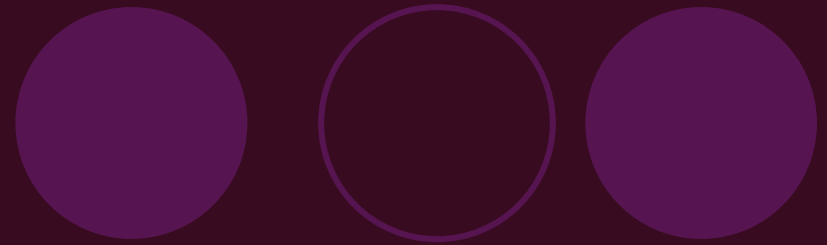
- Taman Jepang

Kosmosentris

Taman Versailles



Anthroposentris





Modern home concept*



- Existensialisme

**Manusia mengenali
dirinya**

Existensialisme

Sartre, Kierkegaard, Gabriel Marcel

- Existentialism generally postulates that the absence of a transcendent force (such as God) means that the individual is entirely free, and, therefore, ultimately responsible.
- It is up to humans to create an ethos of personal responsibility outside of any branded belief system. That personal articulation of being is the only way to rise above humanity's absurd condition (suffering and death, and the finality of the individual).

- This is a reversal of the Aristotlean premise that essence precedes existence, where man exists to fulfill some purpose.
- Sartrean existentialism argues that man has no predefined purpose or meaning; rather,
- humans define themselves in terms of who they become
- as their individual lives are played out in response to the challenges posed by existence in the world

Sartrean existentialism

Existence precedes essence

- Simone de Beauvoir
- uses this concept in her feminist existentialism
- to develop the idea that "one is not born a woman, but becomes one"

- A central proposition of existentialism is that existence precedes essence;
- that is, that a human being's existence precedes and is more fundamental than any meaning which may be ascribed to human life:
- humans define their own reality.
- One is not bound to the generalities and a priori definitions of what "being human" connotes.

Existence precedes essence

- "Existence precedes essence", is a philosophic concept based on the idea of existence without essence.
- For humanity, it means that humanity may exist, but humanity's existence does not mean anything at least at the beginning.
- This concept can be applied at the individual level as well. The value and meaning of this existence—or essence—is created only later.
- It directly and strongly rejects many traditional beliefs including religious beliefs that humankind is given a knowable purpose by its creator or other deity.

- For Sartre,
- we must come into existence first,
- and then create our own essence out of interaction with our surroundings and ourselves.
- With this comes serious implications of self-responsibility over who we become and
- who we are. There is no longer, for Sartre, some universal "human nature".

Responsibility for choices

- The individual consciousness is responsible for all the choices it makes,
- regardless of the consequences.
- Condemned to be free because man's actions and choices are his and his alone, he is *condemned* to be responsible for his free choices.

Responsibility for choices

Paradigma Pendidikan

- **MAGICAL CONSCIOUSNESS**
 - Faktor-faktor diluar manusia (Natural & Supra Natural)
 - Dogmatis
 - Ketidakberdayaan
- **NAIVAL CONSCIOUSNESS**
 - Man Power Development
 - Sistem = “GIVEN”
 - ADAPTASI thd Sistem >< Menderita.
- **CRITICAL CONSCIOUSNESS**
 - SISTEM = Sumber masalah
 - Pelatihan identifikasi ketidakadilan
 - Penciptaan ruang & Kesempatan dalam penciptaan struktur & sistem yang lebih baik.



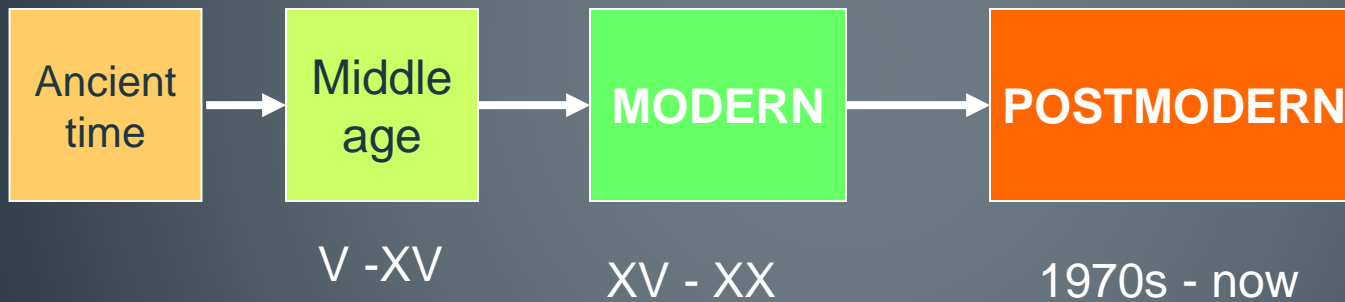
PAOLO FREIRE



Postmodernisme

aliran pemikiran mutakhir
(1970an - now)

Oleh : A. Rudyanto Soesilo



there is no truth, but only versions of it

Epistemologi Positivis :

Fondasionalisme

Scientisme

Konstruksionisme

Konwledge is power



Enlightenment

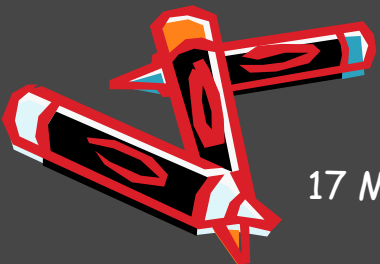


Modernity

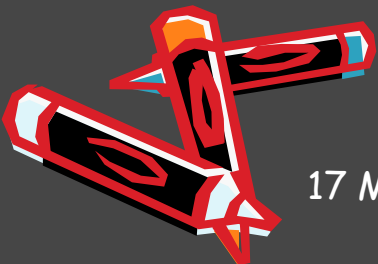
Crisis : Ekologi, Kemanusiaan, Perempuan
: META-NARASI



Post modernity



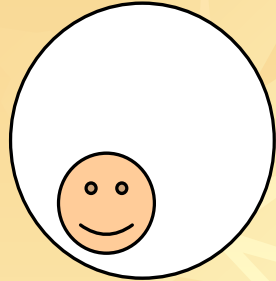
- Muncul sebagai akibat dari kekecewaan pasca Perang dunia II, suatu pergerakan kultural, intelektual dan seni yang menafikkan hirarki sentral dan prinsip2 organisasi yang terstruktur.
- Menawarkan kompleksitas ekstrem, kontradiksi, ambiguitas, perbedaan dan ke-tidak teraturan.



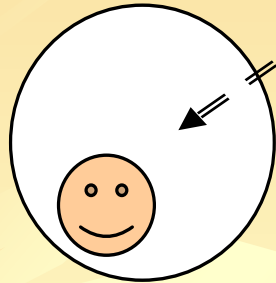
- Gagasan Postmodernisme pada filsafat , budaya & kemasyarakatan , meluas dari teori kritis
- dan menjadi titik tolak dari bahasa, arsitektur, desain, juga pada pemahaman bisnis dan marketing, pemahaman sejarah, hukum dan budaya, sejak akhir abad XX
- Gagasan ini kemudian menjadi suatu re-evaluasi dari keseluruhan Nilai-nilai Barat (Cinta, perkawinan, budaya Pop, perubahan dari ekonomi industri ke pelayanan dll) yg berlangsung sejak 1950-60an. Sering disebut sbg Postmodernitas



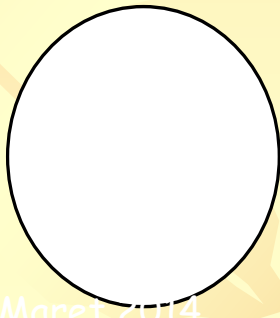
The Turbulence on Human thought



Cosmocentric



Teosentris

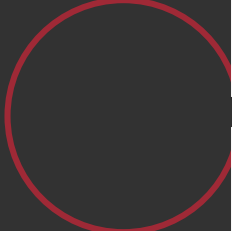


Anthropocentric



17 Maret 2014

rudyanto@unika.ac.id



Kosmosentrisme

Teosentrisme

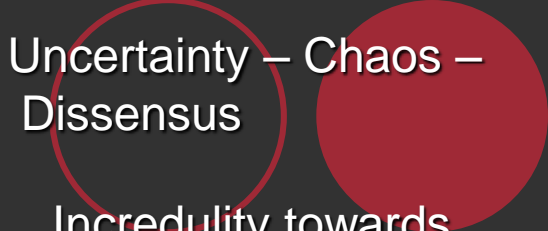
Reformasi
Renaissance
Aufklärung/Enlightenment

Rasionalisme

Empirisisme

Positivisme

Revolusi Ilmu Pengetahuan



Uncertainty – Chaos –
Dissensus

Incredulity towards
meta-narrative

Postmodernism

Plural
Relativism
Paradigm
Incommensurability
Revolusi Permanen

Anthroposentrisme

Evolusi Darwinian
Pragmatisme
Sekularisme

Rev.Perancis :
Liberty,Egality,Fraternity
H.A.M
Demokrasi,
Trias Politica

Meta-narative
Grand-design
Order
Deterministik,Mekanistik



Latar belakang Postmodernisme

Post-Industrial Society :

- World Cities/ World Village
- Global Communication
- Computerizing

Post-modern Culture

Postmodern movement

- Tokoh :

- Ludwig Wittgenstein

Language-game

- Jean Francois Lyotard

Postmo condition

- Jacques Derrida

Deconstructivism

- Feyerabend

Anything goes

- Thomas Kuhn

Paradigm

- Mashab pemikiran :

- Post-structuralism

Menolak univokal/makna tunggal

- Deconstructivism

- Feminism

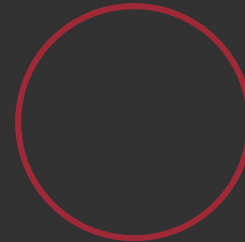
- Posmo

Jean Francois Lyotard

The Postmodern Condition, a Report on knowledge (1979)

- Dasar:
 - Language game (Wittgenstein)
 - Teori Ujaran (Searle)
 - Teori Performative(Austin)
- Key-words :
 - Incredulity towards meta-narrative
 - Incommensurability
 - Local determinism
 - Uncertainty – Chaos – Dissensus
 - Revolusi Permanen
 - Anti Universalitas >> Pluralitas

Postmodern movement



The third force :

Tradisionalisme

Futurisme

Postmodernisme - Hybride

- Sains
- Bahasa
- Masyarakat, Sosial, Budaya, Agama
- Seni
- Lingkungan
- **Arsitektur & Perkotaan**

Seni Postmodern



- Picasso,
- Surrealisme: Salvador dali
- Expresionisme
- Seni Instalasi
- Parodi
- Kitsch
- Eklektisisme

Kritik ke Postmodernisme

- Nihilisme
- Uncertainty happens
- Chaos
- Keragu-raguan



*Otoritas pendefinisi Kebenaran
abad XV - Now*

- Sains, sebagai otoritas pendefinisi kebenaran telah menggeser peran agama.
- Positivisme yg rasional & Empirik menjelaskan Misteri Alam Semesta.



B

rudya





Hatur Nuwun

**Program PASCASARJANA
Unika Soegijapranata**