THE RISE OF MODERNITY: DESCARTES, KANT, HEGEL, + MARX
...was the first to revive the ancient Greek idea that the planets (including Earth) revolve around the Sun (16th century).
...was the first to revive the ancient Greek idea that the planets (including Earth) revolve around the sun (16th century).

But could not figure out (scientifically, at least) that the planets orbited the sun on elliptical paths.
RELIGIOUS CONFLICT
DESIDARIUS ERASMUS
ERASMUS argued that humans possess free will and rationality; they can decide for themselves between right and wrong. **People (not God) determine history.**
MARTIN LUTHER
LUTHER ARGUED THAT HUMAN THINKING WAS PREDETERMINED BY GOD. GOD (NOT PEOPLE) DETERMINES HISTORY.
DOES ARCHITECTURE MAKE HISTORY?
DOES ARCHITECTURE MAKE **HISTORY**?

OR IS ARCHITECTURE CONDITIONED BY **HISTORY**?
IF ANTIQUITY WAS CONCERNED WITH **ONTOLOGY AND METAPHYSICS**...
IF ANTIQUITY WAS CONCERNED WITH **ONTOLOGY AND METAPHYSICS**...

THE ENLIGHTENMENT WAS CONCERNED WITH **EPISTEMOLOGY, RATIONALITY, AND EMPIRICISM**.
IN OTHER WORDS...
IN OTHER WORDS...

THE ENLIGHTENMENT WAS A TIME WHEN RATIONAL HUMAN THINKING WAS SEEN AS SUPERIOR TO BELIEF AND FAITH. ONLY WHAT IS SEEN AND VERIFIED SHOULD BE ACCEPTED AS TRUE.
WHAT IS **EPISTEMOLOGY?**
WHAT IS EPSITEMOLOGY?

A CHANGING WORLDVIEW (TRIGGERED BY MAJOR SOCIETAL, RELIGIOUS, AND SCIENTIFIC SHIFTS) CHALLENGED THE FAITH-BASED ACCEPTANCE OF HISTORIC KNOWLEDGE HANDED DOWN BY AUTHORITATIVE INSTITUTIONS OR FIGURES. (THEY WERE WRONG ANYWAYS).
WHAT IS EPISTEMOLOGY?

A CHANGING WORLDVIEW (TRIGGERED BY MAJOR SOCIETAL, RELIGIOUS, AND SCIENTIFIC SHIFTS) CHALLENGED THE FAITH-BASED ACCEPTANCE OF HISTORIC KNOWLEDGE HANDED DOWN BY AUTHORITATIVE INSTITUTIONS OR FIGURES. (THEY WERE WRONG ANYWAYS).

ALL HUMANS (NOT JUST THE FEW PRIVILEGED) HAVE THE ABILITY (AND THE RIGHT) TO KNOW USING THEIR OWN REASONING SKILLS.
WHAT IS EPISTEMOLOGY?

A CHANGING WORLDVIEW (TRIGGERED BY MAJOR SOCIETAL, RELIGIOUS, AND SCIENTIFIC SHIFTS) CHALLENGED THE FAITH-BASED ACCEPTANCE OF HISTORIC KNOWLEDGE HANDED DOWN BY AUTHORITY INSTITUTIONS OR FIGURES. (THEY WERE WRONG ANYWAYS).

ALL HUMANS (NOT JUST THE FEW PRIVILEGED) HAVE THE ABILITY (AND THE RIGHT) TO KNOW USING THEIR OWN REASONING SKILLS.

BUT WHAT IS KNOWLEDGE?
WHAT IS EPISTEMOLOGY?

A CHANGING WORLDVIEW (TRIGGERED BY MAJOR SOCIETAL, RELIGIOUS, AND SCIENTIFIC SHIFTS) CHALLENGED THE FAITH-BASED ACCEPTANCE OF HISTORIC KNOWLEDGE HANDED DOWN BY AUTHORITATIVE INSTITUTIONS OR FIGURES. (THEY WERE WRONG ANYWAYS).

ALL HUMANS (NOT JUST THE FEW PRIVILEGED) HAVE THE ABILITY (AND THE RIGHT) TO KNOW USING THEIR OWN REASONING SKILLS.

BUT WHAT IS KNOWLEDGE?

HOW CAN WE KNOW?
WHAT IS **EPISTEMOLOGY**?

A CHANGING WORLDVIEW (TRIGGERED BY MAJOR SOCIETAL, RELIGIOUS, AND SCIENTIFIC SHIFTS) **CHALLENGED THE FAITH-BASED ACCEPTANCE OF HISTORIC KNOWLEDGE** HANDED DOWN BY AUTHORITATIVE INSTITUTIONS OR FIGURES. (THEY WERE WRONG ANYWAYS).

**ALL HUMANS** (NOT JUST THE FEW PRIVILEGED) HAVE THE ABILITY (AND THE RIGHT) TO **KNOW** USING THEIR OWN REASONING SKILLS.

BUT **WHAT IS KNOWLEDGE?**

**HOW CAN WE KNOW?**

**HOW CAN WE KNOW THAT WHAT WE KNOW IS TRUE?**
WHAT IS **EPISTEMOLOGY**?

A CHANGING WORLDVIEW (TRIGGERED BY MAJOR SOCIETAL, RELIGIOUS, AND SCIENTIFIC SHIFTS) **CHALLENGED THE FAITH-BASED ACCEPTANCE OF HISTORIC KNOWLEDGE** HANDED DOWN BY AUTHORITATIVE INSTITUTIONS OR FIGURES. (THEY WERE WRONG ANYWAYS).

**ALL HUMANS** (NOT JUST THE FEW PRIVILEGED) HAVE THE ABILITY (AND THE RIGHT) TO **KNOW** USING THEIR OWN REASONING SKILLS.

BUT **WHAT IS KNOWLEDGE?**

**HOW CAN WE KNOW?**

**HOW CAN WE KNOW THAT WHAT WE KNOW IS TRUE?**

**EPISTEMOLOGY** IS THE **PHILOSOPHY OF KNOWLEDGE.**
RENE DESCARTES
LES MEDITATIONS
METAPHYSIQUES
DE RENE DESCARTES
TOUCHANT LA PREMIERE PHILOSOPHIE,
dans lesquelles l’existence de Dieu, & la distinction s’établit entre
l’âme & le corps de l’homme, sont démontrées.
Traduites du Latim de l’Auteur par M. le P. D.L.N.S.
Et les Objections faits contre ces Méditations par diverses
personnes testées, avec les réponses de l’Auteur.
Traduites par M. C.I.R.
A PARIS,
Chez la Veau IEAN CAMYSAT,
ET
PIERRE LE PETIT, Imprimeur ordinaire du Roy,
rue S. Jacques, à la Toufion d’Or.
M. DC. XLVII.
AVEC PRIVILEGE DU ROY.
Is there a belief that I CANNOT doubt?
Is there **ABSOLUTE** certain knowledge?
RENE DESCARTES

I make you BELIEVE that what you know is real! I am so evil!
Maybe so. BUT there IS absolute knowledge!
You see green monster, I can doubt everything I know...
You see green monster, I can doubt everything I know...
But I cannot doubt that I am THINKING!
You see green monster, I can doubt everything I know...
But I cannot doubt that I am THINKING!
And even if I could, my doubt is still a THOUGHT!
You see green monster, I can doubt everything I know...
But I cannot doubt that I am THINKING!
And even if I could, my doubt is still a THOUGHT!
If I THINK, I must EXIST because my thoughts must come from somewhere!
I THINK, THEREFORE I AM!

RENE DESCARTES
Descartes argues that if the mind is a non-physical thinking thing, and the body is a physical non-thinking thing, then the **mind and body must be separate**.
RENE DESCARTES

Wait! How do you know that your body is not real and that I’m deceiving you into thinking you have one?
I don’t. But your question proves my point!
I can only be certain that I EXIST because I
THINK! And my ability to THINK is the
only thing I can be truly certain of!
WHAT IS ENLIGHTENMENT?
This enlightenment requires nothing but freedom—and the most innocent of all may be called “freedom:” freedom to make public use of one’s reason in all matters. Now I hear the cry from all sides: “Do not argue!” The officer says: “Do not argue—drill!” The tax collector: “Do not argue—pay!” The pastor: “Do not argue—believe!” Only one ruler in the world says: “Argue as much as you please, but obey!” We find restrictions on freedom everywhere. But which restriction is harmful to enlightenment? Which restriction is innocent, and which advances enlightenment? I reply: the public use of one’s reason must be free at all times, and this alone can bring enlightenment to mankind. Answering the Question: What is Enlightenment?” (1784)
THIS HAS POWERFUL SOCIO-POLITICAL IMPLICATIONS...
THIS HAS POWERFUL **SOCIO-POLITICAL IMPLICATIONS**...

IF THERE IS NO DIVINE ORDER IN HUMAN SOCIETY, AND IF HUMANS CAN AND SHOULD THINK FOR THEMSELVES, THEN IT IS HARD TO DEFEND SOCIAL PRIVILEGES BASED ON BIRTH AND FAMILY STATUS.
THIS ALSO HAS **PROFOUND IMPLICATIONS FOR ARCHITECTURAL THEORY**...
THIS ALSO HAS **PROFOUND IMPLICATIONS FOR ARCHITECTURAL THEORY**...

HOW CAN ARCHITECTURE SIMPLY ACCEPT VITRUVIAN AUTHORITY **WITHOUT CRITICAL SCRUTINY**?
THIS ALSO HAS PROFOUND IMPLICATIONS FOR ARCHITECTURAL THEORY...

HOW CAN ARCHITECTURE SIMPLY ACCEPT VITRUVIAN AUTHORITY WITHOUT CRITICAL SCRUTINY?

WHO’S TO SAY THAT VITRUVIUS WASN’T WRONG ALL ALONG?
THIS ALSO HAS PROFOUND IMPLICATIONS FOR ARCHITECTURAL THEORY...

HOW CAN ARCHITECTURE SIMPLY ACCEPT VITRUVIAN AUTHORITY WITHOUT CRITICAL SCRUTINY?

WHO’S TO SAY THAT VITRUVIUS WASN’T WRONG ALL ALONG?

ON WHAT BASIS SHOULD ARCHITECTURE ACCEPT THE ORDERS AT ALL?
ENLIGHTENMENT IDEALS:
ENLIGHTENMENT IDEALS:

+ PROGRESS
+ TOLERANCE
+ NATURE
+ FREEDOM
+ EQUALITY
+ EDUCATION
SOUND FAMILIAR?
KANT ARGUES THAT THERE ARE 2 KINDS OF KNOWLEDGE:

1) A *POSTERIORI* KNOWLEDGE COMES DIRECTLY FROM EXPERIENCE
2) A *PRIORI* KNOWLEDGE IS INDEPENDENT OF EXPERIENCE
KANT ARGUES THAT THERE ARE 2 KINDS OF KNOWLEDGE:

1) *A posteriori* knowledge comes directly from experience
2) *A priori* knowledge is independent of experience

WHEREAS FOR PLATO A PROPOSITION WAS TRUE OR FALSE INDEPENDENT OF HUMAN THINKING, FOR KANT PROPOSITIONS ARE ALWAYS JUDGMENTS; AND JUDGMENTS ALWAYS BELONG TO A THINKING SUBJECT.
KANT ARGUES THAT THERE ARE 2 KINDS OF KNOWLEDGE:

1) A *POSTERIORI* KNOWLEDGE COMES DIRECTLY FROM EXPERIENCE
2) A *PRIORI* KNOWLEDGE IS INDEPENDENT OF EXPERIENCE

WHEREAS FOR PLATO A PROPOSITION WAS TRUE OR FALSE INDEPENDENT OF HUMAN THINKING, FOR KANT PROPOSITIONS ARE ALWAYS JUDGMENTS; AND JUDGMENTS ALWAYS BELONG TO A THINKING SUBJECT.

HENCE THERE CAN BE NO KNOWLEDGE INDEPENDENT OF OUR ABILITY TO KNOW. THE WORLD’S EXISTENCE IS ENABLED ONLY BY OUR COGNITIVE APPARATUS. (I.E. TIME AND SPACE DON’T EXIST OUTSIDE OF OUR ABILITY TO CONCEPTUALIZE TIME AND SPACE)
WHAT ABOUT BEAUTY AND AESTHETICS?
WHAT ABOUT BEAUTY AND AESTHETICS?

UNLIKE ALBERTI, WHO ARGUED THAT BEAUTY IN ARCHITECTURE IS AN INHERENT PROPERTY (CONCINNITAS), KANT ARGUES THAT NO OBJECT IS INHERENTLY BEAUTIFUL BECAUSE BEAUTY IS A JUDGMENT; JUDGMENTS ONLY BELONG TO THE THINKING SUBJECT.
WHAT ABOUT BEAUTY AND AESTHETICS?

UNLIKE ALBERTI, WHO ARGUED THAT BEAUTY IN ARCHITECTURE IS AN INHERENT PROPERTY (CONCINNITAS), KANT ARGUES THAT NO OBJECT IS INHERENTLY BEAUTIFUL BECAUSE BEAUTY IS A JUDGMENT; JUDGMENTS ONLY BELONG TO THE THINKING SUBJECT.

AND WHEREAS ALBERTI ARGUED THAT BEAUTY CAN UNDERSTOOD CONCEPTUALLY, KANT ARGUES THAT BEAUTY IS DISINTERESTED, SUBJECTIVE, AND NON-CONCEPTUAL; THAT IS, THINGS CAN ONLY BE JUDGED AS BEAUTIFUL INDEPENDENT OF ANY PERSONAL ATTACHMENTS OR ANY PRECONCEIVED IDEAS OF WHAT BEAUTY IS. SUCH ATTACHMENTS ARE ALWAYS CONCEPTUAL.
WHAT ABOUT BEAUTY AND AESTHETICS?

UNLIKE ALBERTI, WHO ARGUED THAT BEAUTY IN ARCHITECTURE IS AN INHERENT PROPERTY (CONCINNITAS), KANT ARGUES THAT NO OBJECT IS INHERENTLY BEAUTIFUL BECAUSE BEAUTY IS A JUDGMENT; JUDGMENTS ONLY BELONG TO THE THINKING SUBJECT.

AND WHEREAS ALBERTI ARGUED THAT BEAUTY CAN UNDERSTOOD CONCEPTUALLY, KANT ARGUES THAT BEAUTY IS DISINTERESTED, SUBJECTIVE, AND NON-CONCEPTUAL; THAT IS, THINGS CAN ONLY BE JUDGED AS BEAUTIFUL INDEPENDENT OF ANY PERSONAL ATTACHMENTS OR ANY PRECONCEIVED IDEAS OF WHAT BEAUTY IS. SUCH ATTACHMENTS ARE ALWAYS CONCEPTUAL.

PARADOXICALLY, SUBJECTIVE JUDGMENTS OF BEAUTY MAKE BEAUTY PARTICULARLY OBJECTIVE; YOU CAN’T JUDGE A BUILDING AS BEAUTIFUL SIMPLY BECAUSE YOU “LIKE” COLUMNS OR CONCRETE, OR BECAUSE YOU ARE A MODERNIST, OR BECAUSE IT RELATES TO NATURE (THESE ARE CONCEPTUAL SCHEMAS).
TO SAY “ALL BUILDINGS THAT HAVE CONCINNITAS ARE BEAUTIFUL, THIS BUILDING HAS CONCINNITAS, THEREFORE IT IS BEAUTIFUL” IS NOT AN AESTHETIC JUDGMENT, IT IS A LOGICAL ARGUMENT.
THIS COMPLICATES ARCHITECTURE’S LEGITIMATION IN / THROUGH NATURE.
THIS COMPLICATES ARCHITECTURE’S LEGITIMATION IN / THROUGH NATURE.
THIS COMPLICATES ARCHITECTURE’S LEGITIMATION IN RECEIVED HISTORIES.
THIS COMPLICATES ARCHITECTURE’S LEGITIMATION IN / THROUGH NATURE.
THIS COMPLICATES ARCHITECTURE’S LEGITIMATION IN RECEIVED HISTORIES.
THIS COMPLICATES ARCHITECTURE’S RELATIONSHIP TO SOCIETY.
DIEGO VELÁSQUEZ,
LAS MANINAS (1656)