

# Science before Science Study Group

Week Nine

# Begin with Prayer

## **Prayer before Study**

Almighty God, You who are the creator of all things and our loving Father, send us Your Holy Spirit to illuminate our minds so that we can understand how You have revealed Yourself to us through the world around us.

Grant to me  
keenness of mind  
capacity to remember,  
skill in learning,  
subtlety to interpret,  
and eloquence in speech.

May You guide the beginning of my work, direct its progress, and bring it to completion.

We ask this through Thy Son, Jesus Christ

**Amen**

# Last Week

- Gödel theorem
  - Idealism – cannot know truth
  - Realism – must go outside of the system
- Truth is the conformity of our ideas to reality (and not conformity of our ideas to our ideas!)
- Sense thinking – particulars; phantasm
  - A physical change happens but also another kind of change
- A whole lot of images don't make an idea
  - Difference between using a thing and knowing a thing!
- Intellect is that power that allows us to abstract universals and generalities from the sense data
  - Ideas are general; images are particular
  - We abstract substance after we sense any particular thing
  - The intellect makes 'visible' what is hidden to the sensorial power
  - The intellect extracts the essence – the 'what is it' of the thing
  - Intellect – inter / legere
- Intellectual knowledge is analagous to sensorial knowledge
  - Sensorial – particular – phantasms – form of the particular thing – I become the form of the thing in a way
  - Intellectual – general – ideas – universals abstracted from phantasms – I become the form
  - Sensorial and intellectual knowledge are not a kind of a normal physical change
- Intellectual knowledge – receiving the substantial form (essence) of the thing
  - Intellectual knowledge is immaterial in nature

# Tonight's Agenda

- Finish Chapter 4
  - Immaterial nature of intellectual knowledge
  - The Primacy of Being – the first thing we know
  - Being as a noun (*ens*) and a verb (*esse*)
  - Real Being and Beings of Reason
  - Intelligibility and Essence
  - Existence precedes essence
  - What is truth?
  - Transcendentals
  - Principle of sufficient reason

# Storyline

- Truth is the conformance of the mind to reality
  - Gödel's theorem's points to the radical connectedness of reality
- Being is an ocean – a mystery
- Being is primary – not a choice we make
- It is so huge we need to look at it from different directions
  - The transcendentals
- *Being is* to the extent that it *is one* – more unified the more intelligible
- All things are true to the extent that they are – they have an essential form that can be received by a knowing mind
- Potential relation for me since I don't know everything
- Must be relation to a knowing mind
- Principle of Sufficient Reason – must have reason in itself or in another
- Actually leads us to St. Thomas' 4<sup>th</sup> proof of the existence of God
- Perfect conformity to reality - Truth

# Intellectual Knowledge

- I observe Fido. I abstract from my sensorial knowledge what Fido is!
  - The idea of 'dogness'
  - In principle only need one dog to get the idea
  - Quicker and connatural to have many dogs
- I acquire ....
  - The idea of what Fido is
  - The idea of dogness
  - Which is the essence of Fido
  - Which is the substantial form of Fido
  - But I don't become Fido nor dogness (i.e. it is not a **physical change**)
  - I acquire the form without losing myself
  - It is an immaterial (non-physical or also called spiritual) change

# Intellectual Knowledge

- Profound nature of knowing
  - The unity of the knower and the known
  - A world apart – a world where the knower and the known unite
  - Unlike sensorial knowledge that is partly physical
    - Physical change in the senses; the memory
  - Intellectual knowledge is totally immaterial (spiritual)
  - If it wasn't totally immaterial it would lose its general nature and be particular

# Immaterial Substantial Form

- Immateriality of man's substantial form follows from the immateriality of man's intellect!
  - Remember accident is something that inheres in something else
  - Intellect is accident or quality of man's substantial form
  - Must be immaterial or else it would discretize the general knowledge of the intellect
- The act of understanding is a purely immaterial power
  - Material beings must be particular and if substantial form must have correlative particular matter
  - But our intellect is not particular



# Reflecting on the Immateriality of the Intellect

- Think about justice
  - How long or wide is it? How much does it weigh?
  - Silly - because justice is general
- I can have two things in one place in my mind
  - Not in the physical world (e.g. bat and ball)
  - I can bring two separate things together – e.g. black and cat
- Reflect on your thinking about justice
  - You are in the same place as your thought

# What is Truth? Need Being

- Being is rich beyond words
- It is primary
- Two concepts
  - Noun – a being (ens)
  - Verb – to be (esse)
- “to be” is over-flowing with intelligibility
- Being infuses all
  - To be is primary
  - To be is to be something

# Existence and Essence

- Existence is first
  - But we quickly leave it behind as we seek to know “what a thing is”
  - But we can know whatness without necessarily knowing that something exists
    - E.g. we can know dogness even though all dogs were wiped out in a plague!
- Need judgement to decide if something exists
  - E.g. Black holes
    1. Actually exist
    2. Could exist
    3. Is a being of reason (existence only in our minds)
- Being from the standpoint of human intelligibility is the essence

# Being Sub-division

- Verb
- Noun
  - Real being (pigs, cats, flowers, etc)
  - Beings of Reason (mathematics, category, prime matter, subject and predicate, nothing, logic, Gödel's theorem)

# Being is Intelligible

- The being of a thing is what we know
- The degree something is, the more intelligible
  - i.e. the closer the thing is to nothing, the less intelligible it is
- Finding the essence is not a logical exercise
- Essence is what a thing is as intelligible

# Essence

- Remember: the form is what a thing actually is and matter is what is capable of becoming
- Two Important points
  - Material things are less understandable (because they are less)
  - Our intellect leaves behind the particular
- Essence in two ways
  - Intelligibility in and of itself
    - in its entirety
  - Intelligibility to us
    - Form and matter
    - Substantial form

# What is Truth?

- It is not mathematics
- It is not knowing ideas
- It is the conformity of the mind with reality
- Logical propositions – are true only in an analogous sense
  - Rules are chosen (yet come from reality somewhere)
  - Gödel's theorem is about this made-up world
  - It is interesting but a much small area of knowing
- Gödel's theorem leads us to see the interconnectedness of the world

# Being is an Ocean to be Explored

- Understanding requires a primary effort of the mind
  - Not technical, algorithmic or problem solving sort of thinking
  - Requires meditation and contemplation
- A mystery
  - Super-intelligible
  - Not unintelligible
- It is primary – not defined but seen



# Being is Primary

- It is primary – not by choice
  - Not like some areas of science that start with a convenient hypothesis
- Principle of Identity
  - Every *being is what it is!*
  - Interchangeability of being with intelligibility
    - Not a tautology ( $x=x$ )
- Being is so big that we need different ways of looking at it and describing it - transcendentals

# Transcendentals

- Being from different standpoints
  - Being
  - Reality or thingness
  - Unity
  - Identity as something set apart
  - Truth
  - Goodness
  - Beauty is the 'splendor of all the above'

# Look at Unity (related to the topic of truth)

- A being is to the extent that it is one
- The degree to which it is one is the degree to which it is
- The more unified, the more intelligible

# All Things are True

- All things are true to the extent that they are
- How so?
  - Conformity with the mind is standard for truth
  - St. Thomas says, the “minds act of intellection itself constitutes and completes the relation of conformity which is the nature of all truth”
  - If something is intelligible it already must have the relation to a mind
    - It has an essential form that can be received
    - Potential relation – I don't know all things all the time
    - But must be actual somewhere
    - If all thing have relation to a knowing mind, where does this relation have its being?

# Principle of Sufficient Reason

- Everything must have its *reason for being* in itself or in another.
  - Reason for being refers to one or more of the transcendentals
  - Reason of being in this case is *intelligibility*
  - There must be a being that contains the whole ground of it being