

Lecture I.

Topic: I shall not begin with an outline of what I propose to do in these lectures
nor with a proof of the existence of the importance of the matter to be discussed
nor with a defence of the method employed

In fact I think I shall be doing very well if I succeed in conveying some apprehension of an outline of an important question and its method in ~~eight~~ twelve hours

The question roughly is What is knowledge? Not whether there is? Whether there is seems to me a blind alley, an evasion of the significant question, What is it?

The one preliminary point is that the exposition is cumulative.

Tonight a basic line of reference: to it we shall keep adding steadily

Act of Understanding

1. Description.

Narrative of Archimedes

Delight: a Archimedes b Life of study, research (Newton)
c even backward student occasional glimpse

Unexpected: not "The Thinker"

no rules for significant questions

teaching, watch class, ahead, in pace, w study

Internally conditioned

anyone can see hear feel taste smell

worrying it out: define terms, try,

Difference between first occurrence and repetition

initial period of darkness groping

ease facility at will

Clustering: all about same subject -- mastery -- 6th sense
mat

Specialization: that's not my line

Spontaneous and analysed

arts skills crafts technique know-how (Indian guide)
basis of domestic commerce production politics dipl

maths science phil

(not only understand but also analyse it out)

reproduce in another by talking to him)

Both intelligence - both necessary (concrete applications

a matter of adjusting rules to what can be done

here and now)

Analysed provides simpler and neater examples.

2. Analysis of an Act of Understanding.

Point:

Link between sensible data, imagined representations and objects of thought.

What is an object of thought? For the moment it is what you can think about but cannot see or imagine.

Point: position without magnitude

Line: ~~line~~ length without depth or breadth

Geometers talk about ^{them}, think about them, cannot imagine em

How does one reach objects of thought?

Imagine cart-wheel; Ask why round (formal, not ^{efficient} ^{mathematical} ^{material} ^{refined} ^{fin} ^{inst} ^{mat})

Definition: parrot repetition or expression of understanding necessary and sufficient for uniform roundness, grasped in imagined presentation.

Why are straight lines straight?

Definition or Postulate

Lower and Higher Term

Higher is constructed by some law or rule relating lower terms -- law or rule may be definition or postulate

Importance of Higher Terms: exact deduction

Inverse procedure: from what can be deduced to rule areas calculated, theorems on similar triangles if parallel postulate

Plane becomes higher term.

Surreptitious insights in Euclid: 1st Problem

ie incomplete analysis of act of understanding

3. Higher Viewpoint. Lots of talk and writing. What precisely is it?

Illustrate by simplest example: arithmetic to algebra

Arithmetic: definitions (one insight for infinite concepts) deductive expansion (addition tables) homogeneous expansion (new ideas without modification of old) (signs, equations, for fractions)

Algebra: rules/governing operations (define them) operations yielding numbers (number is what can be operated on to yield a number) where do rules come from: insight into doing arithm

Mathematical series of higher viewpoints

image - insight - object of thought - symbol

symbolic image - insight - higher object of thought

4. Explanatory Abstraction: More Technical Analysis of Act of Understanding

a Act and Content

Seeing hearing
What is seen, what is heard...

b Sensible datum: content of act of seeing hearing touching..

Image: content of act of imagining
Idea: content of act of understanding insight seeing the point
grasping the issue, catching on, knowing why, knowing the reason cause
Concept: content of act of conceiving defining thinking
considering supposing meaning

c Abstraction: improper, seeing prescind from sounds
proper, applied to ideas and concepts
Source of distinctions: significant insignificant; relevant
irrelevant; essential incidental; common proper; universal particular
Two kinds: explanatory; heuristic, anticipatory

Key step: exact grasp of idea, of content of insight /idea
appeal to personal experience; blind : color :: stupid:
if you get hold of it, ok; if not, flung; Ar always old

Example 1: circle, list concepts: if radii equal no bumps possible
list image

possibility, necessity; not in general

Idea = pre-conceptual, intelligible form emergent in sensible data

Example 2: counting "and so forth" = grasping rule
not grasping general rule, arith progr, general; child

Basically abstraction is adding, enrichment

Second moment: relevant significant vs irrelevant insignificant

Third moment: thinking it, defining; automatically abstract

Essential: what is necessary for expression of idea

Incidental: what may or may not be added to expression of idea

Theorem: similars are similarly understood

aliter, difference in insight supposes significantly
different data.

Eg. at end of assembly line: same principles of constr & operatn

For different insight, need for different data

Holds even if one only, eg evolution; if similar, then same idea

Universal: essential as valid for all similar instances

Particular: instance itself

indeterminate: imagined only, mts about Shangri-la

determinate: also given, Everest Vesuvius Mt Royal

d Empirical residue: what is always left behind in all cases

of abstraction: instance, interference of different laws, continuum.

Lecture 2.

5. Explanatory System

- a Explanatory system is a related set of explanatory abstractions
Domain of data, images; set of insights; ordered set of
concepts; ordered series of propositions.
- b To each idea there pertains a set of concepts; circle, posit^{ive}, int^{ent}
- c Ideas need not be isolated: circle str line plane between
add subtract multiply divide pow root
- d Primitive and derived concepts.
Derived: defined by primitive, triangle, 3-sided figure etc
Primitive: terms and relations; relations fix terms; terms
fix relations; both from idea; both simultaneous
Hence need for leap into new subject, department
Leap needed for discovery, invention
Necessity of technical terms
- e If primitive are higher terms, then derived higher
In Euclid, derived that rest on str line, circle, plane are highr
- f Primitive and derived propositions
Primitive: definitions, postulates, common notions
Derived: anything you can prove from primitive; syllogism
- g Mastery: analysed
Set of insights; set of primitive terms and propositions;
sets of derived terms; sets of deductions
Where others only see multiple incidental particular contingent
where others just read and pronounce the words
where others just gape at symbols
acquired mastery without hesitation
grasps unity in multiplicity, essential over-ruling incidental,
universal illustrated in particular, necessary relating contingent

Empirical Method: Two Phases 1 Classical 2 Statistical

a Possible explanatory systems: as many as sets of definitions and postulates yielding derived terms and derived propositions.

Empirical method: selection of possible explanatory system that fits the data, the data of an assigned domain.

b Two basic principles: exclusion; relevance.

c Exclusion: only systems that involve precisely defined sensible difference

There is a problem of choice between system A and system B if A implies sensible datum P where B implies sensible datum Q where P and Q are defined by systems A and B.

Pair of scissors: eliminate what cannot be settled; and so able to settle all questions that can arise.

Observe that field left to philosophy; eg what is necessary in every system.

d Relevance: more difficult

"Hypotheses non fingo" yet it was a hypothesis, has been revised
What was Newton's meaning?

a' Descartes' theory of vortices

b' Newton on ether; precise 700,000 ad rare and as elastic as air
precise implications if distributed according to inverse square
explain gravitation, luminous phenomena; yet for Newton just
a hypothesis. Why?

c' Understand cart-wheel: what for? materially? efficiently?
Galilei: what is free fall in vacuum? constant acceleration
Kepler: ellipse, area-time, mean distance -- period
Newton: G, so that deduction of planetary satellite comet project

d' "hypothesis" meant not merely formulation but primarily
additional data that were not observed.

There is another aspect.

a' Must the higher term be mathematical? Circle Ellipse Acceleration
Pure mathematicism: Copernicus, Kepler, Descartes
Empiricism: Gilbert, Boyle

b' What is mass? It is a higher term. It is not mathematical.
Masses are what stand in certain relations that are established
experimentally. Lever, balance, impact, free fall.

Not "heavy" "light" "weight"; no direct experience; mass
is a term defined by experimental relations between masses.

Cp. "E" and "H" defined by Clerk-Maxwell's equations.

Hypotheses non fingo means: 1) use higher terms 2) there
are non-mathematical higher terms 3) such non-mathematical
higher terms are not to be confused with appeal to "occult
qualities" "unobserved data" etc.

e Principle of Relevance.

Terms are conjugate when they are defined by their relations.

Conjugate ~~aa~~ terms are empirical when their defining relations
admit experimental proof.

Explanatory systems are relevant to empirical inquiry when
their higher terms are empirical conjugate terms.

spring/

Empirical Method, Classical Phase 2

Further question: Must the relations be mathematical?

It is asserted: post-Newtonian mathematicism.

It is not empirical- implied in notion of higher term,
conjugate higher term, empirical conjugate higher term.

Seems to be secondary principle of relevance that
requires relations to be mathematical with decreasing stringency
as one advances from physics to chemistry, from chemistry to
biology, from biology to human sciences.

Chemistry defines hundreds of thousands of compounds by
more hundred elements. Defines elements by pattern of relations
of periodic table. Periodic table not a mathematical series
though with many mathematical aspects and relations

Necessity of getting beyond mathematical exploited by
logical theories of science. Strong on definitions, postulates,
derived terms, deductions. Weak on connection with data.
It "corresponds"

Heuristic Abstraction

Heuristic notion: a unknown b employed in making it known.
eg x and equation involving x

Basic heuristic notion "nature" : a unknown, what will be
known when I understand; b employed in reaching understanding,
for similars similarly understood

The "nature" of "red" is what I will know when I understand
"red"; virtus dormitiva.

Other names: "such as to..." "sort of thing that..."
"unspecified correlation" "indeterminate function"

Applied to a sensible similarity b similarities of
conjunction, separation, sequence, proportion, sequences of
proportions, etc. etc. Curve fitting

Bold stroke and successive approximation.

Settle law of free fall; then account for air resistance, friction
Boyle Charles Gay-Lussac Van der Waal

Revision of initial classifications: from sensible similarity
to criteria of relevance, significance

Succession of revisions: new conjugate terms, but conjugate
as such invariant; new laws, new correlations, ground revision.

Fixed in process of revising is sensible similarity; it is
the control for inquiry, verification, application.

Heuristic abstraction: dynamic structure of a nature plus
sensible similarity b conjugates in successive systems.

Empirical method, a method of ever closer approximation to
complete account of data that are given.

Empirical Method - Transition: Laws and Events.

1. Abstractive character of observation and experiment

Observation: concrete observer and concrete situation but from a viewpoint (department, suppose rest of science, with an objective (settle precisely defined issue not exhaustive but selective (viewpoint objective results in language or symbolism (both abstractive

Experiment: lab conditions; make concrete approximate to ideal plan of operations exact measurements, but made many times, probable mean concrete materials, but supposed to satisfy theoret definitions concrete instruments, but supposed ideal, schematic structure exp repeated many times; results win margin of error

Therefore obs & exp no good. NO. But abstractive; aim to determine explanatory system

2. Laws, in abstract, absolutely stated in concrete, caeteris paribus; necessity of law does not make success of demonstration inevitable. Mater oversights other factors can intervene.

What does caeteris paribus mean?

Determinist: if you know all the laws and all the data, then you can predict with certitude ie caeteris paribus means outside does not interfere; if everything considered then nothing to interfere concrete = totality of abstractions

Determinist translates Latin correctly. Proximate reference is to exclude outside interference. Ultimate aim is that all events within closed area occur according to law. Exclude double occurrence. Chemical exp & fall of plaster.

Knowledge of all laws and all data does not exclude double occurrences, coincidences Possible to reduce double occurrence to earlier coincidence but reduction is caeteris paribus

Take an initial situation; N distinct elements; as many coincidences as combinations

Future coincidences deducible from initial coincidences but separately, one at a time, corrected by interferences from other coincidences

Determinist notion of science utterly fanciful: information correct to n decimals, messy interferences, etc.

Misconception of concrete: it is not a full set of abstractions Misconception of explanation: initial situation unexplained, and so all subsequent concrete explanations sit equally unexplained irrelevant to world in which we live: nothing in conclusions that not in premises; something in subsequent not in prior situations Misconception of science. Prophet predicting miracles is not science. Science is comprehensive. Grasp of whole by clustering insights, mastery.

If situations deducible, then conjugate; defined by laws relating A to B, B to C; if conjugate, then abstract.

Every single occurrence according to law

Every coincidence reducible to other coincidence

But still science is not determinist.

Statistical Phase

What is a chance aggregate? Some indeterminacy, Where?

- a not necessarily in data or in description of data
slow-motion picture of dice
possibility of assigning trajectory and momentum of every movement
but not possible to assign law governing relations between
successive elements
just opposite of classical supposition: some day some one will
succeed in discovering such a law
- b do chance aggregates exist?
how can one tell until one knows all the laws?
Empirical Method. Not abstract logic but deed and fact,
trial and error. Classical law because it works. Ditto.
Again, rid of empir meth of assumption. Either systematic
or non-systematic.
Not only rid of assumption, but ready to study events; as
shown, events are not covered solely by laws.
Empirical method involves alternative complementary phase.
- c Probability = intelligibility of statistical phase.
Chance aggregate means aggregate as not understood
Probability aggregate means same as understood.
What is the insight involved?
General Form of Insight. Cp definition of circle, result.
Data: not qua similar but qua together and successive
field of coincidences
Data of events: two aspects a subject to law b occur caeteris parib
systematic element and non-systematic element.
Probability = divergence of concrete from systematic must
be non-systematic. Were it not, it would/diverge.

not/

Concrete Illustration.

Casting dice, 36 possibilities
No systematic influence favoring any of \pm 36.
Reasonable expectation a there is no reasonable expectation
of any one of 36 rather than any other b there cannot be
systematic divergence for any one of 36 so that regularly it
occurs oftener than 1 in 36 throws.

A posteriori frequencies.

A general formula; adaptations of Laplace Poisson Gauss.
Observations, curve fitting, removal of trends.

More general formula: Quantum theory.

Data, Images, Percepts.

1. We cannot understand without understanding something.
Ergo, there has to be a component in knowing that is presupposed and complemented by inquiry and insight.
Ergo, definition of data, images, percepts by relation of presupposition and complementation to inquiry and insight.
2. Distinction of data and images: first approximation.
Distinction between maths and empirical science: mathematicians do not care whether there are perfect circles; operate from images. Empirical scientists check against data, correct revise to maximum conformity with data.
3. Free and perceptual images. Second approximation.
Free: can be produced more or less at will.
Perceptual: integrations of data with memories and anticipations.
Will the third step up support weight. Yes, perceptual.
No, free.
Flow of percepts: Function of a living subject dealing efficiently and economically with environment b flow of data c corrections of a by b (going down another step when already on floor
eg. successive tones, melodies; successive syllables, sentences; rectangular box (percept, as made; datum, as drawn)
4. Data and image: third approximation.
Empirical science not concerned with system of flow of percepts of physicists, chemists, biologists.
Spontaneously integrated animal or man has to recede; desire to understand has to take charge; difficulty of scientific observation.
Datum: the residual presentation when all memories and anticipations removed.
5. Data of consciousness: acts of seeing hearing, imagining, desiring fearing, inquiring understanding conceiving reflecting judging choosing
Direct und : sensible data :: intros und : data of consc
No difference qua understanding; begin from experience of understanding; relate to inquiry, presentations, concepts, in process of maths, class phase, statist phase
Same type of progress: more accurate definitions
Limiting experiences: constructs also experienced; identity of experimenter, experimented on, experimentation.
6. Data images percepts are ineffable.
Without distinction relation identification
Hence indirect definition by relations
Hence fallacy of unambiguous introspection

Things

1. Indigitating account of meaning: elements, compounds, plants, animals, men, etc.
2. Subst. form: that by which thing is one and identical. Grasped in data as instances. Idea.
Permanence: identity in temporally distinct data; identity prior.
Subject to error: 4 or 100 elements.
3. Proportionate thing: data given to us.
Each datum: 1) an instance 2) similar to others 3) together and successive w others
From each viewpoint, distinct understanding
Since data same: complementary insights of same object
Since insights complementary, formulations complementary.
4. Unity and identity (idea) to something (concept)
Differentiation by descriptive or conjugate terms; by probable expectations; individual, revert to data.
Unity and identity: presupposed by inquiry (change not annihilation, substitution, advent), by verification, application
3 invariants: identity, conjugate, frequency.
5. Historical Contact.
Ar. Categories: First and Second Substance (ousia)
Met Z, What is substance, cumulative to chap 17
What is man = Why are these the data of a man
to ti estiv to ti nv eivai
Cor 1: Our mode of inquiry and learning irrelevant to knowledge of non-composite beings. vs. Platonists.
Cor 2: Whenever unity, not like heap, then besides elements there is form, principle, nature, that is cause of being Earth and fire: flesh.

Explanatory syllogism in limit.

Disc illuminated, always disc; moon phases.

Because moon is spherical, it runs through its phases.

M ground of P in S.

Eliminate conceptual, M and S. S data, M idea, P is Subst.

Definition: same data understood as "animal" "rational" "man"

Formal predication: further insight, "mortal"

Syllogism: ~~skik~~ further insight w middle term

Inherence: same data understood in complementary fashion; conjugates expectations "inhere" in substance; inherence nothing to do with pin-cushion.

First substance: unity and identity grasped in data as instances.

Second substance: something differentiated by descriptive or conjugate terms.

Reversion to sense or imagination for singular.

Analysis of Judgment. 11

1. Utterance, Sentence, Proposition.
Two attitudes towards propositions.
2. Division of propositions as division of judgments.
Universal particular singular
Absolute or predicative
Affirmative or negative, categorical or modal
Simple or compound (conjunctive, hypothetical, causal, disjunctive)
3. Direct and indirect content
Proper and borrowed content
4. Questions for intelligence and questions for reflection.

Structure of Knowing.

1. Level of experience, of intelligence, of reflection.
2. Introspection and reflection; former a generalization.
3. Levels related by presupposition and complementation
4. Total and partial increments of knowing.
5. Relations between total increments: Logical, Dialectical
6. Influence of former insights on present insight.
Influence of former judgments on present judgment.
Former judgments elucidate, clarify, qualify, substantiate, prove, persuade to present judgment.
7. Present total ~~increment~~ a tiny fragment w respect to totality of true judgments
8. Habitual character of knowing: only one judgment at a time; either general and vague; or precise but particular. Woods or trees. We want to contemplate. We can only add.

Reflective Understanding.

1. Insight, meeting question for reflection, making judgment possible and rationally necessary.
grasps sufficiency of evidence; problem, What is sufficient?
2. Sufficient evidence = virtually unconditioned
Distinguish absolutely and virtually unconditioned.
Illustrate virtually unconditioned in
 - a syllogistic inference
 - b analytic propositions
 - c concrete judgments of fact [Importance of Newman]
 - d empirical generalizations

Corollaries to Analysis of Reflective Insight.

1. Syllogism is 1) not starting point for infinite regress but 2) exhibition of virtually unconditioned.
2. There is no need for infinite regress, for there are analytic propositions and judgments of fact of equal validity to syllogistic inference
3. Distinguish inference 1) as rule governing process of propositions (calculating machine) and 2) as materials prepared for reflective understanding and judgment.
4. Escapism of ultimate appeal to logic technique method rule contrivance.
Ultimate appeal has to be to inner acts, personal acts; your knowledge is your responsibility.
Bear witness to truth. You cannot impose it.
5. All judgments have ultimately the same basis; virtually unconditioned.
Kinds of evidence vary; possibility of expressing evidence varies. Act and criterion invariant.
6. Opinions, if judgments, reduce to virtually unconditioned; eg best available scientific opinion, ie squares with known relevant data
7. Kant: analytic and synthetic a priori.
Both presuppose insight: analytic seems to be covert insight.
All bodies are extended: some hold that some bodies are points with dynamic properties; others hold that imagination irrelevant to invisible, impalpable; hence all imagined bodies are extended, is true, but it is disputable that all are imaginable.
8. Real issue: existence theorem.
Anyone may define terms and set up analytic propositions ad nauseam.
Aquinas I II 66 5 4m: conclusions to principles; principles to terms; terms to wisdom
Wisdom = Habitual cluster of reflective insights with respect to ultimates.
Existence theorem of mathematics: define; consistency (perhaps coherence to be required, less than construct, more than consistency)
Existence theorem of empirical science: definitive insights; ie succession of thesis, antithesis, higher synthesis till highest possible covering all data reached.
Existence theorem of philosophy: coming to it eventually ??

Corollaries to Reflective Insight (continued)

9. Kant's criterion for valid use of categories; schematism of imagination.
Excludes theories not rules for constructing images, eg relativity, quantum theory.
Mistake: oversight of grasp of virtually unconditioned; it makes judgment rationally possible and rationally necessary.
10. Kantian Transcendental Dialectic.
Supposes unconditioned subsequent to judgment; error.
Hence Hegelianism.
11. Fundamental Importance of Newman.
Concrete judgment of fact, key to knowing existence, being in act.

The Pure Desire to Know.

1. Desire: question in words; question conceived; wonder prior to conception, to judgment, to direct or reflective insight.
Desire to understand, to reach truth.
2. Desire: Pure; Inhibited; Reinforced.
Inhibited, uninterested in understanding, in truth.
Reinforced, interested but only up to a point and for sake of something else; practical. Can't make value or utility ultimate, prior to truth; for utility or value ~~make~~ may be mistaken.
Pure: disinterestedness of understanding or science or truth.
3. Range of pure desire.
All questions we can 1) not answer but 2) ask.
All concepts and judgments presuppose desire to know;
range of pure desire equal to range of possible conception and judgment.
But we can conceive unknown, unknowable; we can affirm that A is unknown and B unknowable.
Hence range unlimited.
Q. Can there not be something so alien to our modes of knowledge that we cannot conceive it in any fashion?
A. We ask about that. Therefore range unlimited.
4. Confirmed: transcendental illusion; positivists terra incognita.
5. Confirmed: virtually unconditioned; absoluteness of truth (anyone anywhere any time either will agree or be mistaken)
6. Scientific inquiry supposes disinterested orientation, not inquiry into flow percepts (interested) but inquiry into data.
7. Error: interference with pure desire from inhibiting and reinforcing desires.
If intelligent, if unconditioned, then true, objective
If interference, subjective, erroneous.
Not arguing; think it out for yourself; if this incorrect, then it would be right if due to subjective interference and erroneous if due to pure desire.

Radical Intellectual Conversion.

1. Intellectual conversion: turning from what seems ~~taxa~~ to what is.

Incidental: from a particular error to a particular truth

Radical: making explicit and deliberate the pure desire acknowledging existence and influence of inhib reinfor effecting transition from spontaneous to explicit, deliberate, effectively combative pure desire.

2. Not any doctrine: if doctrine correct, then that results from pure desire.

Not any method technique: if correct, then because based on pure desire.

Not any list of fallacies: if fallacious, then because contrary to pure desire.

3. Immediately applicable: not something that we can begin only after something else is done; takes everyone just as he is.

Completely general: against every error qua error; not an adherence to some truth, but an adherence to principle whence truth reached

Solid: no danger of it being a mask for some particular favorite doctrine, favorite method, etc.

Invulnerable: to object is to appeal to obscurantism, to stupidity, to silliness.

4. Contrast with Descartes' universal methodic doubt.

a Unreasonable, equal suspicion for true and false.

b Fake, effective doubt would result in mental infancy; acquired habits of mind do not await our bidding to vanish

c Excessive commitment: doubt everything means prove everything; but scientists, technicians, common sense do not expect everything from philosophers: claim to omni-competence results in charge of incompetence

d Gilson, Le role de la pensee medievale dans la formation du systeme cartesien, Paris 1930, pp 184 ff: universal doubt a technique to prepare way for highly implausible system.

e Descartes did not return to mental infancy, become pre-Socratic.

f Cartesian assumption of deductive method provides rationale for universal doubt; risk all to gain all.

But if deductive method doubted, then doubt becomes unreasonable; in general, either not universal or else unreasonable; because either undoubted reasons for doubting or not.

g Cartesian program was a universal commitment: a) cogito b) God c) divine attributes d) deduction of principles of mechanics

5. Function of Radical Conversion.

Logical: bludgeon against obscurantism stupidity silliness

Psychological: pull out of orientation of flow of percepts; memories and anticipations added to data, not from orientation of pure desire to know, but proximately from orientation of efficiently and economically dealing with environment.

pull out of attitude that world of sense is criterion of reality; of deprecatory remarks about bloodless ballet of categories; of utilitarianism, pragmatism of spontaneous type; head for whatever is intelligently conceived and reasonably affirmed

Aquinas: natural desire to see God.

Notion of Being

1. Being is objective of pure and unrestricted desire to know.
a because pure, what is intelligently grasped and reasonably affirmed
b because unrestricted, includes whole universe in all parts, aspects, relations.
Hence, "Apart from being, there is nothing."
2. Collectively, A and B and C... Absolutely universal
Distributively, A or B or C... Absolutely concrete
In both cases because it prescind from nothing whatever.
3. Notion: any distinguishable factor in knowing; hence also desire, orientation, as well as actual insight formulation judgment
Pure notion: desire-itself unrestricted desire
spontaneous: the desire itself
reflective: being is defined by conceiving it as objective of pure and unrestricted desire.
Composite notion: the desire in conjunction with elements towards answers or with answers.
4. Composition is manifold:
a pure desire with questions that express desire
b pure desire with materials for questions
c pure desire with answers to questions
d answers that through pure desire lead to further questions.

c Plato, "If you ask because you do not know the answer, how will you ~~know~~ recognize the answer when you get it?"
Process has begun; will proceed in determinate fashion to reach result under determinate conditions.
What is log of root minus one?
To what power must "e" be raised to obtain "i": a number that according to rules will reach another number.
Answer is new, yet not entirely new.

d pure desire linked with materials through question
Distinguish formulated question and desire itself
"wonder" the beginning of science; Ar. on diagonal

Ar. Agent intellect; Th. Light of Intellect; Kant "Original synthetic unity of apperception" Dynamic, Connection w God, Unity
5. Pure Desire 1) penetrates all contents 2) places each in context of all others 3) open to ever further acquisitions
Penetrates: if sensing, thinking, etc., something sensed, thought
Places in context: partial into total increments; answers into views, doctrines, departments, systems; questions arranged by methods, techniques, etc.
Open to ever more: unrestricted.
6. Pure notion is uniform; composite notion is protean
Uniform: one and same desire for intelligibility and absolute with unrestricted range.
Kantian transcendental illusion: supposes existence of desire but denies possibility of answering. Positivist, ditto.
Composite knowing notion protean: varies with what individual knows or thinks he knows.

7. The composite notion is self-defining.
Being is universe; a being is what pertains to universe.
But what is universe? Depends upon your formulations and judgments; and these are part of composite notion of being.
Materialist, phenomenalist, idealist, essentialist.

Philosophy = Strategic set of judgements determining general character of universe
either directly, eg materialism, Platonism, etc.
or indirectly, via theory of knowledge

Radical intellectual conversion a) is universally acceptable inasmuch as no one claims exact expression of his philosophy to be false b) provides a starting point towards reaching a philosophy

Being is a objective of pure and unrestricted desire to know and b what is to be known through totality of true judgments metaphys positive (if radical intellectual conversion) c id cui competit esse, once/

8. "Being" and "not being" are disjunctives; but "knowing being" and "knowing nothing" are not disjunction.
Because many stages in knowing: through partial to total increments.
Distinguish 1) being, 2) known being, 3) full term of meaning, 4) formal term of meaning, 5) potential term of meaning.
Being: what is to be known by totality of true judgments
Known being: what is known by true judgment
Full term of meaning: what is affirmed (truly or falsely)
Formal term of meaning: what is thought considered supposed (without being affirmed or denied truly or falsely)
Potential term of meaning: raw materials on level of experience.

9. Composite notion of being is analogous.
Notion is analogous 1) if component elements 2) if relation between components and 3) if this relation defines notion.
Notion of being has components "Is it?" and "It is."
There is a relation between them: essential to existential
This relation defines composite notion, 1) without it "being" is not known, 2) with it, being is known, 3) it alone is common to different instances (John's essence is only John's, his existence is all his and no one else's, and no abstractions are.)

Is pure notion analogous or univocal
Might be thought univocal, from unity of desire
Might be thought analogous, from division of questions into questions for intelligence (essential aspect) and for reflection (existential aspect)

Properly is neither analogous nor univocal, for these divide concepts, and pure notion is not a concept but the root of all inquiry, reflection, insight, formulation and judgment

10. Being is differentiated from within.
Outside being there is nothing; if difference nothing, then no difference, and so identity.
Being not a genus: genus and difference are first objects of thought; being is order of object of thought to object of affirmation.

11. Hegel: being is object of thought without determinate content; allied to, passes into "nothing". Reflects Kantian error on Reason.

The Notion of Objectivity

1. Four "pure" positions, to be discussed immediately; variations on this basic theme, to be considered later.

a Realism: object is what is known in true judgment; hence "object" and "being" are equivalent terms.

b Relativism: no true judgments; hence object is comprehensive coherence; knowing is process towards ideal of full understanding of everything; ideal to be approached rather than reached; "true" and "false" said not absolutely but relatively; one opinion is more or less true than another.

c Empiricism: both judging and understanding are subjective activities consequent to knowing; first one knows; then one seeks advantage, utility, practical value of intelligent mastery. Rigorous empiricism is confined to level of experience, to ineffable data as ineffable; Bergson, duree pure; concepts a falsification, simplification of real, which is flow of experience.

d Obscurantism: experience as well as understanding and judgment are activities of subject.

Object is what is independent of subject; it is "really real" "out there" whether or not it is known. It is "thing in itself" not the thing as known but the thing apart from being known. It is what is left from the knowing is subtracted and just the known is left.

2. Reflection on pure positions.

a Pure because based on structure of knowing.

b Radical intellectual conversion commits us to realism; for conversion is to intelligently grasped and reasonably affirmed, therefore to what is known in true judgment.

c Relativism: misses notion of virtually unconditioned. Criticism difficult, because difficult to make relativism a convincing position before refuting it.

Against relativism 1) there is criterion for absolute judgments 2) such judgments do occur

d Empiricist: activities of understanding and reasonableness are said to be subjective; ontologically, true for they occur in subject; but epistemologically and criteriologically false, for what is meant by "subjective" is interference with pure desire to understand and affirm.

One cannot intelligently reject intelligence or reasonably reject reasonableness.

e Obscurantist confuses a property of/object, namely, that it is reached through unconditioned, affirmed absolutely with universal validity and b question what is object

Dilemma: is thing-in-itself being or nothing.

If being, then why all the obscurity in place of carefully defined

If nothing, then why not be open about scepticism.

Obscurantist is a confused empiricist.

knowing/

Notion of Objectivity

3. Characteristics of realist notion of objectivity

a All objects are known in essentially same fashion, through experience, formulation, judgment.

"I am" is actual knowing of self. "It is" is actual knowing of "it"

b The realist viewpoint is absolute. Everything is object. For "being" is object; and apart from being there is nothing.

c On realist viewpoint there is no contrast or opposition between "subject" and "object"

For everything is object; if subject "is" then object in same sense and known in same manner as any other object; if subject "is not" then nothing to be known.

Startling because potential formal and actual knowing: self as conscious, intelligent, reflective in potential knowing affirms self actually; only latter object in present sense because only latter is known being.

d On realist viewpoint opposition is not between subject and object but between subjectivity and objectivity

Subjectivity - interference with working of pure desire

Objectivity - pure desire unfolds without subjective bias.

e Realist objectivity is transcendent.

Object is being, everything, all of everything.

Nothing left over from which to cross; no possibility of immanence.

Object is being; but differentiation of being from within; hence "I" and "thing" are known through differentiating "being".

Knowledge of subject real subject, real object, and real distinction is set of judgments.

"I am" "it is" "I am not it" "I make these judgments."

f Possibility of transcendence.

Unrestricted, through unconditioned, to absolute.

lumen intellectus nostri est participatio quaedam creata lucis increatae; Thomist transposition of Augustinian vision of eternal reasons in incommutable light.

subject is

there is

actually

Confrontationism

1. We have presented "knowing" as fact, perfection; as rising on successive levels from potential to formal, from formal to actual; as absolute and transcendent and therefore objective.

There is an opposed view that takes on many forms.

Roughly: Knowing is or should be "taking a look." The look may be sensitive perception, or presentation of sense data, or some intellectual intuition.

More accurately, confrontationism is

a affirmation that "knowing" is complete prior to judgment; judgment merely certainty, explicit awareness, that already one knows; it is affixing rubber-stamp on knowing that as knowing is already complete.

b supposition that "knowing" is essential, dualistic; subject and object are confronted and object becomes present to subject.

c axiom: to analyse knowledge, to consider "knowing" simply as fact and perfection, to attempt to work out from properties of that fact and perfection why it is objective, is impossible undertaking; to analyse knowing is to eliminate it; to take it apart is to make it impossible to put pieces together again.

2. Historical Illustrations of Confrontationism.

a Plato: we know universals; therefore there subsist universal objects, The Forms, Ideas, Eids.

b Plotinus: One, Nous, Soul: "One" is beyond knowing, because knowing is dualistic. Cp. Aristotle's $\bar{\iota}$ unmoved mover.

c Augustine: truth is not without, not by taking look at sensible objects; it is within; rather it is above, seeing eternal reasons in changeless intelligible light.

d Avicenna: (Ibn Sina): nature in thing somehow neither universal nor particular (Cf Gilson, Avicenne et le point de depart de Duns Scot, Arch. d'hist. littl doct. MA,

e Scotus: knowing presupposes 1) object 2) present to subject.

"species" impressed on intellect is present universal object rejection of insight into sensible or imagined presentations because you cannot know intelligible in sensible, for intelligible is not there to be looked at.

Intellectual intuition of singular; necessary to know matters of fact. Cp. grasp of intelligible identity in data as instances.

Voluntarism: either necessary nexus between concepts \bar{m} or mere fact; hence God either necessary nexus or else will; but order of universe, natural laws are not metaphysically necessary; therefore divine free choice, first; not object of science. Science reduces to principle of contradiction.

f Ockham applied principle of contradiction to Scotist intuition.

g Nicolaus d'Autrecourt applied same principle to Ockham's evident knowledge.

h Galileo: empirical science; primary and secondary qualities; supposition re objectivity; cp. Aristotle, visible potency, act.

i Descartes: dualism. Hobbes: materialism. Berkeley: subjectivism.

j Newton: ambiguity of "True Motion": particle along visible or imaginable path; verification of mechanical axioms and definitions.

k Relativity eliminates "path"; quantum mechanics eliminates particle. See below, "Mechanical Model."

l Kant, ambiguity, subjectivism or phenomenalism, N.K. Smith.

subjectivist: necessity of Intuition to give content to Categories
phenomenalist: failure to grasp unconditioned as condition of judgment
Kant bet on wrong horse: cannot criticize absolute space time, particle

(Confrontationism, con'd)

m Idealism: denial of confrontationist thing-in-itself; failure to reach unrestricted, unconditioned, absolute, transcendent in reflection and judgment.

If knowing is prior to judgment, then judgment is mere knowing that one knows. But "being" is attained in judgment; therefore "being" merely means "being known."

n Irrationalism: Feuerbach, Schopenhauer, Kierkegaard, Nietzsche, philosophies of action, revolution, power, despair.

3. Sources of Confrontationism.

a Man is born animal; integrates as animal spontaneously; prone to make intelligence and reason another organ at service of animal.

Two orientations: universe of being by pure desire to know and radical intellectual conversion; world of sense by flow of percepts, successful living.

Significance of Platonist flight from sense, Pythagorean five years of silence, relativity and quantum mechanics.

b Paradox: subject as object is known actually as any other object; yet accompanying this knowing actually there is a knowing self potentially. Hence confrontation.

c Technical difficulty: knowing as look is easily conceiving imagined, easily asserted, apparently nothing to explain.

Knowing as act, perfection, calls for difficult analysis that seems superfluous.

4. Weakness of confrontation.

a It leads to fictitious intuitions, falsifications of knowledge, disappearance of knowing in immanence, idealism.

b It can be asserted. It cannot be concluded. No reasons can be given for ~~ax~~ it except assertion that otherwise knowing would be impossible. No reasons can be given, because for confrontationist confrontationism has to be primitive and beyond analysis or explanation.

finite

c Object of/confrontationist knowing cannot be being.

Being is absolutely universal and absolutely concrete; apart from being there is nothing.

Hence being can be object of omniscience and it can be object of desire to know all.

It cannot be object of any limited actual knowing, for no limited actual knowing is knowing all.

d Confrontationism sets up divergence between truth and reality.

Truth is known in judgment; reality has to be what is known prior to judgment. Hence confrontationism has to subtract proper content of judgement to reach real.

e Confrontationism cannot accept radical intellectual conversion. Does not consider judgment a constituent factor in knowing; not to whatever is intelligently grasped and reasonably affirmed but to whatever 1) is presented in confrontation 2) or inferred from confrontation.

f Confrontationism cannot deal with fact of error.

What is intuited a has to be there to be intuited b (one cannot intuit what is not there) b cannot be corrected by second intuitions (why should second look be any better than first, or if better, then why not third still better, fourth still better, &c.)

g Confrontationism leads to distinction between thing as known and thing in itself.

~~Our knowledge is incomplete, de facto.~~

~~Further looks, intuitions, keep on adding.~~

~~Until looks are exhaustive, thing-in-itself is unknown.~~

As known, thing is within confrontation. In itself, thing is apart from confrontation.

Thing as apart from confrontation is thing as unknown and unknowable.

Since confrontationism cannot have being as object, it cannot have virtual knowledge of whole. It knows merely what happens to be presented, and de facto that is not exhaustive.

h Confrontationism leads to arbitrariness.

What are we confronted with?

Most obviously, sense presentations. If only that, then materialism.

Essences, then Plato, Avicenna, Scotus, &c.

Objects of thought, then idealism, immanence, with reaction to irrationalism.

Only assertion can determine what we are confronted with, for confrontationism is basically and necessarily mere assertion. It rejects the view that objectivity can be something that is deduced from analysis of knowing.

Mechanical Model

1. Our analysis: thing is identity defined by conjugates, operating probably with ideal frequency, etc. *4 "Things"*

Until recently, scientific universe: particles moving about in accord with laws in absolute space and time.

Understand modern philosophy from influence on it of modern science; from recent advance of science return to phil. perennis.

2. Absolute space: vertical line, parabola, (sun), (nebulae), space
Absolute time: watch, sun crossing meridian, stellar, mathemat
Particle: book, pages flutter, hits on edge corner.

3. Twofold criterion in Newton.
Motion, observed or imaginable change of place.
There is motion, if abstract mechanics verified in data.

Bucket experiment proves true motion in second sense and not motion relative to absolute space.

4. Newtonian 3 dim analysis; imagine or see path; correlate positions in path with corresponding times. Motion as seen or imaginable change of imagined places.

Relativity, 4 dim: motion as-if abstract mechanics verified in data.

5. Quantum: physical systems, observables, states.

PS is large or small scale entity as distinct from property; source of light, measuring appliance, electron, etc.

Observable: position, momentum, ang, velocity, energy; construct to which a number may be assigned.

State: defined by functions that select 1) possible values of observables, 2) mean value of observed values, 3) probability of any of observable value.

Particle disappears.

I see a man walking, data in which identity grasped; no tendency to fit out identity with imaginable qualities and move it along with man.

I see phenomena in cathode tube, cloud chamber, spectroscope, pointer reading; infer electron; very definite tendency to add to identity a set of imaginable qualities.

Unverifiable, unless electron can be seen.

Whirling dervish: verifiable in two ways.

Electron spin, oscillation: only inasmuch as abstract mechanics verified.

6. Imagination as heuristic: Clerk-Maxwell

Imagination as representative: no good. Scientist is scientist because hypothesis verified, not because of imagination; imagination for poets artists orators.

angular
1

Categories of Proportionate Being.

1. The object is "being": "categories" are general lines of cleavage, division, ordering of the universe of being.

a Adequate object: any being whatever.

Proportionate object: the range of beings with a structure that corresponds to our knowing. Cf. Kant: object of possible experience. *Cf. Proterian character of notion of "being"*

b Distinguish: descriptive, heuristic, terminal, and dialectical categories.

2. Descriptive categories: Aristotle's Substance, Quantity, Quality, Relation, Action, Passion, Place, Time, Posture, Habit.

a Descriptive because best suited to natural history.

b Because in work, "Categories," Aristotle appeals mainly to mode of speech.

c Because in Metaphysics Z, he investigates at length what substance is.

d Because in Physics, he studies at length what are Action, Passion, Place, Time, and relates explanatorily change of Place, change of Quality, Change of Quantity, Generation and Corruption.

3. Weakness of Aristotelian explanation.

a Fact: Aristotelian science superseded. Galileo, Modern Science.

b Principle: Prior to us are not prior in themselves.

c Need to introduce two further types: purely heuristic; and purely explanatory.

4. Heuristic Categories.

a Questions for intelligence and questions for reflection.

b Questions for reflection: Being, Nothing. Suppose "Determination"

c Questions for intelligence: Suppose "data" and yield "determinations" of being.

Data as instances: What is it? The concrete unity and identity that is, that makes possible investigation, verification, application of theory in instances.

Data as similar: any similarity (sensible, of conjunction, separation, proportion, sequence, concomitance, etc.); data as admitting systematization; Why? How?

Data as in concrete situation (together, successive); data as not admitting systematization; How often? What is likely? What is to be expected.

5. Terminal Categories. General Definition.

a Potency, Form, Act.

Form presupposes and complements potency.

Act presupposes and complements form.

Potency, form, and act constitute a unity.

Potency, form, and act share a common definition.

b Level of experience, intelligence, reflection.

Second presupposes and complements first; third presupposes and complements second.

What is experienced, is what will be understood; and what is understood, is what will be affirmed.

For the three, only one definition, formulation; namely, on level of intelligence.

Categories

5. Terminal categories (con'd).

b Conjugate, Substantial, Group Form.

Conjugate forms are known by understanding their relations. Substantial forms are concrete and intelligible unities of instances of conjugates.

Group form is emergent probability (probability, because actual occurrence is governed by probability; emergent probability, because events that actually occur affect the expectations of what is to occur)g.

c Substantial, Conjugate, Group Act.

act so
1
In general, what presupposes and complements form, is one with it, shares a common definition.

Substantial act is existence. Existence presupposes "unity" "concreteness" "instance". It complements, for what does not exist is nothing. It forms unity with what exists. It shares definition with what exists.

Conjugate act is event, occurrence, performance, operation. Occurrences are according to law; presupposes law; complement law with actuality; media in which laws are known; form unity with law; defined by law.

Group act is functioning, i.e. totality of occurrences as actually realized. Presupposes probability, ie set of coincidences successions; complements probability, for it is what is expected; forms unity with probability; defined by probability.

d Group, conjugate, substantial potency.

Group potency is the minimum set of substantial and conjugate potencies, forms, and acts that has to be postulated to account for functioning through ~~group~~ emergent probability.

Presupposed, complemented, unity, defined.

Conjugate potency: capacity of substantial form to enter into intelligible relations with other substantial forms.

Substantial potency: root of empirical residue, individual, incidental, multiplicity, non-systematic divergence, continuum.

6. Terminal Categories. Are they valid?

a Three elements inevitable in knowledge of proportionate being.

b Three aspects inevitable in data (instances, system, non-system).

c Hence three corresponding and complementary insights and formulations.

d Duality of form and act corresponds to duality of fact and intelligibility.

e Duality of form and potency corresponds to duality of intelligibility and empirical residue.

f Terminal categories: conditions of true propositions as true.

g Invariants of empirical method.

h Aristotle's use of 'potency form act' broader.

7. Dialectical Categories.

a Person with Person. I and Thou.

b Situation, Understanding, Policy, Action, New Situation.

(1)

Differentiation of Being.
Categories; -further-remarks-

1. The object is "being"; it is what is known through true judgment. But what is that?

From the critique of confrontationism, it is clear that imagination is not representative of reality but heuristic.

Hence, study of categories, i.e., the ultimates in terms of which "being" can be described and analysed.

Necessity a for clear and exact thinking about things, persons, angels, God b for dealing with errors, eg relativism which pushes question back to metaphysics and denies metaphysics to be knowledge.

2. Inevitability of Distinction between Descriptive and Terminal Categories.

a Aristotle: 1) "Categories"; 2) Metaphysics Z, Physics.

b Tension: Pure desire unrestricted; actual understanding attained only slowly. Descriptive in so far as we do not yet understand; explanatory, terminal, in so far as we understand what understanding means.

3. Inevitability of Distinction between Act, Form, Potency.

a Between Act and Form. Act corresponds to the "Yes" of judgment; it is what can be known only by the "Yes". Form corresponds to the intelligibility grasped and formulated by understanding.

b Between Form and Potency. Form corresponds to the intelligibility grasped by understanding. Potency accounts for the empirical residue, to what is abstracted from in all direct understanding.

Instance, incidental, non-systematic divergence, continuum.

c Inevitability restricted to proportionate beings. Angels without potency, just act and form. God, pure act.

4. Inevitability of distinction between Substantial, Conjugate, and Group.

a Each and every datum 1) instance, 2) similar to others, 3) together with others in concrete situation.

b Hence same data understood in three complementary manners.

c Hence three types of form relevant to understanding single proportionate being.

d Three types sufficient: What being is, what laws it obeys, what it will do?

5. Necessity of Descriptive Categories.

- a As long as understanding incomplete, description needed.
- b To link conjugates and frequencies (abstract) to concrete need of 1) substance 2) defined by conjugates 3) defined descriptively
Need of link to concrete in 1) investigation 2) verification and 3) application and 4) revision.

6. Divergence from Aristotle.

- a Not in notion of substance; still add existence as did Aquinas.
- b Not in notion of terminal categories; Aristotle was not content with nominal definitions of Categories.
- c Not in conceiving terminal categories as potency form act, eg eyes, sight, seeing; Aristotle held sight-to-eyes-as soul to animal as sight to eyes. De Anima, II, Metaphysics, IX (Theta)
- d Not in distinguishing substance conjugate group; Aristotle distinguished substance, accident, and world theory.
- e Not in principle that imagination is not representative but heuristic; Aristotle insisted that prior to us are not prior in nature.
- f But in applying that principle to sensible qualities; Aristotle's notion of alteration vs modern science on sensible qualities.
- g And in extending probability to celestial bodies. Aristotle conceived their movements necessary and eternal.

7. Significance of the Divergence.

- a Scientific thought has provided undertow of modern philosophies. Descartes: philosophy to settle preliminaries to his Physics; a confrontationism leading to dualism.
Clear and distinct ideas limited to mathematics; what is the "I" of "cogito ergo sum"; cf. Kant on Transcendental ego, i.e. logical condition of possibility of experience, distinct from empirical self.
Indubitable, yet Malebranche took refuge in vision of God.

Kant: denial that mechanical model, representative image, could be confrontationist knowing of thing in itself.
Inability to reach significance of "being" because of failure to see that judgment results from grasp of unconditioned.
- b Scientific thought has undergone a radical change. Relativity and Quantum mechanics eliminate representative images. Only remaining possibility is "being."
- c Anything we can know about proportionate being falls under terminal categories, in so far as we understand it or anticipate understanding.
Invariants of possible scientific developments.
What are the substances, what are laws, what are ideal frequencies, subject to possible revision? But the questions are not.

The Starting Point of Philosophy.

1. Radical intellectual conversion: takes anyone anywhere and advances towards whatever is intelligently grasped and reasonably affirmed.

Philosophy is a science. It needs a basic set of concepts and relations. Science cannot be based on whatever anyone happens to think, or happens to think important, or happens to think fundamental.

Basic set of concepts and relations must be such that:

- a Relations fix concepts, and concepts fix relations.
- b Relations ~~admit~~ are not free constructions as in mathematics but have experiential basis as in empirical sciences.
- c Relations are universally accessible, for science is universally accessible.
- d Relations have a certain inevitability; they cannot be evaded; science is certain.
- e Relations and concepts must be fruitful; supply a key to the integration of the whole sweep of human knowledge.
- f Relations and concepts must not be subject to radical revision; it may be possible to add refinements, developments; it must not be possible to change the whole shape of the picture,

Thesis: Such a set of relations and concepts is supplied by analysis of our knowing and the descriptive and terminal categories.

2. Part 1: It is supplied by analysis of our knowing.

a We began from description of insight but moved on to analysis; i.e., relating insight to images and inquiry and definitions and explanatory systems.

End result was a set of terms defined by the relations of a scheme: level of experience (sense data, perceptual images, free images; data of consciousness); level of ~~inquiry~~ intelligence (inquiry, direct understanding, formulation); level of reflection (questions for reflection, grasp of unconditioned, judgment).

Each element explained by relations to others in terms of presupposition and complementation.

b Relations are experiential.

One cannot inquire or understand without some prior presentation that is merely empirical.

One cannot understand exactly, reflect, evaluate, judge understanding without formulation.

One cannot be content with mere formulation without reflection. To reflect is to demand unconditioned.

Once unconditioned is grasped one cannot reasonably inhibit judgment.

~~c Relations are universally accessible.~~

~~No one can avoid experience: hermit can cut down on sights, sounds, touch, taste, odor; but he cannot eliminate them.~~

~~No one can intelligently repudiate intelligence: faith is substitution of divine intelligence for human as ultimate rule.~~

~~No one can reasonably repudiate reflection, criterion of judgment, judgments that result from criterion.~~

c Relations are universally accessible.

Everyone has some experience: seeing, hearing, touching, tasting, smelling; awareness of these acts.

Everyone understands something; knows when he understands; knows when he does not understand at all; may mistake slight or incomplete understanding for full and complete.

Everyone knows difference between guess, story, tale, make-believe, and reasonable affirmation or negation. "Listen to reason!"

d Relations have a certain inevitability.

Not Cartesian indisputability; not "analytic proposition"; not deduction from principle of contradiction. All this on level of judgment, propositions. Questions can arise about validity of concepts employed, their precise meaning, &c.

Not extrinsic fact, as in scientific experimentation. If you perform experiment rightly, you will get results; makes no difference what you think.

But go to root of Aristotelian technique. What is to be done with disputant that denies principle of contradiction? Get him to talk. I.e. intelligent and reasonable talking will make a man realize that he is committed to principle of contradiction. More deeply, it will make him realize that he cannot avoid experience, effort to understand, formulation of what he understands, reflection and judgment on formulation.

Hermit can cut down on experience, but he cannot eliminate it; he cannot eliminate tripartite aspect of all data (instances, similar, together in concrete).

One cannot intelligently repudiate intelligence; and one is committed by being what one is to reject unintelligent repudiation.

One cannot reasonably repudiate reasonableness; and one is committed by being what one is to reject unreasonable rejection.

3. Part 2: It is supplied by descriptive and terminal categories. Descriptive for what as yet is not understood as not understood. Terminal for what is understood or anticipated as intelligible.

e Fruitfulness lies in terminal, in-intelligible. in account of proportionate object as understood.

a' Defined implicitly (cf. defining points and straight lines by "Two points determine one and only one straight line")

b' Defined with complete generality for proportionate object. Relations embedded in correct understanding of any object on which we have data.

c' ~~Beyond revision.~~

d' Embraces all positive science and mathematics.

Provides basis for human science.

Admits development to natural and dogmatic theology.

f Beyond radical revision.

Would need new type of knowing.

Combines empirical with a priori. (Kantian difficulty of psychologism solved)

What is the good of Philosophy?

1. The unrestricted desire to know introduces the infinite into human life.

Makes possible knowledge of the universe, conceptions and plans for the good of the universe, the unleashing of vast human energies in the execution of such plans, attainment of such ideals.

Throws into human desires, fears, loves a component that can make them terrifying, horrible, disastrous, catastrophic a for the individual and b for society. Psychoanalysis and revolution.

2. Knowing self, like all knowing, may be potential, formal, actual.

Without successful philosophy, actual and objective self-knowledge is extremely precarious.

Subject is thrown back on experience of self a as self-regarding center b as capable of ecstatic devotion to cause or person. Oscillates violently between extremes: a contempt of bourgeoisie b materialist ideal with religious devotion c new bourgeoisie of officials kept in line by delation and purges.

liberal

3. Pure desire to know is transcendence of a stupid selfishness and b blind and ecstatic devotion.

Its achievement is ontologically in subject, a perfection of subject; but significantly, psychologically, it is root of objectivity, impartiality.

Its goal is serene and objective apprehension of universe, of self in universe, of role of self in universe.

Its consequence is agape, love of intelligible w order of whole; neither self-regarding nor ecstatic; but joy in both good it brings me and the price I must pay.

4. Still philosophy does not provide final answer.

Man can conceive an ideal for individual and society, but he cannot execute it. Necessity of grace. Xtian dogma; and secular experience: Ovid, Video meliora proboque, deteriora autem sequor.

Man can become confused, fail to reach even philosophy. Descartes and rationalists. Kant and idealists. Kierkegaard and existentialists.

Divine childhood: live by divine revelation and by divine grace. New knowledge beyond mastery of human understanding; centered in Xt our Lord. New love "poured forth in your hearts by Holy Spirit who is given you."