

Chapter I.

1. Insight: general description
2. Insight: analytically: image question concept ; definition, law
Cluster of insights: system (Euclid, Newton)
3. Higher viewpoints: sequence of systems
4. Inverse insight: liberation from what is not to be understood
5. Empirical residue: general case: collaboration and generalization
probability, dialectic

Circle

Meno

Construct equilateral triangle

External angle

Parallel axiom

Elim casual insights: symbolic logic

Is maths just deduction of what is implicit in axioms? Russell
Hilbert
Gonseth
Bourbaki

Kant: pure reason gains knowledge from concepts
from constructing concepts in a priori intuition

1° K. acknowledges consequence of insight

2° K.'s argument of a priori is opposed to antecedent aspect of insight

a priori: probability independent of experience

experience just an occasion for intellect

Arg. not an occasion

but the proper aspect of intellect

usage = potentially intelligible

usage = actually intelligible

Self-appropriation = advertence to oneself as experiencing understanding judging
understanding oneself as
affirming oneself as

Not plaster-cast of a man or not a philosopher

not what does Lonergan mean by Insight

not what so and so says

but what out of my resources I know

personal basis, personal grasp, personal conviction

principle of interpretation (difficulties I experience will be had by others)

Procedure that guarantees theory of knowledge that accounts for the theory.

Nest of related terms: data, empirical presentations (not understanding yet)
inquiry (effort to understand, alert, root of questions)
insight (into data, answer to inquiry, root answer)
conception, formulation, thinking, supposing, defining,
hypothesis,
reflection
reflective insight
judgment

Data without inquiry: just there, Hume's world of sense impressions

Inquiry without insight

Insight and effort to formulate: when do circles intersect (coplanar

$$r + R \leq (r - R)$$

general expression vs artistic, practical
of Socrates (operation of systematic ideal)
science vs common sense

Insight and formulation

insight: possible or necessary unity or relation (content as conceived)

formulation: selects in data what is essential to insight

Hegel Husserl

parts of form

Heidegger

parts of matter Aristotle Z 10; phenomenology (different twists Buitendijk

Van Breda, non-speculative

Definition: particular case of formulation

nominal

explanatory: adds postulational element

implicit: solely postulational element

Definitions of data, inquiry, insight, formulation

(a) inner relations - permanent structural element

(b) basic self-appropriation: I have some awareness of myself as exp inq ins form

(c) developing self-appropriation; inner relations remain fixed

related contents expand, diversify

become enriched with implications

Syllogism

math logic: systematic exclusion of casual insight

Aristotle's sullogismos epistmrovikos: expression of insight: moon phases sphere

in limit: eidos, morphn, aiov tou eivai, to ti nv eivai, ousia

System

cluster of related insights, definitions, postulates, rules of procedure, deductions

geometry, Newtonian dynamics, Spinoza's ethics (not Aquinas, qq. aa.

higher viewpoints - system heads into further questions

$$.9 = 9/10 + 9/100 + 9/1000$$

series of recurrences

Symbolism

1784, MDCCLXXXIV - understand why

Inverse insights: irrationals, inertia, collaboration, generalization, probability

is being abstracted in this sense

Transition to scientific insights. Dynamic aspect: inquiry towards insight.

1 Comparison

cart wheel: not end agent matter; clue spokes equal; concepts
free fall : ditto clue s, t; vacuum

no field work; continuous data; necessity; imagination adjusts; internal circuit

2 Heuristic structure

structure, account of framework within which insights sought, obtained
algebra: x (flag the diagramme)

'Nature of..': similars similarly understood

similar to our senses

similar in relations to one another (measurements) - bifurcation of understanding

Differential equations

Invariance

man - weight
Einstein - heat
E.H. - continuous motion

3 Concrete inferences from classical laws

a particular problem and solution

b general problem: motion of body in central field of force; n-body problem

insight constructs the conditions; some sort of scheme

adds to theoretical structure a more concrete intelligibility

conditions must be fulfilled up to moment of predicted event

4 Probability (QM = results better than theory; deal with general problem)

regards case when no scheme of recurrence

does not exclude particular determinate solutions

does exclude general determinate solutions (break at pool

not a limit; LM p. 165 ; if at term of infinity, then non-empirical

~~different types of insight from~~ is probability calculus like Euclid geometry

examine a priori case

heuristic structure for a posteriori case

a determinate number of questions

min - best possible

crit. - become probable

max - just possible, false

set of possible positions

number of possibilities for heads = for tails

either a non-systematic oscillation about $\frac{1}{2}$, or else some systematic pattern

corresponds to problem [either random - classical or non-systematic - statistical]

Why the approach to probability is injust

Probability

1) There exists a mathematical calculus of probabilities

$$p_1, p_2, p_3, \dots, p_k, p_l, p_m$$

2) This calculus can be reduced to axiomatic form

3) The theory in its present state does not seem satisfactory

① probability is a limit at infinity $\lim_{n \rightarrow \infty} \frac{n_i}{n}$

LH p. 165

② if infinite of cases required, difficult to realize any probability

③ the theory may exclude all intelligibility from the total [Alberstein
Dohm]

④ Probability regarded includes limit

⑤ Probability at infinity does not post any intelligibility

⑥ the calculus of probabilities as it now exists may be just a Euclidean game

but may be possible of a series of events

as there is a series of geometries

Eg. a run of n heads $p = 1/2^n$

in how many tosses - $\left\{ \begin{array}{l} \text{impossible} \\ \text{possible but not probable} \\ \text{probable} \\ \text{so probable that } p = 1/2^n \text{ is wrong} \\ \text{occurs then } p = 1/2^n \end{array} \right.$

Why not deal directly w/ QM

Wigner, Quantum Theory of Perception April 1953

- ① gets excellent results - by legitimate procedures
- ② difficulty may be solved mathematically
- ③ disagree that basic entities