

Empirical Residue

1. What is reached by abstraction: subst. forms, conjugates, freq.
What is always abstracted from: empirical residue, condit materia
Instance, incidental, non-systematic divergence from ideal freq,
also continuum (non-numerable infinity)
2. Division: concrete (immediate, remote); imaginary.
Division: invariant statement, prescind from emp. residue
relative statement, includes reference to emp. residue
relative to immediate concrete, remote conc., imaginary.
3. Extension and duration: concrete, continuous
See distance traversed but not time of traversing; one-to-one
correspondence between instants of traversing and of watching.
God: all present; sees distance and time; He is not in time.
4. Magnitude, Unit, Measurement of Extensions and Durations.
Both magnitudes and units are extensions; or both are durations;
both concrete and continuous.
Measurements are numerical ratios. Neither long short fast slow.
Standardization of units. By system, laws, successive approximat
No direct comparison of here and distant, now and past.
5. Ar. Th. Def. of Time: number and measure of motion according
to (spatial) order of prior and posterior. Two o'clock, two hours.
Therefore, as many times as motions. In Iv Phys lect 17 §3 f.
Appeal to primum mobile. (Upset by Copernicus)
6. Frame of reference.
System for specifying any point-instant; for going to any one
from any other according to rules.
Personal: here there near far above below right left
Detached: street map, geography; watch calendar

Division: purely conceptual, imaginary, concrete.
As many concrete, as distinct origins and orientations.
Each a different universe of meaning.
Transformation = Translation.
Rule: abstract remains invariant.
Ie. If principle or law varies under transformation, then
either transformation illegitimate or else expression incorrect.
Holds for all abstract: not only laws but also ideal frequencies
Holds only for abstract. (simultaneity not abstract; ergo relat
Relativity: pursuit of abstract properly formulated.
7. Space and Time.
1) given, to some individual; 2) abstract geometry; 3)
totality of concrete, from viewpoint some particular applied frame,
4) totality from general viewpoint 5) imaginary ordered detached frame
Abstract geometry settled by physics: how make laws invariant
coincident with what transformations legitimate; latter determines geo
Hence pertains to intelligibility of things in space and time,
not to space and time as such.
Applied frame, not space in general univocal sense.
Imaginary frame, not space in real sense.
Intelligibility of space and time is to provide "together
and successive" understood in statistical phase.