Chapter 3

6.3 The Abstractness of Classical Laws

Lonergan now turns to a more complete account of the enriching abstractness of classical heuristic structures and classical laws.

1. **Heuristically**: One is seeking the immanent intelligibility of the data not anything else about that same data.
    a. That immanent intelligibility does not mean what is common to all instances of X, X being a concrete data in its totality (the impoverish replica view), but a relationship between elements in the data.
    b. However, it will be universal, meaning that the correlation understood will hold in all circumstances in which the data are not significantly different. The difference from the "impoverished replica" and this universal element is that the universal element does not claim that it is claiming to be an account of the concrete data as such, but only one facet of the concrete data, namely a relationship it possesses to another, known by implicit definition in a correlation.
2. **Experimentally**: the mode by which the classical scientist operates with concrete materials or data points to the constant focus on finding the theoretical correlation.
    a. **Simplification of the situation**: Reduces the complexity of a situation to a minimum. This includes trying to remove all the "impurities" and "unknowns" that would confuse the discovery.
    b. **Instruments that are ideally constructed**: Constructs instruments in which the mode of operation is understood theoretically, hence the outcomes of these instruments possess a known theoretical outcome.
    c. **Measurements that are the probably mean of actual results**: measurements are repeated many times, and was is accepted in the end is some kind of a mean. Allows only accuracy to so many decimal places.
    d. **So notice, that "at every turn its seems apparent that th econcern of the experiment is to determine a theoretical correlation between definable and abstract entities",** not to explain the unsimplified situation, the discrepancies in the instruments, or the variations of measurements and the limitation to "so many decimal places."
3. **Formulation**: The definition of the classical law is a correlation of correlatives, and these are never the data
    a. As unique in a particular place and time
    b. As generalized, but rather generalized combinations of combinations of combinations.
    c. That are continuous, because such data are discontinuous, thus one selects the simplest law that explains the discontinuous data, realizing that other more complex laws could explain the same data.
4. **Verification**: What is verified is the abstract formulation of a correlation, not particular instances and applications.

a. Since a single instance was not used to discover such a correlation, nor are single instances adequate to verifying the formulation of these correlations.
b. Particular instances and applications may even diverge, and thus not support the correlation, but since only "large and various instances" are used for verification, only "large and various instances" can require revision and refutation of these formulations.
c. Thus, the formulation is abstracted from the particular.