INSIGHT, chapter 3

6.1 The General Argument for a statistical residue.

Lonergan notes that an argument has to be made for the existence of statistical residues. Such residues, if they exist, mean that the universe has an element of the non-systematic in it. This is because if the world is entirely systematic, then everything has its ordered intelligibility in relation to everything else, and the meaning of a probability is not really significant in the end. However, if a probability grasps an intelligibility in this universe that is distinct from classical laws (which grasp relations), and this intelligibility is real, then it presupposes the non-systematic. Lonergan wants to continue to explore the significance of this possibility, and then to argue to its likelihood.

How does his argument proceed?

A. We have seen this before in chapter 2, some of the premises coming from concrete inferences of classical laws, and some coming from his discussion of statistical heuristic structures. The difference at this point is the context of method or canons, which then intelligently, reasonably, and responsibly guide the scientific explorer.
B. If we return to how classical laws are **generated** then **applied**, one will begin uncover the requirement of the insight and its relation to the data, and that such an insight is required for one to know whether a particular law or set of laws is applicable. Also, that same insight allows one to combine the laws in a certain order and to know what kind of "measurements" to take in order to specify the variables. Without this insight, one does not really know if the law is relevant, nor how to combine the laws (if more than one is involved), nor how to specify the variables.

    a. So, for example, an object falls off a table, what is happening? What laws are relevant? If one selects gravitation and laws that address "friction", how do they combine to explain the movement? What measurements need to be inserted to specify the variables?
    b. Notice though, if nothing is falling, then these particular laws are not relevant.

C. Even with full knowledge (Complete Explanation) of all laws (hence all higher and lower systems of laws), one still would need an insight into the particular situations in order to select and combine these laws. This conclusion that Lonergan makes is taken from the analysis of the order of cognition from experience to understanding to verification and back again.
    c. Only if all the particular cases, all the concrete situations, are completely ordered to each other, and every event in every situation is linked in a systematic way to every other event in every other situation, would one be able to explain all data, all situations, the relations and existence of all events in terms of classical laws.
    d. However, if events are not so linked to each other in this full systematic manner, then such laws would not be applicable in various cases. "Then abstract system can be applied only to a limited range of particular cases". The concrete universe as a whole, subsequently, cannot be understood by classical laws. If such an understanding of the whole is possible, one will need to turn to a different method.
    e. We do know of many recurrent schemes, of systematic processes. Eg. Planetary

system, Krebs cycle, etc..

f. Yet, the origination and the ongoing existence of these processes itself is not explained by the process. Hence one can ask whether another process systematizes the origination and ongoing existence, or destruction, of such processes. The planetary system came to be, not because of the planetary system. And that same planetary system cannot guarantee its own ongoing existence.

g. Lonergan then continues to note that there does not seem to be any universal scheme that controls the emergence and survival of the systems of which we know, and hence, its seems that there is a non-systematic element in the emergence and in the survival of the systematic processes of which we know. This non-systematic element is something from which our intelligence abstracts when it discovers correlations. It is part of the empirical residue. What is that residue? This will be answered more precisely later. However, at this point, one can say it is rooted in the non-systematic processes which classical law cannot understand, and does not try to do so.