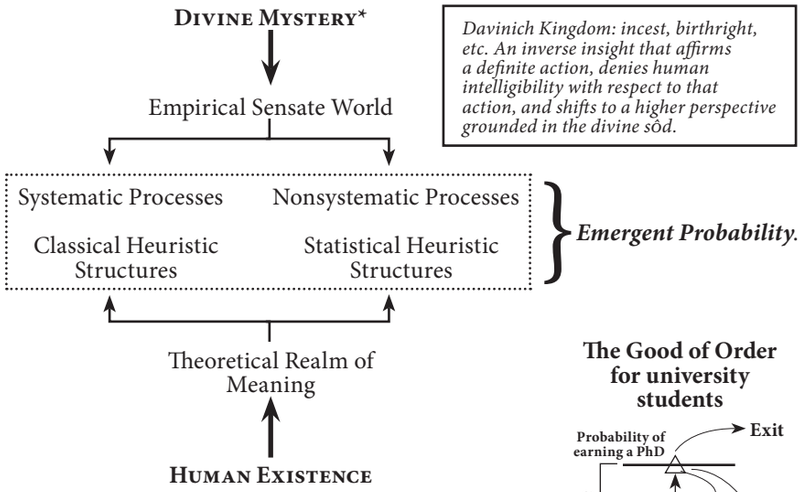


*** Mystery?**

(Marie-France) Better the biblical Hebrew term sôd. סוֹד in its various uses means council or counsel, in familiar conversation, of familiar friends, in the intimate circle of; assembly, company; counsel, taken by those in familiar conversation, of intimate friendship; familiar converse with God, intimacy, intimacy with, with the upright in his intimacy.

The general idea seems to be that "mystery" refers to something out there beyond human ken, but the reality of our contact with the Divine is better describe in terms of a familiar dialogue among friends, hence sôd. (With my apologies to Marie-France.)

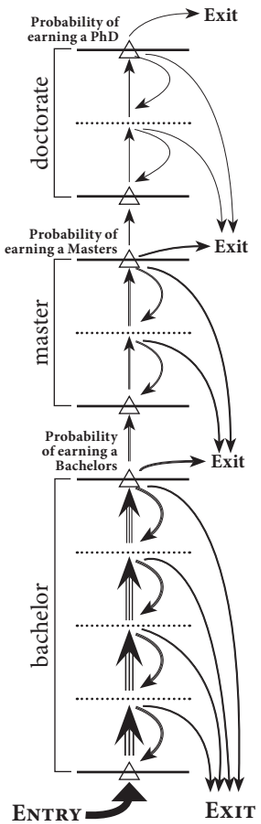
A Hebrew and English Lexicon of the Old Testament, based on the lexicon of William Gesenius as translated by Edward Robinson, Oxford University Press.

Archimedes' Lack of a Creative Leap

"Accordingly, besides the devaluated inverse insight that has been our concern hitherto, there is to be acknowledge in statistical science another basic moment that is positive and creative. Aristotle was quite aware of what we have named nonsystematic process, for he contended that the whole course of terrestrial events was just a series of accidents. But to this devaluated inverse insight he failed to add the further creative moment. Instead of discovering statistical method, he attempted to account for the manifest continuity of the terrestrial series of accidents by invoking the continuous influence of the continuously rotating celestial sphere."

Insight (1992 ed), pp. 80-81.

The Good of Order for university students



Insight-2 — Phase 2 — Empirical Heuristic Structure

Chapter 2.4: Statistical Heuristic Structure — July 5th, 2019

Universities

We can use the familiar notion of a university to better understand systematic and nonsystematic processes and how they apply to institutional formation and change.

Recurring schemes of operations such as the following sequences of events for students in universities represent order. And if such recurring schemes add to the human good, that the scheme itself is a good. Hence Lonergan's addition of the "good of order" to his invariant structure of the human good. The idea of a university, like the idea of a classical orchestra, can bring together any number of different people engaged in different tasks yet through their combined effort achieve a human good. The idea of a university is in effect a universal classical "law" resembling a systematic processes unfolding over time in predictable a manner.

How a university functions in the particular cannot be understood in such a "classical" way. Instead, we are talking about nonsystematic processes involving chance, random behavior, and unique time-and-space-specific circumstances (this autocratic person as provost, that professor excelling at engaging students, this alert student, that protest movement, etc.).

This leads us to Lonergan's world view of emergent probability, where the recurring schemes of operation play the role of universal processes but only within a nonsystematic world where such schemes have a probability of emerging and a second probability of survival.

The modern idea of a university evolved over centuries until it reached it present form. This scheme could never come into being in a failed state like Somalia; nor could it emerge in all its complexities in an resource poor environment. It could only emerge with the industrial revolution and the shift from wealth distribution to wealth creation.

Once it exists, how long can it survive? Assigning such a probability brings us into a a posteriori area of statistical investigations, which is to say the probability of survival varies over time according to events on the ground, i.e., according to nonsystematic processes.

Take the question of the probability of students finishing their degree. We can conduct a statistical study that would give us a pretty concise image of what the current situation but says nothing about future conditions nor the factors that might be involved in students dropping out. So further statistical studies would have to be carried out to establish correlations between two or more variables the investigators consider important.

This highlights why any sound statistic study rests on three things:

1. a solid knowledge of statistical methods,
2. a general knowledge of the world, and
3. specific knowledge of the area under investigation.

Note that knowledge gained may well lead to changes in the recurring schemes of operations we currently recognize as universities.

The chart to the left provides the ideal universal recurring schemes of operations that unfolds over time in such a way that expectations can be anticipated and met. Now each individual student has his or her own determinate reasons. But this does not hold for the class of all students. Now we are in the realm of the non-systematic, where chance, unique conditions, and other specific features come into play. No universal scheme will account for why people enter the institution or why they leave, although the scheme itself provides for an understanding of key decision points in which the student may choose one path or another. For example, the choice of one's field of study may have an impact on success or failure. But to know this one would have to carry out a statistic study.

There are two take-aways:

1. Your chances of understanding what is happening at universities is improved if you can make a clear distinction between the systematic and non-systematic processes at work.

2. The "good of order" of a university, i.e., that "universal" recurring scheme of operations that defines it, is a human good in its own right.

Sneaking up on a Definition of Probability

Step 1: the idea of limits

Take the series S = ½ + ¼ + ⅛ ... 1/2n.
Adding each number in turn we get the sequence:
1/2, 3/4, 7/8, 15/16, ...
This sequence has no end, for there is no end to the series S. But we can say that the deeper we get into the series the close the sequence approaches the number 1 without ever reaching 1.
1 is the said to be the ***limit*** of the series S.

Step 2: Games of Chance

Games of chance such as cards or dice offer the possibility of determining a precise probability for a specific event. Take tossing a coin. The outcome of any one individual toss can be determined by the application of classical laws of motion. But what we are talking about now is a sequence of such tosses and the probability of a particular event happening. Since tossing a coin has only two possible outcomes (heads or tails) and assuming the coin is well balanced, the probability of a heads occurring in any series of tosses is 0.5.

This brings in the notion of ***randomness***, for in the class of all possible sequences of coin tosses, any deviation from 0.5 occurrences of heads (or tails) will be random in the sense that half will occur on one side of the number while the other half will come down on the other side. Deviations from the norm will balance out.

Step 3: A posteriori

The statistical outcomes of games of chance can be determined well in advance of any play. But the majority of statistical investigations don't have such an advantage. So the general strategy is to name the desired probability "P" and work out its general properties from what is known. But in the end, like any empirical investigation, it always comes down to an actually study.

Universal - Individual - Classes

Universals are just that, universal. Non-systematic processes are not, in the sense that they deal with unique situations in the here-and-now. The thing is, each individual case in a class of such cases is "determinate" in the sense that each can be explained. But this is not so for a class of such cases where no possible universal perspective can be applied.

Probability Numbers

Note that probabilities lie between 0 and 1, where 0 indicates no possibility of the event ever occurring while 1 represents the possibility that no other event than that will take place.