# *Truly Natural* Selection – Paper II

## *Selection before Life*

NOTE: Perhaps it should be emphasized at this precise point as we are considering probabilities, and what the assumptions are concerning these rather common phenomena in Reality. They are perhaps one of the most abstract ideas that Mankind subscribes to. When I was teaching such things I, and everybody else, used things like dice to demonstrate what the subject was all about. The idea was that each and every face of a single die was equally likely, and the action of "shaking and rolling" was also completely random and unbiased. Therefore the probability of the occurrence of any particular face would always be 1/6. That the result must be one or another of these faces would be proved by merely adding the probabilities together.
Thus 1/6 + 1/6 + 1/6 + 1/6 + 1/6 + 1/6 would give 1 (or certainty). Similarly if two die were involved you could work out the probabilities for every possible score using exactly the same reasoning, so that, for example, the scores 2 and 12 would only occur once each out of 36 possible scores and the full set would be as below:-

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | SCORE |
| 1 | 2 | 3 | 4 | 5 | 6 | 5 | 4 | 3 | 2 | 1 | OCCURENCES (which total 36) |

Hence all probable scores will relate to the **certainty** figure of 36 and will therefore sum to 1
The full set of probabilities would therefore be:-

1/36 2/36 3/36 4/36 5/36 6/36 5/36 4/36 3/35 2/36 1/36

for the range of scores.
Now this is the method for ALL probabilistic arguments, on whatever subject.
All events HAVE TO BE equally likely, and the shuffling processes merely a purely random re-mix, for this sort of stuff to be appropriate.
SO, in Reality it is NEVER True!

It only occurs in the purely abstract World of Mathematics, which I call Ideality. In the real World all occurrences are NEVER exactly equally likely. Neither can they be abstracted from reality in any way, for every occurrence **is not** in splendid isolation, neither being affected, or affecting, its context. Quite the reverse is in fact the case! Every occurrence does affect the context and the more occurrences that happen, the more the context is changed. The whole basis of probabilities can only be approached in games, where great care is taken making the units required EXACTLY the same, and the "shaker" completely random.

When people use probabilities in Reality, and particularly concerned with evolving Life, you MUST totally ignore what they extract when it comes to probabilities. It will be rubbish!

For, using the usual idea of probabilities, all possible cases will be taken as being equally unlikely.
Now if we start at the beginning, where none have yet appeared, the assessment that **one of them** will occur will NOT be very close to zero as you might imagine. On the contrary in will be 1 – certainty. I haven't stipulated a particular single case, so any case would do and the probability of such would be certainty. Thereafter, as each new occurrence of a member of the set joins the situation they will NOT be in isolation as is assumed in probability theory. They will undoubtedly ***change*** the context, and as more and more appear

they will change it more and more. Now these will not be merely inactive entities standing around doing nothing. They are PROCESSES, all actually doing SOMETHING, so their effects on the situation will be significant. All the stuff I mentioned earlier about conducive and contending processes with come into play, as will sequences and cycles of processes, so the whole formal probability view bites the dust, and can tell us close to nothing about what will be going on. Such considerations as are employed in Probability Theory, only mean anything at all in the abstract: that is in Ideality alone.

Such probabilistic reasoning is what is used by opponents of Evolution, in that the impossible seems to have happened, not once but many times. They obviously know nothing about Evolution, but they know what they believe, and any weapon that will support their prejudice will be employed the "prove" their case.

As soon as we consider the sets of processes as are marshalled in Life, the probabilities seem (using the above abstract methodology) to prove that their resulting existence is totally impossible.
Life is then seen as either a Miracle of Chance, or the Hand of a Supreme Being.
Neither is true!

The mix could do no other than involve the sort of selections that I described above. Mutually conducive processes would become ever more likely than mutually contending processes, and the MIX would change in composition. Having written many a "Life" program for a computer, with various system altering results, it is always the case that either ONE or a small set of conducive processes will soon dominate **no matter what the original mix was**.

It must be clear that probabilities, assuming equal forms and chances, will prove the actually occurring result to have been totally impossible, but if selection is seen as it really is, the probabilities of competing processes will CHANGE over time, until the **unlikely** actually become ***likely***.
Indeed the **supposed impossible** can and do become ***inevitable***.

Now remember, this is NOT the famed ***Natural Selection*** of Darwin & Wallace!
That is concerned when Living Things are actually evolving.
What I have been describing here is a more natural form of selection between NON-LIVING chemical processes.
But, it DID play a vital role subsequently in the actual Emergence of Life too.

At the heart of all Living Things is a series of chemical processes collectively called ***The Metabolic Pathways*** – a very unlikely set of conducive AND contending processes, which outside of Life (and using Probability Theory) are seen as extremely unlikely as individual processes, and IMPOSSIBLE as a set. Yet they did get together, and in Living Things they are both essential and INEVITABLE – indeed absolutely certain.
They were successively selected in the way that I have outlined above.

***Even before Life*** actually appeared, many of its necessary components were selected quite naturally by automatic processes, which ***changed the game*** and dramatically converted probabilities to allow the "impossible" to happen.

The usual lightweight explanation using randomness misses the real point.
Life didn't happen by chance. It happened because the processes involved were POSSIBLE and were then selected for quite naturally – they were BETTER, and more likely to survive than other competing processes, and therefore grew in significance until they were EVERYWHERE!
The probabilities of certain complications were always getting more and more likely for quite simple reasons.
They were more successful than others in acquiring their necessary resources to happen and proliferate.

Now these first steps in addressing Selection, are obviously still crude and undeveloped, but we know that Change not only takes place at walking pace, but occasionally also in a cataclysmic avalanches, which we call

Emergences. To really understand Selection, we will have to trace its role INTO and THROUGH such interludes of cataclysmic Change.

**To be continued**

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