Language/Computer Coding Experience

The complex specified information in the biological genetic code is similar in functionality to that of common languages and computer coding. That is, the genes define a code sequence whose characters have no meaning in and of themselves. Their meaning is derived from the structure and syntax of their arrangement in the sequence, as it is understood and manipulated by external readers and writers. Since languages and computer coding are understood by many people, they can serve as a basis for understanding the complex functionality of the genetic code.

For example, it is clear to any language reader that a letter sequence of 20 or more characters is prohibitively unlikely to contain a meaningful message unless it has been arranged by an intelligent writer who understands the language. A random sequence of 20 or more characters always contains gibberish. There may be internal sub-sequences of 4 to 7 characters each that randomly contain actual words, but these words are never randomly arranged to provide coherent sentences. When the number of characters rise to 1000 or 10,000 (e.g. in a full paragraph or a complete book) the need for intelligent arrangement is even more obvious.

One of the key findings of recent genetic research is that the functionality of genetic sequences is similar to language letter sequences, in that there are extremely few sequences of genetic codes that translate to functional proteins. Indeed, for a typical protein enzyme that requires about 10,000 DNA characters to define, the fraction of functional sequences versus non-functional sequences is about 1 in 10^{77}. Now 10,000 is about the number of characters in a pamphlet or short book. And the ratio of 1 in 10^{77} is about what we would expect for the odds of producing a coherent book of this size using a random character generator.

So the naïve notion that chemicals can randomly bind together to form random sequences, most any of which can lead to life, is simply false. Instead, the biological components of life are finely-tuned, highly designed and integrated to provide the complex operations of living cells.

But what about the mythical notion that a group of monkeys randomly hitting keys on typewriters would eventually write coherent books, including all the works of Shakespeare, if given enough time? In fact, this won't happen. In the first place, the Universe has had a finite history, and there hasn't been enough time for any random process to have had the number of trials required to overcome the probabilistic odds for even a single short-sequenced protein.

Secondly, no natural process is ever completely random. For example, monkeys hit keys on a typewriter in a haphazard fashion, alternating between chaotic and repetitious strikes. Oftentimes they will hit a single key several times in a row. Their pattern of key-hitting is never completely random. So the haphazard patterns of characters they produce will never result in a book-length coherent message, no matter how much time they are given.

What about the notion of "gene duplication" in which a gene is duplicated within the genome, where it becomes extraneous and supposedly available for acquiring a novel biological function? From the No Free Lunch Theorem, we know that this is as prohibitively unlikely as a novel biological function arising from scratch. In the typing monkeys analogy, this would be like giving the monkeys word processing machines with Copy and Paste keys. Even with this new functionality, it would still be impossible for the monkeys to produce any meaningful writing. It would also be impossible for the monkeys to start with an existing book and rewrite it into a different book.

As impossible as it is for any undirected process to write a single book or set of books, it is orders of magnitude more impossible for an undirected process to engage in an ongoing conversation using human language. And it is even more impossible for an undirected process to produce the living beings that are actually able to communicate this way. Even evolutionary scientists admit that there is no Darwinian explanation for the development of human language.

Computer coding is another area of complex specified information that is experienced by many people. The probabilistic situation for computer coding is similar to that of written language and DNA sequencing. There is no chance that a natural process could develop a working computer program of thousands or tens of thousands of lines of code. There is also no chance that a natural process could produce the computing machinery needed to read, understand and run that code. Similarly, there is also no chance that a natural process could have produced the intelligent being that wrote that computer code.

It is also obvious to any computer programmer that random bugs that are introduced in their code will never provide significant improvements to the code. Nor will random bugs in existing code ever lead to new programs with different functionalities. For example, it's not possible that random bugs could convert the Windows 10 operating system code into an operational Apple MacOS operating system.

And no less of a computer expert than Bill Gates has stated that "DNA is like a computer program but far, far more advanced than any software ever created." So it is totally misguided to believe that any natural process could have produced

the DNA code, or that any kind of random mutations in existing DNA code could ever produce any new and beneficial biological functionality.