

Are Mathematical Laws Truly Mindless? What can we learn from the structure of the universe about the possibility that it could produce intelligent life forms that can have purposes, generate goals, and have the intent to fulfill them by their actions?

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Man Verses the Universe

Man thinks he is the most intelligent life form that he knows to exist, but though he has applied his mind for a very long time in an attempt to understand and be able to represent the basic laws of the operation of the universe through a long term process of development of mathematics to make an abstract model of them, he has still not fully achieved that goal. It is true that once the laws have been written down either in the form of ink on paper or in the form of the real world entities that have them written into them, so that they perform according to those laws, the laws themselves do not possess a mind of their own, but they are the output expressions of the mind that created them and, therefore, are an image of the intelligence that is behind their construction. Remember that man is not trying to create these laws from his own mind to then apply them in the construction of a universe. He is only trying to read and understand the laws that have already been written into the universe he inhabits and figure out how he can make an abstract model of them in a form that he calls mathematics. If somehow this world with all of its complex interacting structures and operational laws came about by a series of chance happenings and if man after applying all of the intellectual capacity of his mind over many thousands of years has not yet been able to fully understand it, and has only gained access to an extremely small portion of it to use in any way for himself, it would seem that intelligence is extremely overrated. So far the mindless universe seems to be far superior to intelligent man in its creation and control of all aspects of the universe at all size scales and speed levels, etc. To determine whether or not this is the case, let us first look at the creations of man by the use of his intelligence and then see if these same conceptual and structural traits are found in the structure of the universe.

Creatively and Intelligently Designed Structures Made by Man.

When man decides to make a new complex structure, there is usually an extended period of conceptual planning during which the desired goals that are meant to be accomplished and the structural methods to be used to bring those accomplishments to reality are decided. This usually requires writing detailed specifications and structural drawings, etc. both because a man generally is incapable of remembering all of the complex details and changes to them that are needed to correct flaws and errors made in the initial plans or to accommodate new concepts or goals into the device, etc. and one man usually cannot complete such a complex structure by himself or at least do so in a reasonable time frame and other workers require the written plans to do their part in its construction. Man then looks for the materials that will be able to perform the required operations of the device and last for a reasonably long time and then gathers those materials in adequate quantities to assemble the device. Many of the basic materials may need to be processed in some way to make them ready for use. The materials are then formed into the individual parts needed to produce the device. The complex devices that men make are usually structured in a hierarchical manner. First, simple parts are made, such as formed pieces of metal or plastic, etc. and fasteners such as screws, bolts and nuts, and glue, etc. are made and used in the first hierarchical level to assemble the basic parts together into a sub-assembly. In the next hierarchical level, many such sub-assemblies are usually connected together to create a larger assembly. This assembly could, for example, be the motor of a car. In the next level of structure many assemblies are connected together. This can go on through many hierarchical levels until the device is completed. Since man is not

fully able to foresee all possibilities, it is then necessary that the device be tested to see if it will really work as planned. Any needed corrections must be made and the device is then tested to see if it meets the original goals and any other goals that have been added along the way to production. Finally, if everything comes together properly, a new working complex device comes into being.

Does This Universe possess the markers of being intelligently designed and made?

If we compare man's intellectual methods of creating a complex structure and the resultant structural form of such a structure to that of the structure of the universe, do we see similarities that would indicate that the universe was created by an intelligent being or do we see things that would indicate that it was formed by random chance happenings that just happen to all come together to form the universe as it is today? To determine this we will first need to look at the structure of the universe to see the details of its construction. If we start at the lowest structural level we find a very simple machine called a simple motion. This machine primarily fulfills a single goal, which is to continually change its position in space. In doing so, it acts according to three built in information structures. The first is its current position in space, which is a single element information structure. Its contents can only be changed by the motion machine, which continually changes it to a new position as it moves. The next information structure is its direction of travel. This can be broken down into three information elements with one element for each of the lower three dimensions of the space that the motion machine travels in. Since each of these lower three dimensions are bidirectional, these elements can each contain one of two possible information results, one for each direction in its given dimension. The combination of these three directional inputs does not completely define the complete directional output in three dimensional space, but only defines one of eight general directional areas or an octant around its current position. The actual specific direction of travel is determined by the motion machine's third information structure, its motion amplitude. This structure is also divided into three elements, each of which can contain a motion level between zero and the speed of light. It is the relative motion levels between the three motion amplitude elements that determine the final direction of motion within its octant. As an example, if the motion amplitude level of all three motion amplitude elements is equal, the direction of travel will be such as to always remain equidistant to the three border lines extending out in each dimension from the sub-energy particle's current position in the octant selected by the conditions of all three of its direction elements. The sub-energy motion machine can read and act upon its direction and motion amplitude information elements, but it can't change them. They can only be changed during an interaction with another motion machine. If the total composite three dimensional motion amplitude level of a sub-energy particle exceeds the speed of light, the excess motion is transferred to another dimension. I will call it the fourth dimension. The sub-energy particle is thereby changed into a more hierarchically complex structure called an energy photon. The energy photon's motion in its direction of travel is the same as that in a sub-energy particle at the maximum composite motion amplitude of the speed of light. It also contains a second motion that travels back and forth between the ends of the very short fourth dimension. When it reaches an end of the dimension it interacts with the dimensional barrier so that its direction information element condition is changed to the opposite direction of travel in the dimension. The interaction with the barrier can't change the motion amplitude level information, so the motion amplitude remains the same. The fourth dimension interacts with the lower three dimensions at ninety degrees just like those three dimensions interact with each other. The fourth dimensional motion generates the energy photon's frequency, wave length, and variable mass effects. If an energy photon's fourth dimensional motion amplitude is great enough and it comes in contact with certain angular motion components, some of its fourth dimensional motion can be transferred to a fifth dimension to raise it to the next hierarchical structural level and it becomes a matter particle. The matter particle's fifth dimensional motion is transferred sequentially to each of the lower three dimensions in such a way as to cause its

forward direction of motion to be continually changed, so it takes a three dimensional curved path that encloses back upon itself to create a cyclical enclosed path that it continues to retrace, thus generating a matter particle that can stand still in space. The great angular motion of its curved path creates a static mass effect in all directions around the particle. These three hierarchically produced motion machines complete the basic structure upon which other higher levels of structure are built. The sub-energy particles create the field structures that bind higher level structures together and most interactions that occur between matter particles involve only these field structures and not the matter particles' basic internal structural motions. The energy photons are mainly used to transmit motions (sometimes long distances) between matter structures. The matter particles are used to create the structures that make up most of what we sense as reality even though that sense of reality is generally transferred from the matter particles to us via energy photons or sub-energy fields.

The next level of structure is composed of motion machines called atoms that are composed of matter particles bound together by their internal and external sub-energy fields. There are over 100 such motion machines at this broad hierarchical structural level by joining combinations of three matter particle types together to higher and higher hierarchically built structures. Some atom structures are unstable, but the ones that are used for important purposes such as to build living creatures usually are relatively stable. (I have left out many details to reduce character count. See my previous papers for more details about basic structuring concepts.)

Above this level is the level of molecules, which again are hierarchically built up from atoms and their sub-energy fields to produce more and more complex structures.

The final structural level that we generally see is the level where the molecules are combined together into the large scale things that we generally see or interact with in some way.

Using Man's Creations for Comparison; Does the Universe Follow Intelligent Patterns of Construction?

It should be evident to anyone that starting out with very simple construction materials and methods and using these to build more and more complex hierarchical structural levels is the basis for both man's intelligently designed and built creations and also for the creation and building of the universe. The main difference is that man lives at the higher levels of the universe, so he does not generally go back to basic motion structures and build up from there, but instead uses the higher level materials that are already provided to him. Even though man inhabits and mainly operates at the higher hierarchical levels of the universe he has not been able to build a living creature from these basic higher level materials. Since the universe contains a wide array of such living creatures and man cannot build even one, the universe demonstrates much more intelligence in its creator than that contained in man. I mention living creatures because they are at the top of the universe's increasingly complex hierarchical level structure. When we look at the universe we see the final product and not what led up to its creation, so if it was made by an intelligent being we do not have access to any external plans or specifications if any were made. It is entirely possible that such plans and specifications were kept internal in the creator because of the ability to remember the complete structure and an intelligence level may exist that would allow the planning and creation to be completed without making any mistakes. Since this creator did all of this with no need of any external help from others, there would be no need to produce external plans or specifications, etc. to allow others to know what to do. The creator either only had motion to work with to make the universe or chose to use just motion to build the entire structure. To be able to do this requires a very high level of intelligence. The conclusion at this point is that the universe likely was created by a very intelligent living being.

Could the universe, as it is, have been created by chance happenings?

Even though the evidence suggests that the universe was likely created by a very intelligent living being, we need to look to see if it could also have been created with no intelligence needed. Man's current theory is generally that the universe was created by some action of a thing called a singularity. A singularity contains a very large amount of motion in a very small volume of space. Most of man's current theories are based on such a singularity expanding to become our universe. Man's current theories break down and cannot describe things all the way back to the beginning of the expansion of the singularity. The source of the singularity or the cause of its expansion can't, therefore, be determined, so this does not help us to make a determination either way.

Could the universe have created living creatures? Do its structure and/or operation tell us if it is practical to believe that it could have done so?

We need to look at how the universe works without life present to see if it could produce life. At the most basic levels of structure there are structural rules that can greatly influence this possible ability. One of them is that during interactions between motion entities in the lower three dimensions that transfer motion amplitude from one entity to another; the motion amplitude is generally transferred from the entity that has the greater motion amplitude to the entity that possess the lesser motion amplitude. The overall effect of this on the larger scale of things is that the entities with higher motion amplitudes have them reduced over time and the entities with lower motion amplitudes have theirs increased over time due to interactions. The net effect is the narrowing of the dynamic range of motion amplitude in the total entity population as they all tend toward the center of the range, which becomes the maximum stability point. This stability point could have any motion amplitude value and that value is basically the average value of the sum of the values of all entities involved. One place this can be readily seen is in the structure of atoms. The lighter atoms tend to combine by fusion to form heavier atoms while the heavier atoms tend to break down to generate lighter atoms. Those in the middle range are the most stable. There are, of course, some other factors involved also, but the basic point holds. This is one reason that the universe as we know it will come to an end in the long run. Stars use this fusion of the lower elements to power their fight against the contraction forces of gravity, but they can only fuse the atoms up to about iron, then they will burn out. At the same time the heavier atoms naturally break down into lighter atoms thus narrowing the range on that end of the atomic dynamic range scale. Man gets all of his necessary energy in one way or another from these processes. Once the lower elements have all been consumed, the stars will all collapse due to gravity and some explosions may give out energy for some time, but in the end all of the matter would be pulled into black holes. The motion contained in all of that matter would be released from the black holes over time, as they dissipate, in the form of energy photons and possibly some electrons. Due to interactions, the electrons would eventually be changed into photons and the photons would slowly have their fourth vector motions drained from them by interactions with sub-energy particles, causing them to red shift until their fourth vector motion was completely depleted. They would then become sub-energy particles. The sub-energy particles would over time end up all traveling in the same direction at the same motion amplitude level and all interactions would then cease. The universe would for all practical purposes be at its end.

The second rule that affects things at the basic level and above is that motion entities tend to disperse evenly within the volume that they inhabit. This can be easily understood when you consider that an entity traveling toward an area of high density of other entities will likely be turned away from that direction by interactions with other entities in that high density region, but those traveling away from the high density region into low density areas will likely not have their direction changed by any interactions and, so they can continue on their path away from the concentration and, thus reduce the

overall concentration of entities. Like the averaging of the motion amplitudes among motion entities mentioned above, the net result here is the averaging of the number of motion entities per unit of spatial volume available. Since the volume of the universe is very large compared to the number of motion entities that are contained in it, this means that the end result will be very few motion entities per unit of volume, which will further reduce the number of interactions that occur in the universe. Living creatures can only extract the motion that they need to remain alive and function from interactions, so this is not good news for them.

Both of the above mentioned basic structural rules are a big part of what man calls entropy and entropy works against life. From the perspective of the production of the first living creature, the basic problem is that the natural world actively breaks down structures that possess high levels of real or potential motion (energy). Living creatures on the other hand require very high potential energy structures such as DNA and RNA, etc. in their structure and cannot live without them. Even if such structures as DNA were produced in some way naturally, and all of man's current science indicates that it is not reasonably possible, most DNA molecules would not possess the code of an actual possible living creature in them, so a vast number of them would need to be produced to allow one with such a code in it to be made naturally. This number would then need to be multiplied many times to allow enough of these DNA molecules to be produced so that there would be any chance that all of the other molecular machinery necessary to make a real living creature would be formed in the same location so they could in some way be joined together into a living creature before the destruction of any of them occurred by entropy interactions, etc. At this time, many scientists are looking into the possibility that life could have begun using a less complex molecule such as RNA, but after many years of research no one has been able to make a self-replicating RNA molecule that could contain all the necessary code to make a complete living creature. If the most intelligent creature known cannot with purpose and intent make a DNA molecule from the base elements, it seems very unlikely that multitudes of them would somehow be produced by natural processes that naturally tend to destroy such things. When you combine this extremely low probability with the low probabilities of all the other needed molecular machines being produced naturally in similar quantities at the same time in the same place and the low probability that they would all somehow join together to form a living creature, it would amount to wishful thinking to believe that it could occur in fourteen billion years, let alone the much shorter time that would have been necessary to also allow for time for evolution to create all of the different living creatures that have ever lived. Moreover, the world is awash with the DNA, RNA, and other molecular machines that make up living creatures from all of the living creatures that have died over the years and there is no evidence that any new creatures have been formed from them and come to life. The usual reason that is given to explain why this is the case is that when a creature dies, its structural components are quickly eaten up by other living creatures, so that there is not adequate time for them to come together into new living creatures. An easy way to test this belief is to take a sample of the simplest one celled creature that might be able to reassemble itself and first isolate it from all other living creatures. Then multiply it into a very large sample. Next, the sample would be divided into two or more separate samples and each division would be killed in a different way such that if some of its structural components are destroyed by the method used to kill the first sample, the method used to kill the second sample would not destroy the same components. The samples would then be mixed together, which would make a sample that included all of the structural components in good working order. This sample would be put into some sort of container that had been made to isolate the sample from the external environment and had been cleansed of all living creatures before the sample was placed into it. This container could contain everything that might be thought to have aided the original life form to come together, self-assemble, and begin to live. With such a large sample of genetic materials and with their environment purposely designed by an intelligent creature such as man it seems that it would not

take long for them to self-assemble into living creatures. Although this type of experiment seems to be a no brainer, I have not seen any information that it has been done. This means that it has been tried, but failed or it has not been tried because scientists don't really believe that it would work. There is much more to the complexity of self-assembly of DNA, RNA, and even the various protein machines that make up even the simplest living cell, but details are limited by maximum character count.

Are there any problems with the concepts of evolution?

Evolution is harder to analyze because living creatures do fight against the natural world's entropy and do build up high potential motion structures. This makes it seem more plausible that they could make new creatures over time. The theory is based on the idea that genetic copying errors occur at some rate and that some of these errors yield positive results that make the living creature more likely to survive and, therefore, the change becomes a new improvement that changes the creature. After a large number of such small changes the creature is supposed to become a completely new creature through natural selection of its new improved makeup. There is no doubt that this mechanism has worked on a small scale. An example would be the change that causes sickle cell anemia. Although it causes health problems that can lead to death, it also gives some protection from malaria, so it has not died out, especially in those places where Malaria is a great problem. There are, however, no cases where major changes have been observed to occur in current times. It is usually said that this is the case because it takes a very long time for such changes to occur, so that we would not be able to observe any in man's short period of information gathering and storage. This sounds reasonable on the surface, but it brings up a problem in the concept of the theory. In order for all of the creatures that have ever lived to have been formed beginning from a single very simple creature, it is necessary to choose a copying error rate and positive result rate from the copying errors that are quick enough to allow for the production of all of the creatures starting from that first one. As the number of creatures increases, those chosen rates cause an increasing number of errors due to the larger population that produces that rate of errors. This means that the evolution rate increases exponentially with population. By now we should be seeing large numbers of changes occurring in relatively short times, but we don't.

If the world was created by an intelligent Being (God), has he given us any information about him and why he created it and us?

There are two primary places that we can go to find any such information. They are the world itself and the way that it is made, etc. and any information that God has provided for us through people by direct input to them. From the fact that this world is designed to be temporary, we can see that any purpose that God has for its use is also temporary. It contains three main structures, which are, sub-energy particles, energy photon particles, and matter particles. This pattern of three is repeated in many places in the creation. As an example, we are composed of three parts in our functional makeup. We have a spirit that generates our purposes and intents, a soul that translates those intents and purposes into thoughts that our bodies can understand and use, and a body that receives the information from the soul and takes actions to fulfill those purposes and intents. There is also communication from the body to the soul and then from the soul to the spirit to inform the spirit of bodily conditions and needs, etc. In both cases mentioned above, the middle structure acts as a communication interface or motion transfer device between the upper and lower structures. Since we are the most intelligent creatures that we know of, it could be that God may have modeled our intelligence after his. Of course, we are much less than he is and, therefore, our level of intelligence is of necessity much less than his. The structural pattern may be similar, however, and may give us some information about him in the same way that looking at the things that man has made can tell us much about man. There have been many who claim that God has spoken through them and most of them can be eliminated because their words do not agree with the structure and operations of the world's structure. For example, any that suggest

that the world is never ending and people just die and come back again over and over through eternity are false since the world was made to end. Because of space limitations, I will just go into the two that conform the closest to the way that the world works in their sayings about the world and those in it. These two are the Jewish Old Testament and The Christian New Testament. They are connected together in that the Old Testament prophesied of the coming of the New Testament and gave many details about it hundreds of years before it came into being. At the beginning of the Old Testament God describes the creation of the heaven and the earth. Although the heaven is mentioned here to show that the creation includes both it and the earth, the words that follow concern only the earth. At that time, even though the earth was already created in the past tense, it says that it was void and without form. This means that the earth had the function of containing things that have forms or shapes, but it was empty. This describes an empty spatial system. He then says that darkness was upon the face of the deep. This means that the earth contained something called the deep, which has a face or surface. Next God says that his spirit moved upon the face of the waters. This makes it clear that the deep is composed of what God calls waters and that his Spirit moved upon its surface. This signifies his first addition of motion into the earth. This motion would generate sub-energy particles in the universe, which God refers to here as the earth. Next God says let there be light and there was light. This tells us that the first motion that was inputted into the world was not in the form of light because that still needed to be done later here. Most who read this part only look at the surface and are amazed that God could bring light into existence by just speaking the words, but if we look a little deeper we can see that he is giving us scientific information that would not have been understandable to those who first heard it over two thousand years ago, but should be clear to us now. When you speak, you output motion that is in the form of waves of air called sound waves. This is a perfect way to say that God added motion to some of the sub-energy particles, that he had previously created when he moved upon the face of the waters, to make them go faster than the speed of light so it would be transferred to their fourth dimensional motions to create the wave functions that made those sub-energy particles turn into light photons. Next God divided the light from the darkness. This is a good description of adding more motion to some of the light photons with the proper angular motion component to cause motion to be transferred to their fifth dimensional motion and change them into matter particles which become dark because their light photons are trapped in the cyclically closed curved paths of the matter particles. Much more information is given in both the Old and New Testaments, which all leads me to conclude that the universe was not created by chance, but by God.