

"The two Friedman models of an expanding universe are, in fact, the basis of cosmology today."

**-STEPHEN HAWKING'S UNIVERSE
(Boslough 1967:37)**

"Equivalently, the kinetic energy and the gravitational energy of the universe had to be initially equal to one part in 10^{59} . What physical processes could have set so fine a balance? And there is another puzzle. If the gravitational and kinetic energies are not exactly equal today, why are they becoming unbalanced at this particular moment in cosmic time, just when *homo sapiens* happened to arrive?"

8. BLACK MATTER, INTELLIGENCE & COSMIC BULLDOZERS

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INTRODUCTION:

One of the fascinating issues before physicists -and the public- today involves the ultimate fate of our universe. What will happen to it?^{1} Gingerich frames the question thusly:

"But what about the universe as a whole? Will it not also collapse under the inexorable gravitational tug? Newton's question has been revived to become the leading problem of cosmology today. In modern terms, astronomers ask if the universe is open or closed. If space is hyperbolic, then the universe is open and unbounded, and the galaxies will forever rush away from one another, leading to an even colder, fainter, and more tenuous distribution of matter. On the other hand, if space is spherical, then the universe is closed and bounded, and its expansion will eventually slow to a stop, followed by contraction and a mighty implosion. The open universe is a one-time affair, but the closed universe might be a single cycle of an infinite series of oscillations.

(1977:1)

To summarize the possibilities, there are three potential outcomes for fate of the universe:

- 1) The universe could be "open", in which case it will continue expand forever;^{2}**
- 2) The universe could be "flat", in which case it will also continue to expand forever, though at a different rate than in the "open" model; or**
- 3) The universe is "closed", in which case it will eventually expand to a point when it will stop, after which it will then contract back onto itself.**

By reason of incompetency, we cannot enter the lists in defense of any of these options. We include them to demonstrate what science predicts are the possible final results of priesthood power as manifested in this universe. Obviously, scientists don't perceive their work in these terms, but within this model, that is the global perspective we adopt.

The question of which of the three is the most likely outcome may be rendered moot for at least two reasons. First, the length of time required for

¹Part of the fascination with this question probably lies in a subconscious horror or fear that the world will end before we do. Not a rational response, it turns out, but we are anything but rational animals as you have already noted about everyone - except yourself, of course.

²There is obviously an implied assumption in these three possibilities: the universe is presently expanding. The four major evidences of that fact are apparently incontrovertible.

the universe to reach its end is estimated to be billions of years.^{3} Second, the Christian canon predicts that the 'last days' are not far off, which we personally interpret to be no more than a thousand years. If the latter is true, and we accept it as a general approximation of things, the Lord will interrupt to natural progression of things so that the end of the movie will not be shown. He will introduce the peculiar interregnum, termed "The Millenium", when conditions are right. This means scientists will have to ask after the resurrection what the 'true' outcome would have been.^{4}

The relevance of this stuff to this theory is probably obvious, but let's re-state the obvious:

The final state of this universe must be correlated in some way with the POS, though it is not possible to say whether the universe will be allowed to live out its natural life, or whether it will be interrupted when the conditions for the 'end' are satisfied.

Look closer at the possibility that the earth itself could be terminated while the remainder of the universe is left intact. Within the narrow Christian view of things, this probably seems like a pointless possibility to consider. However, if one perceived the creation story to be a description of the creation of the earth within the context of an eternal universe that already existed, then it doesn't seem so peculiar to suggest the universe may be left standing. It was already standing when the earth was created. A question that is raised by this possibility is this: is it in harmony with the present conception of the priesthood to postulate the existence of a provisional theatre of operations that did not have a specific purpose and time table for closure? We do not countenance an affirmative response.

However, there is at least one scenario in which it would be reasonable to consider the 'end' discussed in the canon as being the end of the earth itself, the universe being left standing. This would not only be reasonable, but would even be mandatory, IF there were other inhabited earths in this universe which were in different time zones than this earth. There is no evidence in the canon to lead us either way, but given the Parsimony Principle, as well as the assertions of Brother Joseph and Dr. Sagan about other inhabited worlds somewhere out there, we believe that the universe likely will be brought to a close at a different point than this earth.

So far, we have talked about the ending point of the earth and universe. In this section on the INTELLIGENCE STATE, we also need to talk about the starting point of this earth and universe. Remember that in the theoretical model outlined above in Chapter 5 we included a set of Physical Initial Conditions which were the precursors and controls for the creation process. Those PIC were derived from, or were expressions of, the metaconditions themselves. This obviously means that the PIC are expressions of the priesthood. So let's talk about the creation of the

³You probably know what this note is about: time is irrelevant to the Lord. So the issue of just how long or how many years means nothing in the grand scheme of things. We just can't help thinking in these terms. However, the underlying issues are valid considerations: when will things end, what will bring them to an end, what will be the effect on us, etc.?

⁴This business of 'truth' is a slippery one. Only a fool -or, it turns out, a religious zealot (which isn't exactly the same thing)- will claim to have or know the stuff. It's a relative of 'reality', which is either non-existent or is totally subjective, the choice depending on your personal bias. For our part, we are persuaded that we wouldn't know it if we slipped in it. Truth is much like perfection as far as our model goes: neither is attainable by us during the metamorphosis.

universe, the earth -and maybe us- for a bit.

In preparation for discussing this, we need to draw on the information presented in the Chapter 5. Specifically, we will refer to the table of Physical Initial Conditions (PIC) that are postulated as the framework for this universe and earth:

- A. Singularity**
- B. Big Bang**
- C. Four Fundamental Forces of Physics**
- D. Particle Zoo**
- E. Energy, Matter & Entropy**
- F. Time**
- G. Three-dimensioned Space**
- H. Black Matter**

Table 8. Physical Initial Conditions

We will review these items in more detail than in Chapter 5 in order to clarify their relevance to this theory.

SINGULARITY AND BIG BANG

The "Big Bang" theory of the creation of the universe appears to be most widely accepted theory today dealing with the genesis of the cosmos. That is no longer the central issue.^{5} Since the genesis theory appears to be under control, cosmological debates focus, instead, on the ultimate fate of the presently expanding universe. Elementary particles (**D. Particle Zoo**) and the four fundamental forces (**C.**) receive considerable attention, and considerable research is done to test various hypotheses and theories. One of the highest levels of generalization in these debates and experiments involves this question of expansion or contraction of the universe^{6}.

⁵ Additional evidence in support of this claim is found in many publications. For example, Lightman (1991:2) says:

"The most widely held cosmological theory, the big bang model, rests on four observational facts: the flight of galaxies, speeding away from one another - discovered in 1929 and interpreted as evidence of the expansion and explosive birth of the cosmos; the approximate agreement between the age of the universe, as gauged by the rate galaxies move away from one another, and the age of the earth, as measured by the radioactive disintegration of uranium ore; the bath of radio waves from space, predicted as a necessary remnant of a hot, younger universe and discovered in 1965; and the overall chemical makeup of the universe -approximately 25 percent helium and 75 percent hydrogen- which can be explained in terms of atomic processes in the infant universe."

There is, however, a barrier beyond which cosmologists are unable to go in this backwards search in time to the instant of the 'big bang'. This barrier occurs at a few billionths of a second after the explosion. It is termed the "Planck wall" (Boslough 1985:87), and is a critical impediment because it limits theoretical developments and development of related experiments -mental or laboratory- that are necessary to attempt to define the initial set of conditions under which the 'bang' occurred, which conditions obviously have tremendous implications for what follows.

⁶ It is fascinating how often cosmology takes on religious overtones. Cosmologists might balk at the use of the term 'religious' in reference to their statements, but I choose to use it -or at least the term 'metaphysical'- because I do believe they are touching on religious issues when they make statements like those which follow in this footnote. Boslough quotes Hawking thusly:

"...Stephen Hawking has made a tentative foray into this uncertain area. 'The odds against a universe like ours emerging out of something like the Big Bang are enormous,' he told me. 'I think there are clearly religious implications whenever you start to discuss the origins of the universe. There must be religious overtones. But I think most scientists prefer to shy away from the religious side of it.'" (1985:109)

Among the technical issues involved in the debate, one of the fundamental ones is the question of how much mass or matter (**E. Energy, Matter & Entropy**) is contained in the universe.^{7} This issue is critical because the determination of which of the three predictions about universal expansion is most correct depends in large part on the quantities of mass that are present, and its interactions throughout the universe.^{8} This is self-evident because the gravitational force inherent in matter exerts its influence across space. If there is enough mass, and therefore sufficient gravity, the expansion of the universe will eventually be slowed down by the pull of that quantity of gravity. After it came to a point of equilibrium, it would begin to contract back on itself. But if there isn't sufficient mass/gravity, the expansion process will continue.

Experimental evidence collected in recent years that relates to the question of the quantity of mass has raised questions about the types of matter distributed in the universe. Previously, the data collected by available experimental technologies suggested that the amount of mass in the universe was equivocal as far as settling this question.^{9} However, there is evidence that suggests the presence of invisible matter where none was seen before in the universe.^{10}

"In fact," said Hawking, "a universe like ours with galaxies and stars is actually quite unlikely. If one considers the possible constants and laws that could have emerged, the odds against a universe that has produced life like ours are immense." (1985:111)

However, this pearly perspective isn't shared by all scientists. JS Bell is a prominent physicist who disagrees with this introduction of mysticism into science. For example, he says:

"The critical test cases requiring this conclusion are systems containing consciousness and the universe as a whole. Actually, the [scientific] writers share with most physicists a degree of embarrassment at consciousness being dragged into physics, and share the usual feeling that to consider the universe as a whole is at least immodest, if not blasphemous...It seems likely to us that physics will have again adopted a more objective description of nature long before it begins to understand consciousness, and the universe as a whole may well play no central role in this development." (1987:26-7)

We have, then, powerful authorities arrayed on both sides of these questions, and given their profundity and the absence of data, definitive answers either way will probably not be forthcoming during mortality. I prefer to side with Hawking and Sagan, not Bell. But note Bell's use of the term 'blasphemous'. It seems to us that one could only use that term if s/he believed in sanctity, believed it was possible to blaspheme, etc. So, was he being a hypocrite by referring to a concept that he scoffs at, or was he simply meaning that "Yes, there is (probably) a God, but let's keep Him out of science." Your guess is as good as any, and better than most.

⁷ As most of you already know, Einstein demonstrated that they are simply variants of each other. A cup of water has enough energy in its atomic bonds to drive a steamship the size of the Queen Mary (R.I.P.) from New York to London. (Not London to be precise, rather Southampton.)

⁸ It is noted that a major question involves the quixotic particles termed "neutrinos". These particles are difficult to detect, so there is uncertainty about whether they have mass or not. If they do possess mass, they contribute significantly to the mass in the universe, and it appears they would contribute enough mass to push omega over 1.0. Otherwise, not.

⁹ Omega, calculated as the ratio of kinetic energy to gravitational energy in the universe, is the variable which indicates whether there is sufficient matter or not to constitute a closed universe, one which will eventually contract back on itself. Estimates of omega, up till the 1980's, ranged around 0.1 which is only a tenth of the value of 1.0 which is the value there would be if this is a closed universe.

¹⁰ In ANCIENT LIGHT (1991), it is stated that 90% of the mass in the universe may be "cold" or "dark" matter. However, there is considerable debate about this matter.

In the 1992 Britannica Yearbook, new evidence is adduced to "argue against black matter as a viable candidate for the missing mass." (p. 107) The cursory article doesn't elaborate, but alludes to discoveries of that preceding year.

In contrast, in 1993, there appears to be new evidence that does support the theory of black matter. In September 21, 1993, in THE IDAHO STATESMAN, John Noble Wilford of the New York Times News Services reported:

"Two teams reported Monday that they had independently observed what could be the first evidence that some of the invisible, or dark, matter making up much of the mass of the universe exists in the form of stillborn or extremely dim stars at the edges of galaxies.

Such objects, known as Massive Compact Halo Objects, or MACHOs, have been hypothesized for years as likely candidates for dark matter. The acronym was chosen to contrast with theories invoking exotic subatomic particles as yet undiscovered bearing the name WIMPs, for Weakly Interacting Massive Particles." (page 3A)

that matter fills the universe, but that it is "finer" than we can observe.^{14} Up to the time of the recent discovery of black matter, it appeared, from a 'scientific' point of view, that this statement, if it was granted any credence at all, referred to the extremely rare molecules of gas found in space, or possibly to photons or perhaps other electromagnetic entities. Now, however, it appears that there may, in fact, be other types of matter, opaque to mortals, that are generally distributed throughout space. Some of the current reports indicate that there may be as much black matter present as non-black matter in the universe.

Could this substance be what Joseph referred to? It seems unlikely, though some LDS would like it if it were so. Regardless of whether or not it is this mercuric stuff called 'intelligence', there are some obvious questions posed by finding this stuff:

- 1) **What is it?**
- 2) **Where did it originate, in the big bang or was it already present in that "space" now being occupied by this exploding universe?**
- 3) **How does it actually interact with other matter?**
- 4) **Are there different types of this matter?**
- 5) **Does it have characteristics that can be formed and modified? etc.**

It could be suggested that at least part of this black matter is the thing termed "intelligence" by Brother Joseph. However, that is no more of an explanation of what the matter is than calling it cold or black.

Cosmologists, like Lightman and Sandra Faber, have anticipated unusual matter, as illustrated by the following quote:

"In other words, we have detected about one tenth as much cosmic mass as is required by the inflationary universe model. Scientists who believe on theoretical grounds that the model is right must therefore have faith that an enormous amount of mass is hiding from us, escaping detection, perhaps in a uniform and tenuous dark gas of particles between galaxies. In addition, the missing mass

¹⁴ LDS without exposure to the history of science probably tend to attribute Brother Joseph's statement to pure revelation. However, as in the case of the 89th Section, as noted by Dr. M. Backman, there were strong concurrent forces in the 19th century when Joseph lived which may have influenced him. (Backman noted that there is very little of SMD that didn't exist in some form in the US during the beginning of the 19th Century.) In fact, the concept was alluded to in the Seventeenth Century by Isaac Newton, as quoted by Rudy Rucker here:

"It is inconceivable that inanimate brute matter should, without the mediation of something else which is not material, operate upon and affect other matter without mutual contact. That one body can act upon another at a distance, through a vacuum without the mediation of anything else....is to me so great an absurdity, that I believe no man, who has in philosophical matters a competent faculty of thinking, can ever fall into it."
(Rucker 1984:72)

He is referring here to the force of gravity and its interaction, across massive distances, with other bodies. The point of this note, then, is that there were others who also recognized the logic of an undetectable type of matter in the immensity of space, including the pre-eminent Newton himself, one hundred years prior. True, at that time reference was made to a mysterious substance termed "aether" that filled otherwise empty space, but, while the term and conception was erroneous in a sense, in another it was right on target. We wonder, then, whether Joseph was familiar with and influenced by this concept. That doesn't matter whether or not he was. He chose to make it part of his cosmology so had to have exercised some sort of evaluative/selective process to justify it.

But whether that concept was in circulation or not and whether it influenced Brother Joseph or not is not really an issue here. He did choose to make such a pronouncement within the context of his revelations, and he gave it the name of intelligence and further drew a correlation between intelligence and spirits, though this correlation was not elaborated on in a manner that extended our understanding.

We note that the Newton's idea was pooh-poohed for many years, but that his idea might be construed as reference to this CDM after all.

required by the inflationary universe model cannot be composed of the ordinary matter that makes up atoms. Agreement between the observed abundance of helium and the theoretical calculations of its production in the early universe requires that the omega derived from ordinary matter, such as protons and neutrons, cannot be larger than 0.1. The missing mass must therefore consist of some exotic species of matter." (1991:114){¹⁵}

The final sentence, by one of the prominent cosmologist-astrophysicists of our time, is the important one.^{¹⁶} Might not the intelligence predicted by Mr. J. Smith constitute this "exotic specie of matter" of Dr. Lightman?^{¹⁷} However, we will be scientifically conservative and deny it. Somehow it seems counterintuitive.

INTELLIGENCE AND SPIRITS:

While we will disassociate black matter from intelligence, intelligence nonetheless plays an important role in this theory. In SMD, the discussions about the origin of our spirits is unusually divergent for a major doctrine.^{¹⁸} Here it is assumed, following Joseph himself, that our spirits

¹⁵ Note the statement that scientists "must have faith." Isn't that ironic? Science, which pretends to absolute objectivity, verifiability, replicability, impartiality, consistency, etc. nonetheless is sometimes predicated on faith of some sort. And don't be deceived. This faith can be of a religious nature in that scientists will hold to a theory or hypothesis in the face of seemingly incontrovertible evidence that a previous theory/hypothesis is untenable.

Witness the bitter struggles that arise between the young turks and the old guard as the paradigm, a la Thomas S. Kuhn, of a particular discipline undergoes one of the ground-heaving transformations that do occur as new experiments and data suggest a new way of proceeding and of perceiving what constitutes 'truth' and such. The old guard will harrumph disgustedly at the youngsters with their new-fangled ideas and ultimately cling to their older notions out of stubbornness and/or faith in the older theory. And the young turks will ultimately prevail. But they, too, will invest themselves in a new version of the 'faith', and run the risk at the other end of their careers of holding doggedly to it.

¹⁶ This same sort of spiritual feeling is described by Grof as a byproduct of the entire mortal experience in this manner:

"Spiritual feelings are associated with the dilemma of time and space, origin of matter, life and consciousness, dimensions and complexity of the universe and human existence, and the ultimate purpose underlying the process of creation." (1977:29)

These feelings are the kind we imagine cosmologists and quantum physicists experience.

¹⁷ We really don't entertain that possibility, but it is a thought. The thing I don't understand in discussions of dark matter is how it is able to interact with standard matter, even though it isn't standard matter. That sounds like something crossing dimensional boundaries or something equally unusual. If we can't see it with any of our scientific technologies, then it doesn't seem possible that it could actually interact with our matter. Doesn't the interaction of mass require the presence of gravity, and if so, how does this dark matter interact with standard matter if it has no gravity or has no mass or both? And then one wonders whether standard matter somehow interacts with or affects the black matter itself. Most perplexing matter to the neophyte.

Lemonick does a fair job of explaining the difference, but I still don't understand.

¹⁸ This divergence is not only remarkable because there are diametrically opposed opinions about the source of spirits, but also because of the authority of the 'evidence' that supports both hypotheses. On one hand, spirits are described as having existed eternally, meaning as long as God himself has existed, that they co-existed with Him always, that they were not created by Him. On the other, spirits are described as having been created out of intelligence by God. Obviously, this difference is a major one. This disagreement is founded, at least in part, in the teachings of Joseph himself.

There is another concept which may mediate between the two views: the stuff termed intelligence itself has existed eternally, so if one takes those passages that refer to the eternal nature of spirits, and construes them to be references to this fact, that the intelligence of which spirits are made, is eternal, then there is no real disagreement between the views.

It is impossible to understand why it is that such divergent views developed, or why they are so strenuously held by various latter-day prophets, whose pronouncements don't admit of differences. However, here it is suggested that the reason for these differences is that those who were pronouncing were focussed in one area or another, and based on their viewpoint at the time they made statements, they saw a particular segment of this matter. Their pronouncements were true, but they only represented the focus of their attention at that time. Of greatest importance here, it is suggested that if those same prophets were presented with this clearly defined question, i.e. were spirits formed by the Father of eternally-existing intelligence?, that the answer would be affirmative. For this reason, then, the posture taken in this paper is to proceed from that viewpoint.

It may be that this choice is erroneous. If so, it will be readily admitted. We are taking a strong position and will

were actually created out of this intelligence by the Father, although no description is given of the process of creation. However it occurred, this stuff termed intelligence is somehow processed, refined, modified or transformed into the sentient things called "spirits".^{19}

One wonders whether this sentience is imparted to the spirit through the set of birth ordinances^{20} which are applied to the intelligence as it is transformed into spirits. Alternatively, it may be that the intelligence itself, especially since Joseph chose that particular word which has connotations of ability or capacity,^{21} has inherent capacities, that it possesses abilities of some type. In the latter case, the spirit birth ordinance would not necessarily impart total sentience and abilities to the intelligence, rather would modify the latent abilities possessed by that substance, perhaps releasing or accentuating them.

OBEDIENCE OF INTELLIGENCE:

It is relevant here to bring in the matter of certain miracles that Jesus Christ did, and which a person with sufficient faith can perform^{22}. Jesus stilled the tempest by apparently talking to it, exercising his priesthood. That part is clear, but it isn't clear just how that action led to the changes in the behavior of the water and wind. SMD simply notes that the priesthood

prosecute it logically to determine what flows therefrom. Failure to take such a position, that is, admitting both possibilities, weakens the theory and prevents one from proceeding very far in a logical direction. The major reasons for selecting the particular choice, i.e. God is the literal, "genetic" ancestor of our spirits, stem from His designation as our Father.

But if unequivocal evidence to the contrary is presented, we will be persuaded. By unequivocal, we mean evidence which cannot be construed in the manner it obviously is going to be construed in support of this strong position. We will always attempt to construe the evidence in a way that it will be consonant with this hypothesis. Note also that we will always take evidence within the broader context in which it is presented because (1) that is the only way to have any confidence about what is intended by the speaker, and (2) it is the only way to be able to assess the general tenor and validity of the argument at that point.

As an example of the latter, Joseph Smith stated in the King Follett Address (HISTORY OF THE CHURCH v. VI, p.302) that the elements, meaning soil and water, out of which this world was created were 'eternal' and 'co-existent' with God. Within the context of the cosmology of today, this statement is difficult to comprehend or believe. Soil and water have only existed on this earth for 5.2 billion years, hardly eternity. For this reason, we have to use the context of any argument to determine what is intended.

One of the fondest wishes of LDS today is to believe in a Heavenly Mother. One of the favorite hymns, OH MY FATHER, with magnificent lyrics, even alludes to such a being. But there is nothing in the official canon to support that conjecture. Entailed in this wide-spread belief is a wish for a mother, and a hope that she did in fact bore us in a manner analogous to the bearing of children by mortal mothers. If there is in fact no heavenly mother, there will, in fact, be a lot of angry LDS who will believe they were substantially deluded by general authorities who propounded and reinforced such a belief. I will carry this notion to its logical extreme below in other chapters, not because I wish to be a heretic, rather because of the need for rigor.

¹⁹This leads to an obviously outrageous question:

Could spirits be created from the black matter of science just alluded to?

Science clearly would not tolerate this concept because intelligence is not a construct of science, and because it would be preposterous within science to propose such a startling use for this dark matter that otherwise is apparently just sitting in place, pushing and pulling galaxies. Revelation will be the only source of a solution to this problem during mortality. Since it is unlikely that the prophet will make a pronouncement on this matter, we will have to wait until we go to the other side to find the answer to the question.

There are, however, mortals who have the possibility of earning the visitation of the Father promised in John 14:23 at which time, according to Joseph Smith, He will teach them the secrets of the universe. Such fortunate individuals will learn the answer to this problem if they ask, though they would be instructed to not share such information.

²⁰See 11. PRE-EXISTENT SPIRIT BIRTH ORDINANCES for more thoughts about this topic.

²¹One wonders how successful translators of LDS scriptures are at finding words which carry the same range of connotations. Obviously, they can find terms to use, but the question here involves the deeper level of connotations and nuances that are separate from the lexical, i.e. dictionary, meaning. Our bet is that most languagea will not have words that convey the full range of nuances that 'intelligence' conveys. That's not a problem and isn't anyone's fault, but is a fact that has implications for the scriptures which will miss some faint meanings otherwise.

²²Given SMD's intense emphasis on the evils of alcohol, I chuckle each time I remember that His first recorded miracle was to make alcohol. Guess that's what a Jewish Mother will make you do. See Chapter 25 COFFEE, TEA OR MILK? for details on this matter. Ironic that SMD has to deal with this fact. Which it does through avoidance or ignorance.

was operational, a reasonable, appropriate observation, but let's look a bit deeper.

If one speculated that matter possessed intelligence,^{23} that it is filled -or whatever words apply- with intelligence, and also speculated that these intelligences have the latent ability to respond to the priesthood authority, then we have one hypothetical explanation for the success of Jesus' action^{24} as He made wine out of water. This molecular juggling was mediated through the priesthood. If the water possessed intelligence, then the priesthood could have been acting on that intelligence which in turn would act on, move, transmute, transform, or whatever it does, the molecules of water, of the hydrogen and oxygen atoms.^{25}

A third example of this obedience of intelligence is from the last week of Christ's life on earth. Jesus said on His triumphal entry into Jerusalem that if the people were silenced, the stones would cry out^{26}. If that remark is taken to be more than just colorful language, then Jesus believed that rocks possessed the capacity to act. Obviously, it is possible that the statement is no more than hyperbole, or is perhaps an allusion that would mean something particular to the listeners in that culture. However, it is also possible that it was intended to be a statement of fact.^{27} Here, it is assumed that His was a literal statement and we believe that the manner in which the stones would have acted would have been through the activity of the intelligence they possessed.

The fourth example involves the earth itself. She is described in scriptures as groaning as a result of wickedness. This, too, could be figurative or allegorical language. But we believe that this may be another

²³This is the suggestion of the Sunday school teacher who is referred to in the Preface of this work. Wish I could take credit for it.

²⁴This concept is not unique after all. Many cultures have myths and legends that attribute such powers in this manner. Various footnotes in 15. CONSCIOUSNESS - COGITO, ERGO SUM exemplify such cultures. One will be appended here as an example:

"The Dayaks believe, some clearly and some obscurely, that every object, but particularly those growing or usable or capable of changing in any way, has in it a kind of force. It must have, they say, for otherwise it could not grow or be used or change. We could translate their term for this force as 'soul', since it is the same term they use for the vital force in themselves....The truth of the matter is that the Dayaks tend to take a different view from us of cause and effect. Effects just do not follow passively from causes but must have in them a power in order to be able to develop. A spear can fly through the air in a way that a feather cannot because it has a different power. The force which we so nearly translated as 'soul' is thus the operative power in things." (Geddes 1961:xxiv)

Note the use of the term 'soul' to translate the Dayak term for whatever it is that "inhabits" these categories of things. In this work we call it intelligence. We believe that human souls are constituted of this intelligence.

²⁵Two questions come to mind here. First, Is there some sort of one-to-one correspondence between the finite molecules or atoms of mortality and the sub-units of intelligence such that one finite unit is possessed of one unit of intelligence? (Are there even 'sub-units' of intelligence?)

Second, in this molecular juggling, did the priesthood act solely on the mass of hydrogen and oxygen molecules in the jars, or did it introduce -bring in from elsewhere- additional atoms of other stuff, i.e. flavors, colors, alcohol, etc.? Either possibility is worth being considered. In the first case, we know that all 'mortal' matter derives from the basic forces and particles of the universe, so it should be possible to simply rearrange any collection of these forces and particles to obtain new types of matter. The process would basically undo the existing arrangements and then rearrange the forces and particles to get new types of matter, but still using the same forces and particles. In the second case, it should also be possible for the priesthood to call new materials into the jars, to magically import them from elsewhere and merge them with what is already present. Here, the first choice is the one that is assumed to be more likely.

And finally, if the four forces of physics are in fact aspects of the priesthood itself, it could be that the molecular juggling was actually performed at the level of "beauty", "left" and "up". Neat.

²⁶The actual language of Luke is:

"And he answered and said unto them, I tell you that, if these should hold their peace, the stones would immediately cry out." (19:40)

²⁷Given His commitment to straight honesty, one is tempted to conclude that He meant this remark literally.

example of the responsiveness of intelligence possessed by matter.

It is assumed here that intelligence "possesses", for lack of a better word, latent properties of various kinds^{28}. We claim that one of them is "obedience", which is evidenced in Jesus' miracles mentioned here. When priesthood power is exerted on intelligence, it responds through this property, so if the intelligence is possessed by water, it is water which appears to respond. If rocks possess it, rocks appear to respond, etc.

This concept is comparable to the actions of our spirits during mortality: a human spirit made of intelligence is clothed by finite matter which matter appears to obey, when in fact it is the spirit that is responding. In this manner, then, rocks responding blindly to priesthood influences, and human spirits obeying commandments, are exhibiting comparable behavior. Intelligence is involved in both the rock and spirit, with the property of obedience being manifested^{29}, which, in turn, leads to modifications in the matter itself.

AGENCY OF INTELLIGENCE:

Another aspect of this concept, that intelligence has intrinsic abilities and capacities, revolves around free agency. Above, it was suggested that intelligence possesses the property of obedience, meaning specifically, obedience to the power of the priesthood. When priesthood is applied to it, it must respond. This obedience suggests a form of agency. Matter is perfectly obedient and responds consistently and in a predictable manner every time priesthood power is applied to it. There will never be a case where dumb matter is "disobedient" to the instruction directed to or at it through the priesthood^{30}. Compared to mortals, then, matter is more obedient, because it unflinchingly responds to the invoked wishes of the gods wielding priesthood authority. Matter is perfectly obedient.

However, this behavior which seems in one sense to exemplify a higher degree of obedience than that of humans who sort hit and miss is not worthy of a reward. While intelligence is perfectly obedient, it has no other choice. It is probably incapable of even "recognizing" that there is any other option than compliance. For this reason, intelligence merits no reward for its obedience. If a pebble is placed in a sling shot and then thrown from here to there, it will be perfectly obedient to the force applied to it, and will be so whenever it is subjected to that set of circumstances. Does the pebble deserve a reward for obeying? We think not. It is obviously obeying -that is, responding appropriately to- the forces exerted on it, but it is not exercising cognitive intention nor making a decision.

²⁸ Other properties are difficult to guess at, but all matter will exhibit describable, definable, measurable characteristics, attributes or qualities. Mortal matter can be described in terms of color, density, molecular weight, specific gravity, melting point, freezing point, resistance/conductivity, reactivity, atomic structure, valence, Ph, specific heat, etc. In a similar manner, intelligence has attributes, though of entirely different species, that can be described by those who can "measure" it.

²⁹ Zukav also compares us to rocks:

"But that is an unfair example," we say, "Rocks have no choice in the matter of falling. If we drop them, they fall. If we don't drop them, they don't fall. Humans, on the other hand, exercise choice. Accidents excluded, humans ordinarily are not found in the act of falling. Why? Because they know that falling may hurt them and they have no desire to be hurt. In other words, humans process *information* (they know that they may be hurt) and they *respond* to it (by not falling). Rocks can do neither." (1979:70)

He doesn't use the term agency here, but this description is relevant to this discussion.

³⁰ This assertion is un-documented. Logic seems to support it.

In contrast, the human spirit, also fashioned from intelligence, has the ability, quality or attribute we call 'free agency'. And it can also be obedient, even perfectly obedient. However, there is a profound difference between the obedience of rocks and the obedience of spirits. The human spirit, in contrast to the intelligence of the rock, is cognizant of at least the option of simply not obeying^{31}, if not aware of a variety of other options it has before it. A spirit can exercise agency and because its obedience is the result of selecting and then intentionally acting on a choice from among a set of choices, reward is in order.

Similarly, if a wrong choice is made, a human spirit reaps a negative result, which is not true of rocks. They can't even disobey. If they could, they would also reap negative results. The paradox here is that the state of obedience that is most highly valued in the POS for a human spirit with its free agency is for it to be as obedient as a dumb rock. But only the spirit will merit rewards, and this is because the spirit exercises free agency in its obedience while the rock does not^{32}.

Free agency appears, in this context, to be a sophisticated, multi-function version of the corresponding property or primitive trait of the intelligence inherent in, or possessed by, a rock. If this is so, then we suspect that the spirit birth process either transforms or amplifies -or some such thing- the latent agency of unprocessed intelligence into the sentient agency of human spirits. After this transformation, the human spirit can be obedient just like inanimate things can be obedient. But the precursor to the spirit's obedience is a process of selecting one from a set of alternatives which are detected or sensed by the spirit. This process of detection and selection is the fundamental purpose of the mortal experiment we find ourselves in, indeed of the entire metamorphosis we undergo. We are set up in a testing environment where our blinded spirits are subjected to tests to determine the degree of our willingness to be as obedient as an inanimate rock.

CLASSES OF INTELLIGENCE:

Consideration of the process of creation of spirits from intelligence, suggests that there might be different types of intelligence. Perhaps the differences between classes would be comparable to differences in mortal matter described as atomic weight or mass or differences other inherent qualities, etc.^{33} Different types of intelligence might be assigned to specific types of mortal creations, or there might be random distribution of types, etc. Plants might possess one type, animals another, and rocks still another. Perhaps even intelligence undergoes transformation over "time" so that it evolves from one type to another until it is eventually utilized in spirit creations.

³¹We might say "obeying a law", because that is all rocks do and, in reality, that is primarily what human spirits are doing in obeying. But humans don't always perceive themselves as obeying laws as they make choices and act accordingly.

³²The scriptures indicate that people who become perfect will (a) exhibit predictable behavior and (b) will act like the Father. This is because they will be obedient to the laws of the priesthood, always choosing the "right" option. So they will be as consistent as rocks are. This is why knowing the Christ was the same as knowing the Father and seeing the Christ was the same as seeing the Father.

³³See 15. CONSCIOUSNESS -COGITO, ERGO SUM for a more detailed discussion of this idea.

The statement that all things were created spiritually before they were created mortally is relevant here. We generally propose that this spiritual creation was essentially a manipulation of intelligence -black matter?- to create spirits, or the analogues of spirits, for living entities found on earth, leaving the non-living things full of unmodified intelligence.^{34}

COSMIC BULLDOZERS:

According to this model, the priesthood is able to manipulate raw intelligence through its innate, latent obedience, which we consider to be a form of primitive agency. The by-product of this principle is a lovely explanation for the process of creation of earths, stars, planets and universes. Persons who were authorized through the appropriate priesthood ordinance to be in charge of the creation process, whether Christ, Michael or someone else, exert priesthood influence to shift matter as needed^{35}.

An authoritative commandment was given to the subject matter (ha!) which commandment stimulated the intelligence residing therein. Then the intelligence somehow responded and acted in conformity with the authority and instruction exerted on it. It executed and fulfilled the commandments. This concept of creation obviates the need for some sort of cosmic bulldozers that would otherwise be required to shift masses of matter from place to place. Intelligence in the matter will move as instructed and, note this important fact, such movement will be according to natural laws which are expressions of priesthood power. Eventually the structure desired by the person in charge will be produced through what appears to be the application of natural laws.

FUNDAMENTAL FORCES OF PHYSICS:

This discussion raises several other questions. First:

Is there any correlation between the basic forces of the physicists (strong, weak, gravity, electromagnetic) and the priesthood?

The answer must be yes, at least at one level, if one accepts the dogma that the power of the priesthood governs and controls all things.^{36} Natural laws are assumed, within the context of SMD, to be expressions of the priesthood. This obviously leads to the conclusion that there **is** a correlation

³⁴For detailed discussions of this process, see both chapter 15. CONSCIOUSNESS - COGITO, ERGO SUM, as well as chapter 32. MICROBES, ALGAE AND LICHENS. Very perplexing topics.

³⁵Special note need be made for the non-LDS reader. SMD holds that the priesthood possesses, or consists of, sub-parts, segments or facets, though those words aren't the ones used. It uses the term "keys" of the priesthood. In order for a person to exercise or employ a particular key, (s/?)he must have it specifically bestowed on him by another person who already possesses it. However, we can't begin to guess how the process works, meaning conferral of, or even exercise of, those keys. But when an individual has the appropriate keys, (s/?)he can exercise that aspect of the priesthood.

³⁶The bewildering consequence of an affirmative answer to this question stems from the necessity, then, of having the priesthood, which exists in a 3+n dimensioned world, simultaneously operative here as well. How can this power "express" itself, or be efficacious in both realities. Fascinating concept that, on deeper probing, will reveal many grave and important aspects of the POS and our role in it, i.e. the method of operation of the holy ghost, the method of the Father in creating and controlling worlds, etc.

between the forces and the priesthood.

The next question, is:

Is there a correlation between the basic particles (of the zoo) of the physicist and the "molecules" of our spirits (which are made of intelligence)?

We obviously don't know, but if there is a correlation between the fundamental forces of physics and the priesthood, then it would appear that there must be a correlation between the priesthood and the particles, because particles are merely expressions of the forces. We know that the strict scientist will categorically balk at such an idea. But we do not believe that one concept necessarily excludes the other. The conditions of mortality -all conditions- must actually be expressions of the basic properties of the priesthood in some manner. That is why we postulated the initial conditions as being derived from the Primordial Conditions.

The final question, which is a slightly different version of the preceding question:

Is 'intelligence' created of fundamental priesthood forces in the same manner that mortal matter is formed of particles which, in turn, are formed of the four fundamental forces?^{37}

Who knows. This is not a trivial issue at all, but it is absolutely outside the realm of even speculation for us at this point in our metamorphosis with the corpus we have to work with.

CONCLUSION:

This chapter discusses the relationship of priesthood to matter and to intelligence from which spirits are created. The Metamorphosis Function dictates the purpose of the three-stage metamorphosis, once the spirit is created. Whatever the nature of spirit "matter", or intelligence, is during our sojourn on earth, we believe here that it is altered by:

- 1) the exercise of our agency, and**
- 2) by the application of the two priesthoods -the white and the black- to it.**

These influences modify the "molecular" structure of our spirit matter^{38}. That is why we are subjected to these horrible experiments that pain us so greatly. And thereby offer such spectacular benefits.

³⁷ Indeed, who cares! This stuff is over-whelming sometimes.

³⁸ I hope it is also obvious that we believe that part of the nature of our present spirit condition or state is the result of what we did (not) do during the PE. We came here in a condition that reflected something about what we had done. But much more on this matter in the chapters in SECTION III. PRE-EXISTENCE PHASE.