

"The flagellates are thought by some to be the source of higher animals and higher plants as well. As a group, they are difficult to exclude from either the plant or the animal kingdom."

-GENERAL ZOOLOGY
(Villey, et al 1963:165)

"For the things that happen in the material world do offer a kind of mirror-view of things in the spiritual world.:"

-HEAVEN AND HELL
(Swedenborg 1990:58)

32. MICROBES, ALGAE AND LICHEN

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INTRODUCTION:

Interspersed in the bits and swatches of information revealed about the PE, is an intriguing statement that all things were created spiritually before they were created mortally^[1]. This seems like an innocuous bit of doctrinal fuzz that is hardly worthy of much thought, and unlikely to yield much insight after it is investigated. It appears to be a categorical statement that sums up a minor doctrine, leaving nothing for discussion. However, a few moments exploring the implications of the statement raise several legitimate, interesting -even startling- questions that are not answered in the present LDS canon. Let's scrounge around in the mental rag bag again for relevant miscellanea.^[2]

LIONS, TIGERS AND WHALES:

If we limit our speculation regarding this doctrine to the spiritual creation of man him/herself, the claim just seems like a nice, but obvious comment, which any clear thinker would probably deduce eventually. Obviously, we, homo sapiens, were created before we came here, if we believe we lived before we came here, and if we believe the Genesis scripture saying we were created in His image. Now expand the scope of the doctrine to consider other "things" that exist on this old mudball.

Let's start with animals, particularly large ones, such as lions, tigers and whales. Does the doctrine still fit? It seems like it might. Whales are pretty large and maybe they needed spirits to run their bodies. Such spirits would need to be created, then. Perhaps the same could be said about tigers and lions. The only snag in the idea is the staggering numbers: the total number of those creatures who will have lived on the earth -counting past, present and future ones- must be stupendous, doubtless outnumbering humans by magnitudes. Do we really want to believe that the Lord actually created one individual, unique

¹The specific scripture is:

"...For I, the Lord God, created all things, of which I have spoken, spiritually, before they were naturally upon the earth." (Moses 2:5)

Succeeding verses elaborate this theme, but the seminal concept is as stated here. This chapter revolves around it. Note, please, that He uses the word "all". (Or at least Joseph chose to gloss whatever he was dealing with as 'all'.) That seems to cover the waterfront, leaving no exceptions. But there ARE exceptions as we will see here. Maybe you won't be persuaded, but you won't be able to explain away this collection of factual minutiae that sits in front of us all the time. In the Lord's created world. If this tidy little scripture is to be strictly construed as quoted here.

²Without going into detail, I heartily recommend Swedenborg's HEAVEN AND HELL again. Chapters 12 and 13, regarding HEAVEN HAS A CORRESPONDENCE WITH EVERYTHING ON EARTH, offer some fascinating information pertinent to the discussion which follows, which may actually be closer to the truth than our own speculation.

We can't resist inserting one quote:

"The whole natural world corresponds to the spirit world - not just the natural world in general, but actually in detail." (1984:81)

That sounds like a paraphrase of the Moses scripture in the above footnote. The most fascinating thing about this quote for LDS, from a historical perspective, is that it was written by a non-LDS in the 18th century, almost 50 years before Joseph Smith was even born.

spirit for each of those bodies? If we take the doctrine at face value, that's what we conclude. That is possible, and that would be a lot of them.

He obviously could have done that. We don't deny the possibility. But somehow the idea that He created so many of these animal life forms and created unique spirits for each individual seems to be a violation of the Parsimony Principle proposed in our metatheory. Why would there need to be so many creatures whose purpose in the Plan is so limited?

At this point, the omnipresent philosopher will ask, "Just what are you assuming to be 'purpose'?" How is these animals' purpose limited? Definition, please. We make the assumption - without foundation- that these critters have only minimal significance in the POS, that they occupy particular ecological niches and compete with each other and serve as meat substitutes for each other^[3]. If that is their 'purpose', then we could be persuaded that they didn't have unique spirits. But we recognize that it is also possible that they, in fact, serve a higher function in the POS than we realize. That possibility cannot be ruled out at this point. If there were some higher purpose, then the possibility that they were all created spiritually first would not seem to us to be a violation of the Parsimony Principle. We'll return to animals in a minute.

MONKEY PUZZLES, YEW^[4] AND BROMELIADS:

Let's move now to the plant kingdom. Think about big^[5] trees first, like the giant of them all, the Douglas Fir.^[6] The doctrine did not exclude plants or any living group, so if taken to its extreme^[7], we must conclude that these trees were each created spiritually before they were created mortally.^[8] Again, like in the class of big animals, it seems like an awful lot of

³ For a lengthy discussion of Darwinism -in several flavors, actually- and various theories of evolution, dip into SJ Gould's THE PANDA'S THUMB. He even devotes several pages to the Wallace-Darwin debate, alluded to above. He comes down on the side of Darwin, finding Wallace to be too much of a creationist. We politely demure.

⁴ No pun intended.

⁵ We don't now why size seems to us to be a consideration. That probably is irrelevant. Large things probably are easier to comprehend in this discussion.

⁶ No, the famous, much touted sequoia and redwoods are not the largest trees of this world. It is one of the perverse paradoxes of history that the total devastation of the larger Doug firs was the impetus to protect these two species. The doug reined supreme in the Cascade Range east of Seattle, through the Snoqualmie Pass and environs. The warm Japanese current supplied 60 inches of rainfall a year on the west side of this range, which produced gargantuan trees. The surviving photographs taken by a local photographer from the Skagit Valley show stands of trees, each 14 feet in diameter. Humans are mites in comparison. One of the largest recorded firs rose 200 feet to its first branches, and at that level, it was still 9 feet in diameter.

⁷ Which is what we keep doing here, and which we should do because that brings out salient implications and ramification that otherwise are opaque to us, but which are nonetheless, germane whenever one wishes to comprehend what s/he believes.

⁸ Just what does this mean? Do trees have spirits? See 21. MALE AND FEMALE for some thoughts about classes of spirits.

tree spirits^[9] to have hanging around up there, waiting their turn to come down. The sheer number of this group, which has covered so much of the surface of the earth for so long, must be astronomical.

Did He intend to state in that scripture that He really created individual spirits for each tree? It is obviously possible for Him to do that, but the numbers are SO LARGE.^[10] Alternatively, it could be, according to the idea elsewhere that there were four classes of spirits, that the spirits for trees are modified masses of intelligence that occupies tree trunks somehow, without a need for individual spirits to be created and stored in a cosmic warehouse. This would satisfy the creation requirement of this scripture, and would also seem more in keeping with the Parsimony Principle. But this really isn't more than a notational variant of the spirit idea^[11].

CRAB GRASS, TIMOTHY AND BAMBOO:

Now let's just expand our group of included things a bit. Take grasses as the next example. Simply overpowering. We can hardly think about it. Did He really create a spirit for each one of those?! We don't doubt a minute that He could do it. That's not the issue. The issue is that the Parsimony Principle seems to us to be violated by the outrageously large number of grass spirits that would have to be created.^[12] We think the Lord is more conservative and that He uses another system -a la large trees just mentioned- to accomplish His purpose here.

MICROBES, ALGAE AND LICHEN:

And now if you will expand our example even a bit further, you will short-circuit your brain. What about bacteria, and viruses? And chlamydia? And algae and amoebas? And parasites and lichen, etc.? Boggle. Tilt. Push RESET to continue. Worse, how about the things like slime molds that grow on wet surfaces, or the mildew that creeps and grows into and becomes part of a piece of moist cloth?

Do you think He created a spirit for each of these little things -many of which seem like nasty, horrible little things anyway? The Parsimony Principle suggests no. It seems like such an exuberant waste of His time and resources to create all of those tidbits of spirit protoplasm/ectoplasm. But in addition to

⁹ The druids weren't all wrong!

¹⁰ Magnitude of numbers is really irrelevant, isn't it. This is a purely personal response, an inability to comprehend big numbers. And a wish for simplicity and patterns and algorithms.

¹¹ See 15. CONSCIOUSNESS - COGITO, ERGO SUM for details on this matter.

¹² Remember that as we extend the implications of our (meta-)theory, we will encounter problems. This is one. Is it sufficient to persuade us to drop the Parsimony Principle? We think not. The beauty of algorithms, manifestations of this principle, lies in part in their simplicity and elegance, relegating a host of minutiae to obscurity, freeing His attention for larger scale -more important?- enterprises. So we will keep the PP.

the issue of numbers -which is really red herring introduced for your thinking enjoyment- there is a question of purpose and resurrection and mortal biochemistry, etc.

VOLVOX GLOBULATOR AND HYDROIDS:

And what about the groups of funny little things that aren't clearly plant or animal - like hydroids? And what about things like *volvox globulator* which appear to be a set of colonies within colonies? How many spirits would it have? And what about the algae masses? How many individuals would there be in a mass? And what about lichens?

Why should it be that size, number of creatures, and complexity of an organization -from man to amoeba- affect our personal ability to accept this dictum? The manner in which I have presented the evidence here leads one to think that size and complexity are somehow important factors. Are they? In a purely logical sense, as a principle, it shouldn't make any difference, but somehow it bothers us. It just seems preposterous to think that the Almighty created every single virus and bacteria and giardia spiritually before they came into existence down here. I know, I know. He could do it. But somehow I doubt he did.

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But these sorts of thoughts come to mind when pushing a simply stated principle like this one to its logical extreme. Lets's go further. Would the Lord expend resources -energy and matter- in creating a multitude of viral particles when they are probably not going to be resurrected? It seems to me that resurrection might be a razor that could be used to isolate things that will be created spiritually.

Now consider the notion of all mice and lemmings being spiritually created in the PE. Since they are still large enough to appear to probably possess their own spirit, one may find it believable that in the spirit world there were trillions of each specie of small creatures. A veritable living carpet of them I imagine, a sight to behold indeed! Now. Hold still for this one. What about evolution? Shudder. Could it be that multiplication and extinction of species in response to changes in ecological niches accounts for the variety of creatures we see and that this is the mechanism for the development of such creatures, rather than having the Lord design each one of them? That's heresy, isn't it. But. It's closer to true than the converse. In fact, evolution would be a wonderful way to explain how the phenomenal variety of living things that have lived on this earth came into being. It fits the Parsimony Principle better than the above dictum does. However, here as in most areas, the Lord's mind is opaque so we don't know how he did it.

Let's return to the pathogens again for a minute. Some microorganisms like bacteria, viruses, chlamydia, etc. appear to serve only the purpose of degrading the life of other organisms, at least the pathological ones do- in the pursuit of their own

life^[13]. Does it seem likely that Divinity would have spiritually created any sort of organism whose purpose is only malignant? (Yes, what about neoplasms, oncogenes, etc. Did He make those up as well? They are real things so if we strictly apply the dogma to them, we must conclude that He did in fact make them spiritually.) Somehow, that doesn't seem likely, though it is possible. It seems more likely to postulate their "creation" as a byproduct of mortality. And note the implication when one considers spirits and the resurrection again? Does it seem likely that these organisms will be resurrected? Why would the Lord create anything spiritually that would not be resurrected?

Once one grants the possibility of mortality-only creations -a difficult thing to do in light of the dictum we are discussing- one is faced, predictably, with knotty problems: where does one draw the line between mortal-only creations and spiritual creations? No answer, sorry.

Another note: viruses are not able to replicate themselves. True, they do manage to propagate themselves, but it is in an abnormal sense that doesn't seem to fit the concept that each creation contains within itself the "seeds" for its propagation. The way viruses succeed is to physically violate the membrane which serves as a boundary for a cell, then enter into the protoplasm, commandeer the replication mechanism of the cell, twisting it to its own end, thereby causing the mechanism to spew forth copies of the viral particle which then burst from the cell, destroying it in the process, and then these repeat the sequence elsewhere in other cells. But the viral particle cannot replicate itself. It must have this access to someone else's replication device. In this light, then, one must ask whether the Lord would create a fragmentary organism that did not comply with His requirement that living things contain their own seeds for re-creation. It's obviously possible - I guess- but doesn't seem likely^[14].

¹³ One of the foremost immunologists today, Ivan Roitt, said it succinctly:

"We live in a potentially hostile world filled with a bewildering array of infectious agents...of diverse shape, size, composition and subversive character which would very happily use us as rich sanctuaries for propagating their own 'selfish genes' had we not also developed a series of defense mechanisms at least their equal in effectiveness and ingenuity." (1991:1)

Our mortal bodies are beset with a fearsome array of 'creatures' that can cause illness and even take our lives. We speculate here that this characteristic suggests, though it doesn't prove, that perhaps these pathogens are somehow basically expressions or byproducts of mortality. We say this because they are 'bad' and nothing bad comes from the Lord.

However, we can sneak into the philosopher's den again, and argue definitions. Perhaps causing death isn't not a 'bad' thing, not that it is a good thing, but perhaps it there is a neutral value in which case this note has no merit as an argument.

¹⁴ Perhaps the most exotic of viroids are the pathogens responsible for the transmissible spongiform encephalopathies, Kuru of New Guinea, Creutzfeld-Jacob Disease, scrapie in sheep, varieties in mink, mule deer, and strains in elk and cattle. Various theories have been postulated to account for their nature and life, but none seems persuasive. The term 'prion' was developed after the term 'viroid' was found to be inadequate, to describe these entities believed to contain little DNA, which makes them smaller and more primitive even than viruses. Bockman states:

"The agent or agents of these diseases have many unusual physiochemical and biological properties, particularly their resistance to treatments that inactivate known viruses." (1991:11)

Some of the bizarre qualities are: long incubation periods up to 20 years for Kuru, ability to withstand standard sterilization treatments like high temperatures and resistance to some chemicals and ionizing radiation. None have been visualized, though there are electron micrographs showing structures attributed to these organisms (or their pathological effect), nor have they been cultured although they are filtrable and titratable.

The reason for bringing them in here is to point out that it seems to us to be most peculiar to theorize that there are individual spirits for each of these bits of protein, which one must do if s/he maintains that the spiritual creation referred to above means that ALL life forms had individual spirits created for them. We doubt that these organisms will be resurrected, and conjecture that they are merely

Look at another consideration here. If we allow for separate grass spirits to be created spiritually, we still run into a difficult problem. Let's grant their existence, and then place one grass spirit into a crabgrass seed and plant it. Now, when it hatches and grows, we will have a minute plant which seems OK. As the plant grows, it starts the wonderful crabgrass trick of sending out tough pointed rhizomes laterally which then start sending up what appear suspiciously like separate plants - little clumps of blades- but that's OK for the moment. We'll just assume that the grass spirit can "fill" whatever extensions of the parent plant that develop from it and remain attached to it. Seems odd, but does seem possible. Now the problem: let's place a fanatical gardener into this little picture. Before the poor plant is even aware, this man has ripped out the original plant and some of its extensions, and in the process has broken off some of the still-buried rhizomes that haven't yet erupted into individual plants. Now what do we have? We have a problem, thank you. We have bits of roots off the original plant that will EACH turn into individuals - so whose spirit fills them now? The original one that extended to fill the rhizomes that were still attached now must somehow be asked to splinter itself so it can occupy separate individuals without there being any physical link. Or else maybe the spirit will sort of exert a sort of force-field that covers or inhabits any of those plant types that are under the field? Does that work? I think not. This may seem preposterous, but the POS is nothing if not logical and methodical, so if we extend any argument to its reasonable extension, we will discover some interesting things about the basic idea. We may not find any answer, as in this case, but we will understand more about what the basic problems are.

REPRODUCTIVE STRATEGIES:

Then let's talk a minute about asexual versus sexual reproduction. In the grass story above, we brought this matter in. Plants are wonderfully adept at this sort of process, as are star fish. If we whack off a starfish leg and throw the piece back into the sea, it will insist on forming an entirely new, complete individual of the same specie! So whose spirit fills the latercomer? Part of the spirit of the original one -hardly likely- or a new one? And if it is a new one, we have to deal then with what the mechanism is that sorts out creatures into 'parent' groups that retain the original spirit, and offspring groups for which it collects new spirits and inserts them. Seems sort of silly, doesn't it? Especially when there is an alternate explanation: that these levels of creations do not have individual spirits, rather are essentially expressions or mortal ectoplasms that were originally set up from some sort of spiritual template but which continue on their own through the DNA replication process. The problem with this explanation is that there is no explanation for why these creatures should be

"alive", seeming to have spirits.

Let's look at other reproductive strategies for a bit now, since this pertains to the present discussion. What about parthenogenesis? This is the process wherein new generations arise from a single individual without the use of gametes? Does that violate the commandment for multiplication to occur between individuals? Or am I wrong in believing that the Lord intended for two individuals to have to share in some way to create the next generation? And what about the business of spirits? If the new generation derived from one individual—keep the crab grass story in mind—does the new individual get a new spirit even though it is merely an extension of the original protoplasm? This is a trick used by some fish and plants so this isn't just idle speculation. It must be accounted for in the model.

And here's another curious tidbit that has implications for the model: some of the live-bearing tooth-carps, like swordtails in the *xiphophorus* genus, can undergo a most peculiar transformation in that some females mutate into the form of males and functions physiologically as a male from then on.

The questions, then, are:

Are there male and female spirits for fish?

Or did the Lord make special bi-sexual spirits for these particular individuals who would undergo mutation?^[15]

If so, what are the consequences of the mortal body being transformed into the opposite gender?

Is the spirit thereby affected, or is the body affected or does it matter?

And look at bacteria and viruses again. They don't even have gender! So what does that mean? He commanded that things on the earth be created, to contain seeds within them for reproduction. But these critturs don't conform to that rule.

And how about asexual reproduction like hydra, where an individual allows a portion of its body to bud into a new individual that is then separated? Crab-grass technology again. Whose spirit fills the new guy? And is it male or female?

And how about deformed bodies of all types? Does that have any relationship to the spirit embedded in it? Just too many questions and too few answers in this area. Time to move on into something else equally murky.^[16]

DARWIN'S FINCHES:

¹⁵ Doesn't that seem like an outrageous thing to suggest - a bisexual spirit?

¹⁶ Quickly, we will quote from Gould, because he vindicates our (feeble) efforts here:

"Nature's oddities are more than good stories. They are material for probing the limits of interesting theories about life's history and meaning." (1980:75)

We take some of these oddities and bend them to our end, trying to figure something out. Though we aren't always sure what it is we are trying to figure out. Lame, huh? Gould does in his essays, which originally appear as editorials in NATURE magazines after which they are compiled into volumes like THE PANDA'S THUMB, is the same thing that started this frenzied work.

Look at the ugly duckling called evolution again. We cannot ignore it. It is real. How else account for Darwin's finches, or, for that matter, how account for good ol' Luther Burbank's phenomenal success? Mutations are the primary, incontrovertible proof -yes, they are proof- that there is a mechanism that allows species to undergo modification and yield new species, which is evolution. So whether it is radiation from the sun, gamma rays from nuclear interactions, chemical irritation/alteration, freak genetic mutations, or just the highly skilled manipulation by people attempting to speed up the natural process of evolution, the result is the same: evolution.

And now, 20th century man, through the blending of the marketplace and the research laboratory, have added another mechanism for mutating individuals: genetic engineering. And some phenomenal things are being done. My mind boggles when I see the photographs of tobacco plants that have been given the luciferase gene from fireflies so now phosphoresce! And medicine has already capitalized on this technology. *Escherichia coli*, a lowly bacterium of rather distasteful procedence, has been engineered now to produce human insulin by the tubfuls. No more bovine or porcine reactions, thanks to this process. But the point now: did the Lord foresee these genetic manipulations and prepare special spirits for them? A phosphorescent tobacco plant certainly is not the normal type, so does it need a new type spirit?^[17] Maybe it does, and maybe it doesn't.

We really don't understand very much about evolution, but it's only a problem of understanding, not of whether it exists. Let's look at Darwin's finches again. If we disapprove of evolution as a mechanism for "creating" all the separate subspecies that each occupy a unique ecological niche on each of one of the Galapagos Islands, then we have to postulate a God who created the myriad of types, species, and subspecies, simply making one tiny adjust of this bill for this island, and that bill for that island, and then assigned each to the proper habitat. Seems like the Creator of the cosmos has better things to do than play tiny little games like this. Oh, He could, He could, but the question is, will He? He conserves energy jealously, I believe, and will avoid wasteful expenditures of it. So I believe the is more likely than not to set up an algorithm or process that operates independently of him to accomplish his purpose of populating the world with His creations.

My own opinion regarding the millions of millions of species of all types is that the Lord created spiritual templates for many of them, thereby avoiding the need to create separate spirits for all of them. Those -and it would be difficult to determine where the boundary is in the hierarchy of complexity- that were created with a template and allowed to simply propagate through the DNA mechanism would not have spirits while those of the other type would have their individual spirits.

¹⁷ It seems possible that the A & P of a mortal body might diverge from the theoretical -or theological?- 'normal'. This would allow the consequences of purely mortal processes to be manifested, without their having any impact on the spirit. Gamma rays, nuclear radiation, etc. could wreak their results.

The interesting level to look at evolution -at least to us as non-specialists- seems to be even below the level of the amino acids. Those are still comparatively massive structures. Getting down to the quantum level where the particle zoo is acting up is where the action probably is. Indeed, after learning a bit -admittedly a dangerous thing to do- about that bizarre world, we are persuaded that the fact that there aren't more frequent and major mutations is suggestive of something extraordinary in the way of organization or powers.

We must touch on the evolution of man for a moment. I do not believe that Adam was the end product of an evolutionary chain of hominids. They are real. They did live and they did resemble man, but they were not the precursor of Adam, I don't believe. Adam was a special creation, just as stated in the various creation stories, and the Lord simply made him a body when the time was right and stuck him in it.^[18] The reason I believe this is because I believe that Adam's spirit was so different from that of any hominids^[19] that there was no way he could arise from them.

To end now. These examples could be multiplied (ha!) many times, but they suffice to show the surprisingly complicated issues raised by this little scripture that all things were created spiritually before they were, mortally.

HOUSES, HOWITZERS AND HUARACHES:

I can't resist adding a trailer here. The little scripture is also interpreted to refer to the earth itself, so if we take THAT perspective, a new vista of confusion materializes. If something non-living is spiritually created before it is created mortally, then we have to think about all non-living things. Like bassoons, bombs and bumper cars. Or houses, howitzers and huaraches, etc. All of those things are real, all of them are non-living and so appear to fall into the category of the earth. Did they in fact merit a spiritual creation prior to their being created mortally?^[20] If so, then there was an astonishing warehouse of spirits for these things.

Actually, it is this matter, more than bacteria and lichen, that begins to persuade us that the scripture must apply in a special way, rather than across the board for everything. What about dirty magazines, or childrens' toys? They are real and non-living, but I doubt they were created spiritually.

Non-living things seem to be exempt from the scripture in some way, although I do believe the earth was spiritually created. Perhaps the spiritual part derives from the mind-set of the creator of the thing. If they are spiritually, or positively motivated, the creation is in some way spiritual, otherwise not. In the latter case, the world and universe will need to be

¹⁸ I am puzzled at some of positions taken by Christians of various ilk, positions that are untenable to us. They all admit of a Savior who suffered, died, resurrected and atoned for us. How extraordinary! Mind-boggling. Impossible to comprehend. This demigod was clothed with mortal tissues, and underwent the ultimate mysteries of the universe. Those mysteries are accepted in the canon. They are received, as it were. We tend to believe them, too. No, more than that, we accept it as an article of faith, a postulate impossible of proof. But only because it is part of the canon. Not because we see no alternative. (Given the haphazard manner and late time in which the NT was collated, one must harbor some reservations about the validity of at least part of the canon.)

Yet some of these faithful who swallow that story hook, line and sinker, turn up their noses at a special creation for *homo sapiens*. Why? Is it any more radical than the Immaculate Conception, the only one we know of, which produced a half-god who accomplished what we just mentioned? We think not. No, not any different at all. Granted, science doesn't allow for such, but that is only an indictment of the (necessarily) limited strategies available to a scientist. Do note, also, that scientists do actually operate on the basis of hunches and intuitions and hope and belief and faith. So when they are in those modes, perfectly sane, reasonable states of mind, are they really doing anything different than the clerics intoning special creation of Adam and Eve? No.

¹⁹ See Chapter 15. CONSCIOUSNESS - COGITO, ERGO SUM for more on this matter.

²⁰ Swedenborg's HEAVEN AND HELL has a long section dealing with what he called 'correspondences'. It is relevant to this discussion.

resurrected.^[21] Who knows!

SHADOWS, FIRE AND WINTER:

Lets now look further into this before-earth-creation business by talking about wind and fire. Fire is a sort of physical thing, as is wind. Aren't they? Other matter is affected one way or another by these processes, which are merely the expression of energy transfers. So one begins to ask the obvious question: did the Lord "create" fire and wind in heaven before they were manifested on earth? Strict application of the doctrine seems to suggest He did. And I suppose I even agree with it in a limited, special sense.

What about shadows cast by the sun? And what about winter, spring and fall? What about months and numbers and dinner plates? What about carpets made from sheep wool, or spandex and bicycles? Or sandals and highheels? Computers? Testtubes? Icecream? Ferrari's and machine guns? Bombs and books? Tofu and spaghetti? What about thoughts, and principles, and theories, and hypotheses, and scientific experiments, and glassware and cyclotrons, fighter airplanes, etc.?

Somehow the latter things seem to be below the level that God involves Himself in. Oh, He could, but will He? That's the question. We believe that on the basis of the Parsimony Principle at least, He will handle these things through elegant algorithms, or will simply not be involved with them, allowing them to be result from the physiology, chemistry, of this world, of be created by us dummies^[22]. Global things like monitoring the Powers of Heaven might be His, but not tricycles.

²¹ Tristan Englehart converted to the Antiochian orthodoxy three years ago. Today, he expressed the belief that the universe will be resurrected. So even competent, reasonable people believe it is possible.

²² To use a repulsive, but real example, we doubt that He is responsible in any manner for pornographic magazines, toys, movies, etc. Those "things" were not "created spiritually" by Him before this world was created. We have done that all by ourselves, under the influence of A) our own wilfulness, and B) the influence of the malignant powers surrounding and acting on us.