



Journal of The Brotherhood of Man Library, an Information, Telecommunication and Lending Service Resource for Students of *The URANTIA Book*.

Favorite Places
from
The Urantia Book

Colliding Black Holes and the Urantia Papers.

This is indeed a strange topic for our "Favorite Places" segment. But if you have the stamina, read on and discover the reality of a revelation.

"Evolving energy has substance; it has weight, although weight is always relative, **depending on revolutionary velocity, mass, and antigravity**. Mass in matter tends to retard velocity in energy; and the anywhere-present velocity of energy represents: the initial endowment of velocity, minus retardation by mass encountered in transit, plus the regulatory function of the living energy controllers of the superuniverse and the physical influence of near-by highly heated or heavily charged bodies....

"Given a sufficient duration of retarding influence, gravity would eventually convert all energy into matter were it not for two factors: First, because of the antigravity influences of the energy controllers, and second, because organized matter tends to disintegrate under certain conditions found in very hot stars and under certain peculiar conditions in space near **highly energized cold bodies of condensed matter**.

"When mass becomes overaggregated and threatens to unbalance energy, to deplete the physical power circuits, the physical controllers intervene unless gravity's own further tendency to overmaterialize energy is defeated by the occurrence of a **collision among the dead giants of space, thus in an instant completely dissipating the cumulative collections of gravity**. In these collisional episodes **enormous masses of matter are suddenly converted into the rarest form of energy**, and the struggle for universal

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*The religions of authority
can only divide men and set
them in conscientious array
against each other; the
religion of the spirit will
progressively draw men
together and cause them to
become understandingly
sympathetic with one
another. (1732)*

equilibrium is begun anew. Eventually the larger physical systems become stabilized, become physically settled, and are swung into the balanced and established circuits of the superuniverses. Subsequent to this event **no more collisions or other devastating catastrophes will occur in such established systems.**

“During the times of plus energy there are power disturbances and heat fluctuations accompanied by electrical manifestations. During times of minus energy there are increased tendencies for matter to aggregate, condense, and to get out of control in the more delicately balanced circuits, with resultant tidal or collisional adjustments which quickly restore the balance between circulating energy and more literally stabilized matter. To forecast and otherwise to understand such likely behavior of the blazing suns and the dark islands of space is one of the tasks of the celestial star observers....

“The superuniverse of Orvonton is **apparently now running down**; the outer universes seem to be winding up for unparalleled future activities; the central Havona universe is eternally stabilized. Gravity and absence of heat (cold) organize and hold matter together; heat and antigravity disrupt matter and dissipate energy. The living power directors and force organizers are the secret of the special control and intelligent direction of the endless metamorphoses of universe making, unmaking, and remaking. Nebulae may disperse, suns burn out, systems vanish, and planets perish, but **the universes do not run down.**” (176)

Commentary

To include a Section, primarily on physics, as a “Favorite Place,” probably seems extraordinary to most readers. But this Section, as well as many others like it, is capable of exciting true wonderment if we are old enough or knowledgeable enough to be familiar with the historical background.

In 1955, this Urantia Book Section could appear to be a fanciful extract from a science fiction novel. For one thing, antigravity was considered to be nonsense by most of the physics fraternity. Only recently has it attained a degree of respectability. And despite

Einstein’s $E = mc^2$, very few people believed that energy could be converted to matter or that the weight of an object could be affected by its rate of rotation.

Nowadays we might not be surprised to read something like: “Bottomonium, for example, is what you get by putting together a bottom quark and its antiquark. They can come together to form a number of different mesons, depending on how they move relative to one another. The simplest is the “upsilon.” It has the lowest energy—and the smallest mass—because the bottom quark and its antiquark rotate about one another as slowly as possible. **Set these quarks rotating more vigorously, and you get other mesons with larger masses.**”

More science fiction? No, it comes from a serious 1998 discussion on lattice quantum chromodynamics computations. For more information ask a physicist.

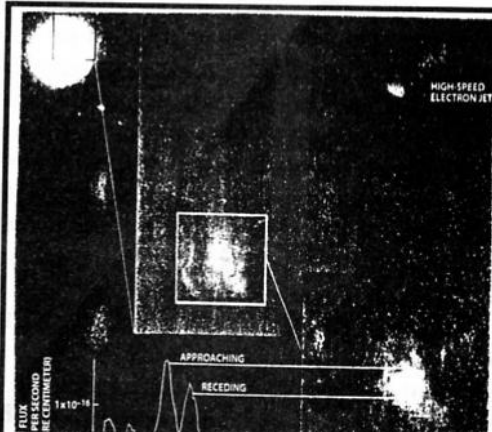
“**Highly energized cold bodies of condensed matter**” from the Urantia Paper quotation could only

mean black holes to the modern day physicist. Pre-1960’s, condensed matter was known to exist in white dwarf stars but these could have a surface temperature in the order of 3000 degrees. The then hypothetical neutron star was even more condensed but both the neutron star and black holes remained undiscovered.

A respectability status for black holes is a very recent acquirement. In 1939, after Oppenheimer and co-workers demonstrated (via a highly simplified mathematical model) that black holes could be a possibility, Einstein and

Eddington both vigorously rejected that concept. At the time, Einstein had a God-like status among physicists while Eddington had a similar status among astronomers, possibly attributable to his claim that only two people in the world understood relativity and Einstein was the other. To go against either of these demigods was akin to denying God himself.

Is a black hole devoid of heat? Nobody knows the answer. Matter entering black holes is accelerating under the influence of enormous gravitational forces and is assumed to carry on to a Schwarzschild singularity, a dimensionless point at the hole’s center where the laws of physics are assumed to breakdown.



M87 is an elliptical galaxy that may once have been a quasar. A filtered Hubble photo reveals a blue-shifted jet of high-speed electrons. A red-shifted jet recedes in the opposite direction. Calculations indicate there is a disk of hot gas spinning around the center at a speed of 1.2 million miles per hour. A black hole weighing about 3 billion suns may reside at the center.

However, all agree that heat cannot escape from a blackhole, so even a pinpoint-size black hole could not be used to heat the household hearth. Actually it would extract heat from the home so, for all practical purposes, we can consider black holes to be dead cold.

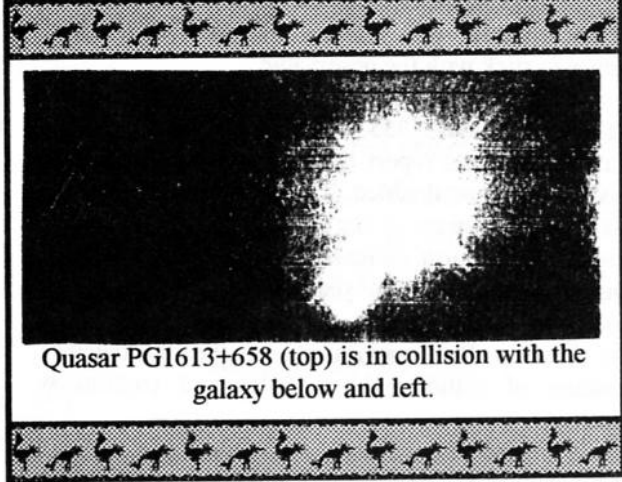
That brings us to "collisions among the dead giants of space"—colliding black holes? If it were not for quasars, we would not know that such was a realistic possibility. Quasar stands for "quasistellar radio source." The original quasar was an extremely powerful radiosource discovered in Australia in 1962. After plotting its position, details were sent to the Mount Palomar Observatory where its optical spectrum revealed only a hydrogen spectrum and a location about 2 billion light-years from earth. "Quasar" was a misnomer as these bodies radiate over the full range of the spectrum and now are more often known as quasar stellar objects—QSO's.

Since the repair job on the Hubble telescope, new work has revealed that a "typical" QSO is embedded in a host galaxy which, in turn, is surrounded by a fuzzy halo and about three quarters of them are either colliding with or swallowing other galaxies. The most likely explanation for the observations is that a very high proportion of galaxies have a black hole at their center. The QSO characteristics are due to the black hole swallowing stars that then provide for their enormous energy output.

A recent survey of nearby galaxies indicates that 11 of 27 may harbor a black hole. It would seem, at least to me, that if both partners of colliding galaxies have black holes then, sooner or later, in some collisions the gravitational fields of the two black holes would overlap to the point that their collision became inevitable, perhaps with fusion, a doubling of mass and a rain of in-falling stars consequent upon the increased gravitational field—a hyperquasar maybe!!

Many quasars shoot out jets in opposite directions that may extend for more than a million light years. One explanation for the jets is that a giant spinning black hole accumulates a spinning accretion disk in its equatorial plane from materials being drawn towards it by gravity. Friction and gravity supply the energy necessary to heat the disk to the point where a gas plasma forms and slides inwards along magnetic fields lines later to be hurled out by centrifugal forces as two jets in opposite directions.

The accretion disk is the major source of radiation—X-rays at its hot, innermost regions, and ultra-violet, visible, and infra-red radiation further out. Radio frequency emitting lobes may form where



Quasar PG1613+658 (top) is in collision with the galaxy below and left.

a quasar's jets terminate. Geoffrey Burbidge calculated that these lobes may have as much magnetic and kinetic energy as would be obtained by **converting all the mass of ten million Suns into pure energy.**

Burbidge's calculation demonstrates that The Urantia Book's statement, "in these collisional episodes enormous masses of matter are suddenly converted into the rarest form of energy" is not just the wild imagination it would have appeared to be at the time of the printing of the book..

Once the fireworks are over, the revelators tell us that such devastating collisions become a thing of the past. It seems that our Milky Way galaxy is in no immediate danger. If we take the Urantia Book's comment on Sagittarius to mean that our Milky Way galaxy is a minor sector of Orvonton, the number of galaxies in the Grand Universe is of the order of 7,000 (give or take by a factor of 100 if you wish). The measured frequency of quasars in our vicinity is one in a million galaxies. Hence quasar activity appears to be confined to the outer space levels of the Master Universe.

Isn't it nice to know that the power directors and force organizers have these catastrophic collision things under control? And that it's all just part of a routine universal recycling program!

And is it not also nice to know that the running down of our universes is apparent and not real. Science rightly uses what it conceives to be the simplest explanation for known data. It sees an expanding universe and so assumes a beginning calculated by extrapolating backwards from the expansion rate. Rightly, it also assumes the universality of its observed laws of conservation of energy, from which it sees an eventual running down. Continuous creation and controlled energy flow are

not measurable—not yet anyhow—and it is good science to stick with the observable.

It was in about 1955 that the New York Times carried a headline report that the size and age of the universe had just doubled. The reason for the report was a new estimate of the rate of expansion of the universe which also increased the estimate of its age from 2 billion to 4 billion years, about 10 billion years short of current estimates. And about the same time The Urantia Book appeared on the bookshelves speaking of colliding black holes and continuous creation!

In 1998, it all seems plausible. One reason that Section 8 of Paper 15 makes it among my "Favorite Places" is that I am old enough to remember the 1930-1960 period and, as with my elderly brother and sister Alzheimer and dementia patients, can comfortably drop back mentally to earlier times. And in this mental state, I can look at Section 8 of Paper 15 in utter awe, wonderment, and gratitude.

Ken Glasziou

References.

Davies, Christine, "Let's Play Quantum Chess." New Scientist 158 (2137) 1998

Disney, M. "A New Look at Quasars." Scientific American, 278 (6) 1998

Thorne, K. "Black Holes and Time Warps." (W.W. Norton, London, 1994)

Goose Bumps

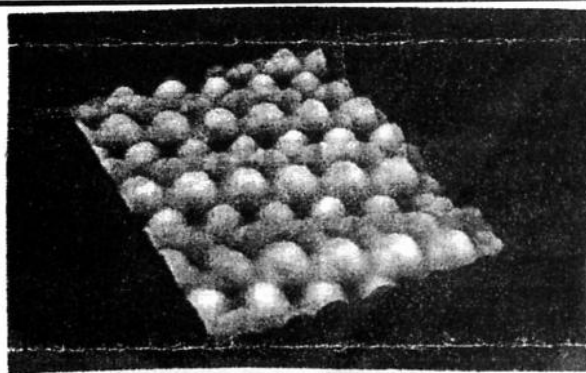
Next time you see geese flying in their characteristic "V" formation, consider what science has discovered about why they do what they do.

As each bird flaps its wings, it creates uplift for the bird immediately following. So by flying in formation, the flight of the whole flock becomes more efficient to the point that the range of the flock is increased by as much as 70% more than the individual bird is able to achieve by itself.

People who share the same direction and sense of community can get to where they are going considerably more quickly and easily because they are feeding upon the thrust of one another.

When a goose falls out of formation, it suddenly experiences increased drag. Hence the added resistance due to going it alone is the incentive for it to get back into formation.

If we all had goose sense, we would stay in



Even in the 1940's, individual atoms were thought to be an abstraction in the minds of physicists. Modern technology has shown they are real. Photo is of atoms in a germanium crystal.

formation. When a lead goose gets tired, it rotates back into the formation and another takes its place. In the geese formation there is no one leader. All but the weakest take their turn.

Sharing the burden and taking turns at doing the hard work makes sense, be it people or geese. The Urantia movement needs people who will take their turn and share the work load, each according to their ability. That also makes sense.

Author unknown.

Taking the Spiritual Path.

From pamphlets by Meredith Sprunger.

How we conduct our outreach ministry is more important than when or where we introduce people to The Urantia Book. Indifference and social opposition must be met with love, intellectual candor and good humor.

Since we are not starting a new religion, our public ministry is relatively benign. Jesus assures us, "My yoke is easy and my burden is light." This mission bears the simplicity of Philip's invitation, "Come and see."

In many instances we might be simply introducing people to a new book and encouraging them to read it. Their response is in the hands of the Spirit. We must cheerfully allow the reader their own interpretations and evaluation. For if this new vision of spiritual reality does not inspire, then our arguments will not either.

Let Love Create.

Let love create the atmosphere of your interpersonal relationships. You cannot effectively communicate with others unless you are prepared to accept them as

they are, and with their imperfections. Strive to prevent your biases and limitations from interfering with or distorting your service. Support, encourage, and help people; do not coerce them. See your fellows as persons of worth and build their self-respect. Be natural, genuine, and enjoy their company.

Serve out of love, a thankful heart, and joy of the act itself. Ministry is an internal activity of the creative mind and the loving soul. External motivations of service compromise the spiritual value. Serving God solely for external purposes such as building your study group, church, or a spiritual renaissance limits both its spiritual value and personal satisfaction. Minister out of love; the repercussions will take care of themselves. Serve with intelligent dedication, do not try to manipulate people.

Personal Spiritual Growth.

I close with the most important aspect of our ministry. Since outreach is the main imperative of the Urantia movement, take personal action and carry the good news of The Urantia Book to the farthest corners of the earth. But if you lack the talent or calling for outreach ministry, there is another call we all must respond to. This is the Father's loving appeal that you dedicate yourself to spiritual growth.

Nothing in your life is more important than your active cooperation in achieving the Spirit's mastery of your mind and body, your attitudes and appetites, your emotions and actions. This is not accomplished by merely willing it; it demands active participation.

Growth can entail suffering, it may require the transcending of egocentric pride, or even the experiencing of social humiliation. The rewards and joys of a Spirit-controlled mind and a Spirit-mastered body far outweigh the birth pangs that may be endured in evolving the soul.

The enlarged freedom and inner peace of your being bring great joy and a profound sense of fulfillment. Not only have you actualized your inner self, you have developed a quality of being capable of accomplishing greater service for your fellows and the Father's kingdom.

It is my prayer that each of you may grow in the Spirit, for it is the life of the Spirit that becomes the well-spring and creative source of outreach ministry.

Living Faith Acts

Our society desperately needs an enlarged spiritual

"I am now on the way to Rome with you and your father, and that is sufficient for today. My tomorrow is wholly in the hands of my Father in heaven."

Jesus to Ganid (1436)

vision to give guidance and stability to the new era struggling to be born. The Urantia Book has been given to you to provide the spiritual fulcrum to lift our world into a new era of human achievement. Our Sovereign speaks to you as to Peter, "If you love me, feed my sheep."

"The Way."

Jesus' Baptismal Decisions.

- He discerned that God's way was not going to be the easy way.
- He said goodbye to the throne of David.
- He had only one objective—the establishment of the rule of the Father in the hearts of mankind.
- The idea of contention, battle, slaughter was repugnant to him. He rejected it—even contention.
- He would appear on earth as the Prince of Peace to reveal a God of love.
- He would return to Galilee to quietly begin the proclamation of the kingdom and trust his Father (his Adjuster) to work out the details of procedure, day by day.
- He would refuse to apply material tests to prove spiritual problems or to presumptuously defy natural law.
- He would refuse to grasp temporal power as the prelude to spiritual glory.
- He would not cater to the physical gratification of his people.

- He would not deal out bread to the multitudes (as he had seen done in Rome) nor draw attention to himself through wonder working.
- He would not seek to win acceptance of a spiritual message by any show of authority or power.
- Finally, in all things, he pledged himself as subject to the Father's will.

Jesus was engaged in a mission of enormous dramatic possibilities, but he insisted in going about his Father's business in the most quiet and undramatic manner; he studiously avoided all display of power.

Jesus never departed from the decisions which he made during the days of his isolation in the Peraan hills following after his baptism in the Jordan.

How successful was he? In the eyes of most of his contemporaries he was an abject failure. During his ordeal of the cross, he was ridiculed, beaten, spat upon. He was also deserted by all but one of his apostles and a few of his women followers.

But in the eyes of his heavenly Father, he had earned his place as the Master Creator Son of a universe. And his death and his life were his Father-sanctified legacy—a model eternally worthy of emulation by all his mortal children.

"Seek ye not the praise of men. Rather, seek ye the praise of your Father who is in heaven."

Post-baptismal aims and motives

"There was just one motive in Jesus' post-baptismal life on Urantia, and that was a better and truer revelation of his Paradise Father."

Jesus would pause in the midst of a profound dis-course that he might go out in the road to speak good cheer to a passing woman laden with her burden in body and soul. (1546)

Jesus would interrupt a serious conference with his apostles to fraternize with an intruding child.

(1546)

Jesus' life is a divinely certified pattern life for all of his universe children. To his followers, he said,

"Do you not understand that...you are to represent me in the world and in the proclamation of the kingdom, even as I now represent the Father who is in heaven?"

Jesus made no compromises in instructing us concerning the motivation of our mortal lives. His motive is to be our motive, our earthly lives are to represent him as he represented the Father, we are to emulate the goals and purposes of his life—just as he did—by attempting to actually be, in our day to day activities, a revelation of the true nature of God, our Father. Nothing less is permissible.

Whereas the goal set for those who volunteer to be on Jesus' team may appear daunting, we must not let that discourage us from trying. Jesus had the task of setting us an attainable goal and we know that he succeeded. Hence we have no option but to believe in our given task and to step out in faith.

References: The Urantia Book, 1328, 1522/3, 1543; Matt. 5.

On Worship

A talk at the A & NZ UB Readers Conference by
Ken Glasziou

The Urantia Book informs us that the quality of our worship is determined by the depth of our perception which, in turn, varies in proportion to the depth of our knowledge of God. It follows that our worship experience may be enhanced in two ways, firstly by increasing our understanding of ourselves and secondly by increasing our knowledge of God. So let's make a start by attempting to know more about ourselves.

How can we know anything at all? How do we differentiate between dreams and reality, real and false memory, conscious sight and blind sight, a real image from an optical illusion, or a cause and effect kind of mechanical mind from a mind endowed with self-consciousness and freewill choice? How can we know which is which? How can we really know anything? Maybe this is an area where we can learn much more from revelation than we can from an empirical science that assumed, until recently, all things visible and invisible have a mechanistic explanation.

Mind, the Papers tell us, is derived from the Infinite Spirit, the source of Cosmic Mind. Therefore mind cannot be simply an electrochemical phenomenon. In actuality, it is a universe mystery. We have it, but we don't know what it is. Cosmic Mind comes to the creatures of the universes via one of the seven Master Spirits thence via the Universe Mother Spirit who bestows it upon the local universe creatures.

Mind, we are told, is a gift that comes tailored specifically for the needs of the creature. The minds of our nearest cousins, the secondary midwayers, differ from ours. And their minds differ from primary midwayers whose minds are of the angelic type. Like bodies, minds are disposable. Our earthly minds are disposed of when we move on to the Mansion worlds where we will be equipped with a different variation of Cosmic Mind.

All types of universe mind have certain properties in common that are derived directly from Cosmic Mind. Nevertheless, each variant is tailored for the benefit of the individual creature, according to their need. The three major classes of attribute deriving from Cosmic Mind that are held in common are classified under the headings of Causation, Duty, and Worship.

Causation covers those traits of mind that operate in

Nothing seemed so important to Jesus as the individual human who chanced to be in his immediate presence.
(1546)

“Exhibit in your one short life in the flesh, as it has never before been seen in all Nebadon, the transcendent possibilities attainable by a God-knowing human during the short career of mortal existence....”

Immanuel to Jesus (1328)

the domain of the physical senses and are concerned with the differentiation of fact from non-fact, and the striving for meaning. We can observe this urge to strive to discover meaning quite readily in ourselves, and even in animals as they attempt to make sense of the signals invading their minds from the surrounding environment.

The Cosmic Mind's attribute termed “duty” includes our innate sense of moral values and our ability to differentiate between relative right and wrong. It is interesting that, to date, all civilisations appear to have assumed that individuals are congenitally equipped to distinguish between relative right and wrong, rather than making the alternative assumption that right and wrong are defined solely by authoritarian decree.

Worship is another innate component of Cosmic Mind. Among other attributes, worship is concerned with the fostering of a personal realization of divine fellowship and our recognition of spiritual values. But it is not an attribute that is universally distributed. For the evolutionary creatures of a planet like ours, it comes only to those creatures that have evolved the quality of self-consciousness. (“When any animal becomes self-conscious it becomes a primitive man.” p. 1479)

Having minds with the capacity to reason, to distinguish relative right and wrong, and to recognize spiritual values is only the first part of the human story. Along with what comes with Cosmic Mind, we also have the gift of “personality” directly from the Universal Father. With it comes the dual characteristics of relative free will and the capacity to utilize qualities indigenous to Cosmic Mind. The Cosmic Mind has them. Personality uses them. This combination of personality and Cosmic Mind is then adequate for the initiation of moral decisions, the very first of which initiates Adjuster indwelling.

"Personality is one of the unsolved mysteries of the universes." So says a Divine Counselor. There are more than a thousand references to the term "personality" in the Urantia Papers. We can only cover what appear to be the most important for understanding ourselves. The Eternal Son, we are told, is the master pattern for all personality and Havona is the home of the personality pattern of every mortal type. Shades of Plato!! Once we start to think of personality as pattern, we are on our way to understanding some of apparently anomalous statements about it—for example we are informed that personality is changeless and is devoid of identity.

We are born with a gift from the Universal Father of a unique personality pattern already assigned to us. But just as with the basic pattern for a car or an item of clothing, the user of the pattern may modify it in many ways. The personality pattern we each have is there for our use. The pattern is fixed. Its use is not. Similarly, for example, the pattern of a dress is just the pattern, it is not the dress. The dress has its own identity. With that puzzle out of the road, let's go through a listing of some other important things about personality.

- It is a gift of the Father that is independent of and antecedent to bestowal of the Thought Adjuster.
- It is diverse, original, exclusive, no two being the same.
- Self-consciousness is one of the qualities it confers. Somehow our self-consciousness enables our recognition of other personalities.
- It brings the endowment of relative free will necessary for moral decision making, spiritual choice, unselfish love, and our dedication to doing the Father's will.
- It survives by virtue of the survival of our soul. But it is neither body, mind, or soul, it is changeless while, at the same time, being integrating, unifying, and supervising for the

*We are shaped
and fashioned
by what we
love.*

Goethe

*If there are
shadows in your
life, there must be a
light close by.*

living system of its bestowal.

- Personality is the activator of the three basic realities of our cosmic minds—the recognition of uniformity of physical causation, the recognition of the obligation of moral conduct and loving service of humanity, and faith-grasp of the urge to Deity worship.
- Personality has the competence to examine goals and pass judgment on their value.
- Only a personality can know what it is doing before it does it.
- Personality causes the spirit to strive for the mastery of energy-matter through the mediation of mind.

Personality then, appears to be some kind of hybrid between pattern that we think of as inert and something else that can activate and influence our minds. However, if we remember that the Divine Counselor described personality as an unsolved mystery, providing we do not try to be too precise about defining personality, then the concepts we have covered can help us to gain an understanding of one side of ourselves.

The components of self that we have touched upon are all of divine origin. They consist in a combination of our personality endowment from the Father, plus attributes of Cosmic Mind from the Infinite Spirit. Together these influences help bring about that first moral decision that initiates our indwelling by the spirit-fragment from the Universal Father, our personal Thought Adjuster.


With all this marvelous equipment directly from Divinity, we might wonder why we humans are so intractable and perverse? So let's take a look at what is in the opposing camp.

We are animal-origin evolutionary creatures. As such, we have remnants of those endowments that

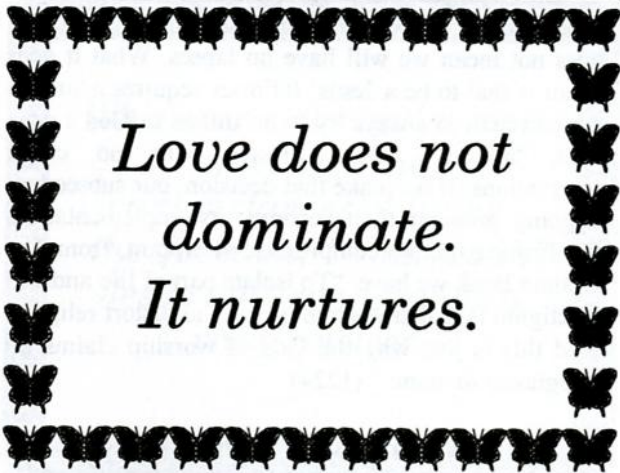
originated along that evolutionary pathway that permitted the survival of our animal ancestors. Among the most important behavioral attributes we have inherited are the dominance behaviour character we see in most herd animals, the territorialism that is rife throughout the animal kingdom, the fight or flight response to danger, and the instinct to survive at all costs.

Dominance behavior in animals has been studied in what is sometimes termed the peck order in the fowl yard, but the same thing is seen with milking cows in a cowshed, or a group of horses in a paddock. Each animal in the group has a place on the social ladder, and every member is aware of which animal is higher and which is lower in the peck order. Any new animal introduced to the group must settle the score with every other member in order to establish its position on the ladder. In the wild, the male of the species can have a much harder life than the female. Its lot, on reaching maturity, may be to join in physical battle for the right to sire offspring. If it loses, it may find itself expelled from the safety of the flock or herd. And even if it wins, it is only a matter of time before something younger, fiercer, and stronger comes along to depose it. So win or lose, a short and violent life is its most probable lot. Although rooted in the survival of distant ancestral species, dominance behavior in the human herd is congenital in all of us, male and female alike.

Dominance behavior may be expressed in unusual ways. I remember being amazed at the results of a study of the physiological responses of a group of ordinary people taken both before and after entering their cars for their drive home from work. In some of these apparently normal people, their heart rate went from the usual 70-80 beats per minute range to something approaching the 200 mark before they were even on the road! And this was just the routine after-work drive home! They were not going out onto the



*You cannot change
yesterday. You can only
make the most of today,
and look with hope
toward tomorrow.*



*Love does not
dominate.
It nurtures.*

race-track! One explanation is that the feeling of power associated with being in charge of a powerful weapon of possible destruction induces subconscious recall of the scent of battle. The ensuing adrenaline rush then brings about the extraordinarily high pulse rates. Strangely, it appears to be just as common in the female as in the male.

Territorial behavior is seen in the lowliest of creatures, from fishes and insects right through the animal kingdom, up to and including ourselves. For some, it may include an invisible space surrounding the animal, intrusion upon which calls for an aggressive response. Others may use scent of some kind to mark the boundaries of their personal territory. Groups of animals may have group territorial boundaries, intrusion into which calls for group action against the intruder. Human tribal communities often display this pattern. It is from these tribal communities that nations develop that continue with this behavior. In the human species, territorial behavior expresses itself in a multitude of ways, most of which carry the threat of conflict if there is an uninvited crossing of boundaries.

Probably all behavioral responses that are in direct opposition to those inherent urges in us to love one another and to live together in harmony, are actually rooted in the dominance, territorialism, and self-survival instincts inherited with our animal ancestry..

So stacked up against each other in the make-up of each of us is one set of behavioral urges that are of divine origin and nature, and a second set that derives from our tooth and claw evolutionary origins. The first is the unselfish set, the second set is probably always totally selfish—despite any appearances to the contrary.

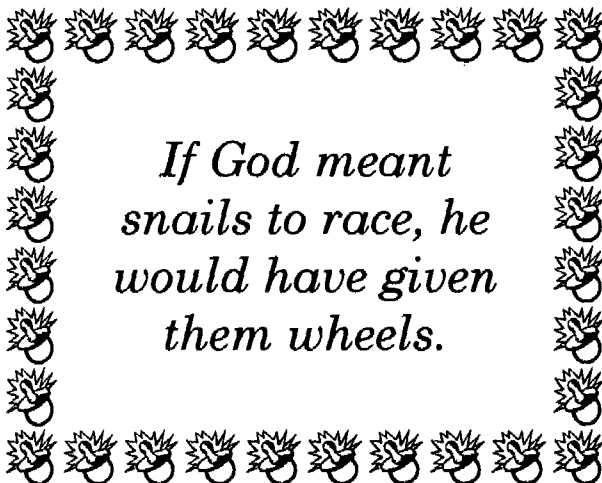
I'll stick my neck out here and state that to become a Jesus' follower, there can be absolutely no

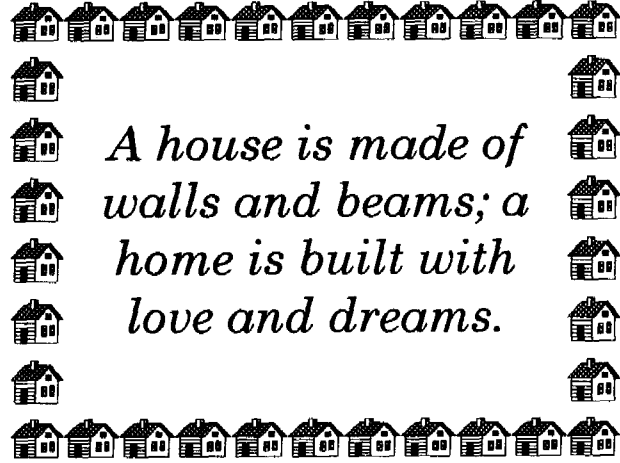
compromise between these opposing forces. But that does not mean we will have no lapses. What it does mean is that to be a Jesus' follower requires a sincere commitment to always try to do things in God's way. And "always" means always with no closet reservations. If we make that decision, our subsequent ongoing problem then becomes its implementation. Confirming this no compromise viewpoint, from The Urantia Book we have: "To isolate part of life and call it religion is to disintegrate life and to distort religion. And this is just why the God of worship claims all allegiance or none." (1224)

I've been a dedicated Jesus follower for considerably more than sixty years of my life and a Urantia Book reader for about twenty five of those years—so can lay claim to a reasonable amount of personal experience in this task of trying to be totally committed. A long time ago now one of my sons became disillusioned with Christianity and decided to try out Buddhist-style meditation. We talked about it and he explained that his problem with the Christian way is that there is no method. At the time, I had no answer for his problem.

In fact, it has taken me a long, long time to realize that there is a Urantia Book method of the kind my son was seeking. Then a further period elapsed before I understood the importance of the method. But it is only relatively recently that I believe I've cottoned on to the significance of what the book has to say on how to go about implementing its method.

Discussing this method the revelators tell us that children sometimes "evinced a tendency to converse with imaginary companions. In this way a budding ego seeks to hold communion with a fictitious alter ego." (Latin for "other self") Then, in discussing communication with our Thought Adjusters, they say: "the more effective technique for most practical purposes will be to revert to the concept of this nearby

 *If God meant snails to race, he would have given them wheels.*



A house is made of walls and beams; a home is built with love and dreams.

alter ego,... and then to recognize that the idea of the alter ego has evolved from a mere fiction to the truth of God's indwelling mortal man in the factual presence of the Adjuster so that man can talk face to face, as it were, with a real, divine alter ego that indwells him, and is the very presence and essence of the living God, the Universal Father." (997)

The revelators comment that the most practical way of developing continuous communication with our Adjusters is to carry on a conversation with our alter ego just as children do, was authoritarian enough for me to personally adopt the method. Compared with my previous efforts at Adjuster communication, I rated it as a great success. But even when it became habitual, I was conscious that something was missing. Communication with my Thought Adjuster remained a monologue—but that was all I had expected, so I really had no obvious reason to be dissatisfied.

Then one day I overheard my four year old grandchild doing this alter ego thing just as it is described in the book. I was intrigued by the fact that he was actually playing the part of the other characters exactly as if they were real people. Each alter ego character had a name, voice and mannerisms all of its own. And his conversation was a definitely a dialogue and not a monologue. When I checked The Urantia Book references I found:

"By this technique the child early learns to convert his monologue conversations into pseudo dialogues in which this alter ego makes replies to his verbal thinking and wish expression." (996)

Even after reading this, I was still a bit slow on the uptake but eventually it sank in that the technique being recommended to us by the revelators was really intended to be a dialogue. We are supposed to be both ourselves and also to speak the part of our own Thought Adjuster, replying to ourselves exactly as if

we were truly our indwelling God-spirit.

To take the part of God in a conversation would appear to be somewhat presumptuous if it were not for the fact that it has the sanction of the revelators who recommend it. But to do so effectively it becomes essential that we already have a reasonably accurate idea of what God might say to us in any particular circumstance. How can we do this? The Urantia Papers inform us that: "The nature of God can best be understood by the revelation of the Father which Michael of Nebadon unfolded in his manifold teachings and in his superb mortal life in the flesh."

That comment leaves us without doubt that the best way for us to know how God might respond to us is to be thoroughly familiar with the life and teachings given to us by Jesus. Once we achieve this, in a dialogue in which we also take the part of our own Thought Adjuster, when an answer is required we simply need to ask ourselves, "What do we think Jesus would have done?"

Despite a long exposure to the Gospel stories and The Urantia Book, I still find it useful to have a flash card memory jogger covering major points about Jesus and what he taught. Short daily sessions with these serve to keep this knowledge to the forefront of my mind. We'll take a look at this later if there is time.

That brings us back to our major topic of worship. The diversions were required because of what we encountered at the beginning: "The quality of our worship is determined by the depth of our perception which varies in accordance with the depth of our knowledge of God."

From the book we've learned that our knowledge of God is best enhanced by knowing the life of Jesus and how he lived it. Similarly we've learned that



*Whenever right and wrong
enter into the
circumstances of living,
the question, "What would
Jesus do?" can provide a
valid answer.*

communication with our Thought Adjuster is best promoted by use of the alter ego method. But why make a fuss about worship? Isn't just trying to be like Jesus enough?

In seeking an answer to that question I came across this from the revelators: "Worship is the highest privilege and the first duty of all created intelligences" and "Worship is the highest joy of Paradise existence."

The clue to why the revelators place such a high value on worship may be in these words, "Man aspires by worship to be better—and thereby eventually attains the best." Is it not true that when we truly admire someone or perhaps someone becomes an object of our hero worship, there is a natural tendency for us to want to imitate them, to be like them. So can it be that our sincere worshipping of God virtually automatically means that we will strive to be like God? If so, what qualifies as worship? Surely it has to be more than singing or shouting God's praises. Let's see what else the revelators have to say about worship:

- Worship is the conscious and joyous act of recognizing a personal relationship with our Creator.
- Worship is a transforming experience whereby the finite gradually approaches, and ultimately attains, the Infinite.
- Worship is both a measure of the soul's detachment from the material universe and its attachment to the spiritual realities of all creation
- Realizing God, recognizing the reality of God, and seeking to be like God is both a spiritual experience and an act of worship.
- In worship, we enter the domain of divine fellowship and spiritual values.
- Worship is effortless attention, true and ideal soul rest, a form of spiritual exertion.

- Worship is the technique of looking to the One for the inspiration of service to the many.
- True worship is for its own sake. There is absolutely no self-interest element. God is worshipped simply for what we comprehend him to be.
- Knowing God as Father, enthroning God in our hearts, experiencing the good, realizing the unity of truth, beauty and goodness, all form part of a valid worship experience.
- Worship is self-forgetting—superthinking.
- Jesus' whole life was a worship experience.
- The simplest form of worship is a sincere: "Thank you, God, for just being you." [not from Urantia Book]

So worship isn't just singing praises to God. We actually worship God whenever we think about him with sincere gratitude, admiration, or awe in our hearts and a desire, even if unconscious, to be like God.

At the other end of the scale from where we are, there is Paradise worship.

"All the arts of all the beings of the entire universe which are capable of intensifying and exalting the abilities of self-expression and the conveyance of appreciation, are employed to their highest capacity in the worship of the Paradise Deities. Worship is the highest joy of Paradise existence; it is the refreshing play of Paradise. What play does for your jaded minds on earth, worship will do for your perfected souls on Paradise. The mode of worship on Paradise is utterly beyond mortal comprehension, but the spirit of it you can begin to appreciate even down here on Urantia, for the spirits of the Gods even now indwell you, hover over you, and inspire you to true worship." (304)

During preparation of this talk a couple of thoughts

*Why is worship
important?
When you worship
someone you want to
be like them.*

*Jesus' whole life
was a worship
experience.*

came to mind that are "shareable." We've been informed that worship is an innate component of Cosmic Mind that fosters the personal realization of divine fellowship. And discussing personality, the book has:

"Personality cannot survive well in isolation. Man is innately a social creature; he is dominated by the craving for belongingness. It is literally true, 'No man lives unto himself.'" (1227)

Particularly in early adulthood, many of us develop an overwhelming yearning to find the perfect partner to share our lives in happiness and bliss, and we load onto this imaginary partner a set of impossible-to-be-achieved attributes of our own making. On reading about our craving for belongingness in the book, and having also read about the congenital urge we have from Cosmic Mind for divine fellowship, it struck me that our youthful desires to find the perfect partner is possibly an instinctive but misplaced yearning stemming from the combination of our desire for belongingness and our innate, constitutive urge to find God—in other words, even though we didn't know it, God was the real goal of our youthful yearning—which often long persists into adult life.

Another thought that came to mind during preparation is "What might happen if a goodly proportion of Urantia Book readers undertook the diligent practice of the alter ego method, exactly as it is recommended to us by the revelators?"

Obviously the idea has been given to us for a reason—it is not just idle chatter on the part of its authors? So why is it there and what were the revelators expectations? A miracle maybe!

Cosmic Reflections

Brahma Breathes

by Dick Bain

In Hindu theology, when Brahma breathes out, the universe appears; when he breathes in, the universe disappears. The Urantia Book has a similar concept called space respiration. The authors provide a verbal picture of this phenomenon, but there is much that we are not told. What additional details can we deduce from the information in the book?

What is Space Respiration?

The Urantia Book devotes a section of Paper 11 to space respiration. In this section, we are told that a vertical cross section of the master universe resembles a Maltese cross. The authors inform us that the master universe and space reservoirs engage in a two billion yearlong cycle consisting of an expansion followed by a contraction. We are further told that the master universe is half way through the portion of the cycle in which it expands and the space reservoirs contract. Fig. 1 illustrates a vertical cross section of the Master Universe and the expansion/contraction cycles. The authors also inform us that the material universes participate in the expansion and that it is uniform expansion. (134)

In a uniform expansion, all bodies are moving away from one another at the same rate. An analogy of this used by astronomer George Gamow and others is that of raisins in a raisin muffin. As the muffin cooks, it expands and the raisins all move away from each other. Fig. 2 depicts a horizontal cross section of the Master Universe looking down on upper Paradise depicting the expansion phase of the universe. Small

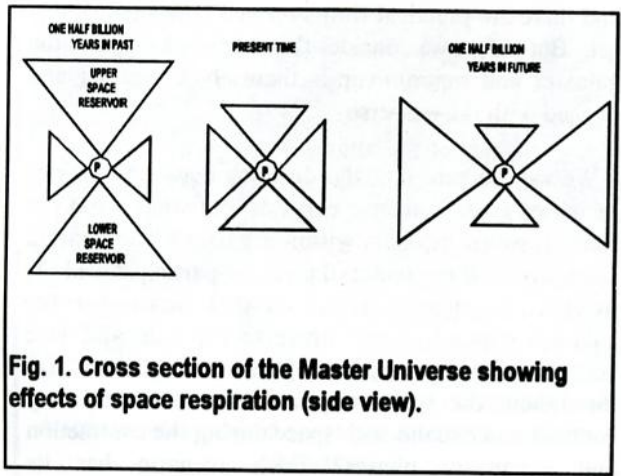


Fig. 1. Cross section of the Master Universe showing effects of space respiration (side view).

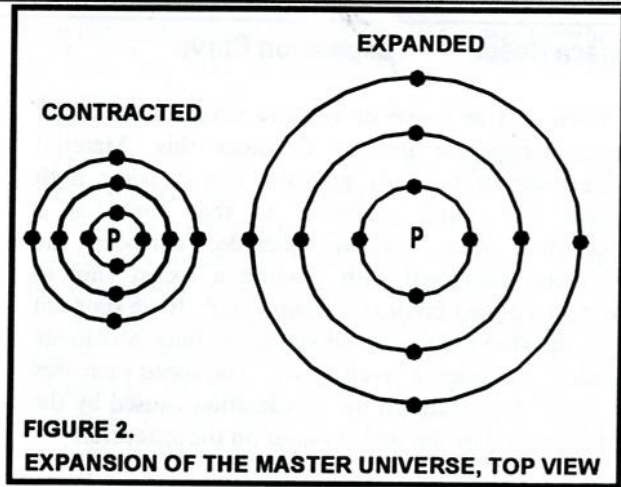


FIGURE 2. EXPANSION OF THE MASTER UNIVERSE, TOP VIEW

circles representing galaxies are placed on each of the large concentric rings to show how galaxies move away from one another as the universe expands. It is important to note that the further away from the center the galaxies are, the faster they must move to keep the spacing equal between the rings. This in fact is the way that astronomers believe that the universe expands due to the postulated Big Bang.

Information Supplied and not Supplied

The authors give us only a few pieces of numerical information about the universe. One piece informs us that an entire expansion/contraction cycle takes two billion years. (134) A second point is that we are half way through the expansion phase. Another suggests that the thickness of the first outer space level is about 50 million light years. (129) A fourth implies that the superuniverse level is about 500,000 light years thick. (359) A light year is the distance that light travels in a year, which is about six trillion miles.

Finally, the authors inform us that the red shift we observe in the light from distant galaxies is not due to them flying away from us. (134) Note however, that since the universe is supposedly expanding, there will be some red shift caused by this expansion. Several of the things they do not tell us are: How far does the Master Universe expand or contract and what sort of expansion/contraction curve does space respiration follow? There are several other pieces of information that would be useful. What is the average radius of Havona? What is the apparent radius of Paradise in our time space universe? Although Paradise is outside of time and space, the entrance or portal to it must have some size in space. The portal could well be the same physical diameter as Paradise. The authors also do not tell us how much of the red shift we observe in the light from distant galaxies is due to the passage of light through space, and how much is due to the present expansion of the Master Universe.

Space Respiration Expansion Curve

What sort of curve of velocity versus time might space respiration follow? Consider this: Material bodies cannot instantly go from rest to some high speed; they must accelerate to that speed at a reasonable rate. As an example, consider the problems associated with sending a rocket ship to land on a planet circling a distant star. If we start out with the ship motionless in space, we must accelerate gradually to reach a given speed. The speed increases at a rate dependent on the acceleration caused by the force exerted by the rocket motor on the spacecraft.

Acceleration is limited by the fact that we human beings can't handle many G's of acceleration over a long period of time. ("G" is the force of gravity at the earth's surface.) If we accelerated until we got halfway to the distant planet, then we'd have to turn the ship around and decelerate the rest of the way to get down to landing speed. In a similar fashion, the expansion of the universe could not go from 0 to full speed instantly; there needs to be a period of acceleration at the beginning. Likewise, unless God chooses to fiddle with the laws of physics, there needs to be a period of deceleration at the end of both the expansion and contraction phases.

The upper curve of Figure 3 shows how the size of the universe changes throughout the space respiration cycle. S_{max} and S_{min} are the maximum and minimum sizes of the master universe. The lower curve of Figure 3 shows how the velocity curve might change during the expansion/contraction cycles. V_{max} and V_{min} are the maximum and minimum velocities at any given point in the master universe. This shape is known as a sine wave curve. Each phase begins and ends with zero velocity. Maximum velocity is achieved halfway through each phase and acceleration falls to zero at this point. The expansion begins to decelerate and continues until it reaches zero velocity. At this point, the master universe has achieved its maximum expansion and is ready to begin its contraction phase. The contraction phase retraces the acceleration/deceleration path of the expansion phase. The velocity during the contraction phase is negative since it is in the opposite direction compared to the expansion phase. To me, this seems a reasonable scenario for the space respiration expansion and contraction cycles.

Maximum and Minimum Size of the Observable Universe.

I have chosen to limit this discussion to the observable universe because that is all our

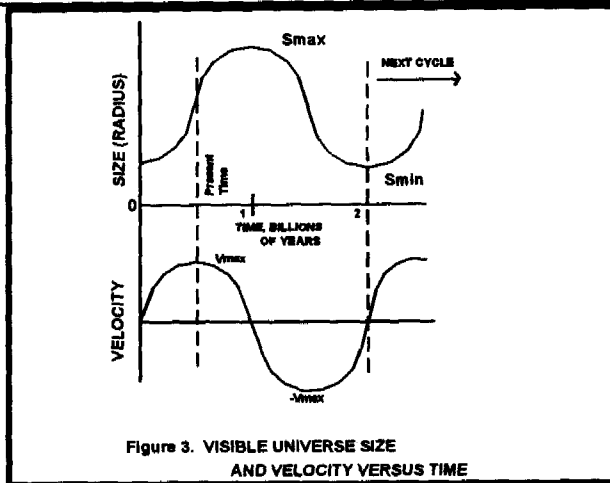


Figure 3. VISIBLE UNIVERSE SIZE AND VELOCITY VERSUS TIME

astronomers are able to measure. The Urantia Book seems to indicate that this observable universe extends only to the outer edge of the first outer space level. (129) If the first outer space level and the superuniverse level together are about 51 million light years thick, how thick or what is the radius from the center of rotation (Paradise) to the outer edge of the first OSL?

In a previous article, I determined that the radius of the central universe was probably less than 1000 light years [1] If so, then its size is small enough to neglect in calculating the radius and volume of the visible universe.

If the average radius to the outer edge of the first outer space level is about 51 million light years, can we make any predictions as to the amount of contraction and expansion of the universe? (I say average radius because the orbital track of the superuniverses and outer space levels is not a circle, but rather is shaped like a racetrack. Unfortunately, The Urantia Book does not tell us the maximum and minimum radii of the orbital path.) The amount of contraction is perhaps the easiest part to bracket. We know that the universe cannot contract to zero size, and there are practical limits on just how small it can get. But before we consider that, we need to ask if the galaxies and superuniverses themselves contract and expand with the universe.

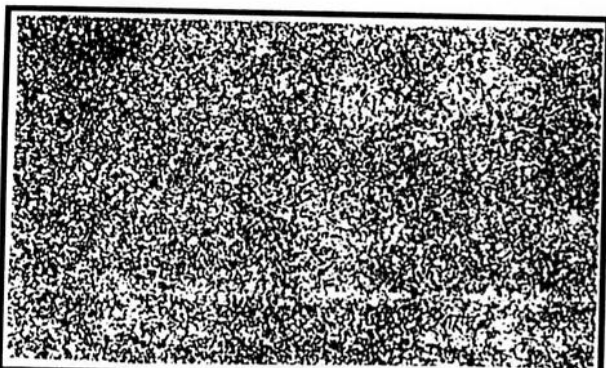
We can be sure that the distance between galaxies increases as the universe expands, but what about the space between the stars within a galaxy? The Urantia Book says that the material creation participates (134) in space respiration, but does that mean that the galaxies expand as the universe expands and vice versa? Do the galaxies keep their shape and size throughout the space respiration cycles or do they contract and expand with space during the contraction and expansion phases? Each scenario has its

problems.

Physicists tell us that the balance between gravity and the forces created by rotation is what prevents galaxies from flying apart or collapsing. If we assume that galaxies do not change size as the universe expands and contracts, what are the consequences? As the universe expands, the galaxies will move farther and farther apart. This doesn't seem to pose a problem. However, as the universe contracts, the superuniverses will come closer together. We are not informed on how much space exists between superuniverses but there could be a large buffer zone between them. If the superuniverses keep their present size, as the universe contracts, the galaxies that comprise the superuniverses would eventually come close enough to mutually disrupt each other. This clearly would not be acceptable.

Again, since the authors don't indicate how much of a buffer zone exists between the superuniverses, we can only make a reasoned judgment about the amount of contraction that is acceptable. 50% sounds to me like a reasonable amount for the maximum contraction. If the universe contracts by 25.5 light years from its present size, then it seems logical to assume that it expands by an equal amount referenced to its present size.

The other possibility is that everything contracts as the universe contracts, and expands as the universe expands. This would mean galaxies, planets, people, and perhaps even molecules and atoms would change size in proportion to the change in the size of the universe. To make this scheme work, either the mass of the basic particles would have to increase or the gravitational constant would have to increase as the universe expanded, and decrease as the universe contracted to maintain the same gravitational force between objects. This would maintain the same gravitational forces between planets, stars, and galaxies, thus preventing disruption due to changes in



As seen by the Hubble, the universe is uniform in all directions—stars packed like grains of sand on a infinite beach.

gravitational force as the bodies come closer together. Is there any way to determine which of the two concepts is correct?

The authors tell us that the superuniverses participate in space expansion. They also tell us that material bodies work against Paradise gravity during the expansion phase and with Paradise gravity during the contraction phase of space respiration. (134) To me, this suggests that stars, galaxies, and all material bodies resist expansion and contraction. The idea introduced in the previous paragraph that the constants of the universe are not constant seems outrageous. The simplest solution is that the forces between atoms, molecules and larger bodies are much stronger than the expansion of the space within the bodies, and thus the bodies do not expand and contract in size during space respiration. If we accept this as a working hypothesis, can we find evidence of space respiration as we look out into the universe?

Consider that the further a galaxy is from us, the longer it takes for its light to reach us. Because of this, we are looking further back in time as we look further out into the universe. If the figures given in *The Urantia Book* are correct, the light we see today from the outer edge of the first outer space level started out about 50 million years ago. What was going on out there 50 million years ago? Since we are now at the highest velocity point on the lower curve of Fig. 3, then the velocity of the edge of the 1st OSL would be less in the past than it is today. This would give the appearance of non-uniform expansion. We should be able to look at the red shift of that region and calculate the velocity, but there is a fly in the ointment. *The Urantia Book* tells us that much of the red shift we see is due to the passage of light through space, not the velocity away from us. We may be stuck at this point. We don't know the formula for the amount of red shift due only to the passage of light through space. We could use the assumptions that we have made to calculate the expected red shift due solely to the velocity of the 1st OSL and use that to determine the extra red shift, but this seems like picking ourselves up by our own bootstraps. And further, this whole exercise stands on a chain of assumptions. Change any one of them, and the whole analysis falls apart. What is required is incontrovertible proof that light can be red shifted just by its passage through space.

A small minority of astronomers feel that there is non-velocity red shift, but none of them can offer the sort of proof needed, nor, as far as I know, has any of them come up with a number for this non-velocity red shift. There have been some physicists who claim

that the Compton effect could cause the red shift. When radiation such as light interacts with a free charged particle, the energy can be re-radiated at either the same frequency, or at a higher or lower frequency. [2]

I have seen papers on the Internet claiming that most of the red shift in light from distant sources could be due to the Compton effect operating within intervening particles. But there are others who vehemently deny the possibility. Therefore, until reliable proof and numbers are forthcoming, the best we can do is speculate.

All the foregoing discussion was based on accepting the figures in *The Urantia Book* for the size of things. If those figures are in error, then all the preceding speculation is moot. Our astronomers believe that the universe is about 12 billion years old based on red shift measurements; we can infer from information in *The Urantia Book* that the universe is trillions of years old. (651) Our astronomers believe that the edge of the observable universe is more than 10 billion light years distant, again based mostly on red shift measurements; we can infer from information in *The Urantia Book* that it is about 50 million light years in radius. If the red shift assumption of our astronomers is incorrect, then the universe size and age they have determined are seriously in error.

At present, I don't see any way to reconcile the findings of the astronomers with the information in *The Urantia Book*, or to determine which is correct. It may turn out in the end that both are partly in error. I would be very pleased to find out that *The Urantia Book* has it exactly right, but unfortunately the authors put in an accuracy disclaimer regarding the science and cosmology of the book. It seems that I will have to wait until the evidence is in before I can decide on the correctness of any science or astronomy information in the book.

Speculation won't necessarily provide correct answers, but it can help us to frame the questions. It often turns out that asking the right questions is half the battle in finding the right answers. I hope no one is ever so overawed with the spiritual parts of *The Urantia Book* that they are afraid to question the science of the book. As far as I am concerned, the science disclaimer (1109) gives us license to question the science and cosmology of *The Urantia Book*. So speculate on!

References

1. "The Visible Universe," Dick Bain, *Innerface International*, Vol. 5, No. 6.
2. Grolier's 1995 CD-ROM Encyclopedia under "Compton effect".

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