



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

Not If, But When

Dick Bain, Hickory, NC, USA

Is the Urantia community a religion? How do we see ourselves? How do others see us? Will there ever be a Urantia church? Should there be a Urantia church?

The terms "church" and "religion" are often used to mean the same thing, so I will define what I mean when I use the terms. I take my cues from Webster's New Collegiate Dictionary. By church, I mean socialized and organized religion with buildings and clergy. By religion, I mean a community in which the individuals share a common set of spiritual beliefs and attitudes relating to God. Early Christianity was a religion but only later became a church.

If some in our community find the idea of a Urantia religion objectionable, then they would no doubt view the idea of a Urantia church as a scandal! The distaste of many in our community for a church or even for a religion is understandable. Some rather despicable things have been done in the name of religion or the church. The church has often been a roadblock in the way of social, scientific and even spiritual progress. Wars have been fought and people have been persecuted because of disagreements over theology. On the other hand, socialized religion as embodied in the church, synagogue or mosque has at times been a conservator of values and even of valuable knowledge. It has also provided a community of loving support for many in times of trouble. And because of its conservative nature, the church has at times been a governor on the engines of change to prevent too rapid or too radical changes. Weaknesses can sometimes be strengths.

Another objection that people have to socialized religion, especially as seen in the church, is that it isolates groups from one another; it promotes the "us vs. them" syndrome. If people begin to see the Urantia community as just another religion or church with its own holy book, will this inhibit them from looking at *The Urantia Book*? Will we thereby limit our growth? Do the advantages of a Urantia church outweigh the potential problems?

Some people will see the development of a Urantia

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church as a great sell-out, the beginning of bureaucracy and the death of real religion. I would ask this question of such folks: How many practicing Gnostics do you know? The Gnostics were against a professional clergy and they were against overmuch organization; without organization they had no power. Gnosticism wilted away beside the power of the organized Christian church. Humans are institution builders because institutions are the machines that carry out the great tasks of civilization. The Urantia community will have difficulty accomplishing large, long term programs without the power of a well-organized church.

On page 1076, the authors of *The Urantia Book*

offer an additional reason for the development of a socialized religious institution such as a church: "*The Jewish religion persisted also because of its institutions. It is difficult for religion to survive as the private practice of isolated individuals.*" (1076) And again on page 1083: "*While it is true that the institutionalization of religion has usually detracted from its spiritual quality, it is also a fact that no religion has thus far succeeded in surviving without the aid of institutional organization of some degree, greater or lesser*" If a Urantia religion exists or is developing, then it seems it will eventually need to organize to survive.

But even if a Urantia church develops, not everyone in the Urantia community will rush to join it. Such a church will only be a piece of the community, not the whole, and will not speak for the whole. I see three different sorts of Urantians in relationship to a future Urantia church. The first is the totally independent person. Many in the Urantia community are anti-institution and would have nothing to do with a Urantia church. These independent people will be valuable to the community because they will be free to introduce the book to people who are unaffiliated like themselves. The second type of Urantian is one who embraces the teachings of the book, but remains a loyal member of his or her religious organization. This person is an asset to the Urantia community because they are positioned to introduce the book to people of their church or other religious organization with which they are affiliated. They are missionaries of a sort. The third type of Urantian is one who longs for a church that provides the sort of support and organizational functions that the Christian church provides, but a church composed of students of the book and a church that embodies the teachings of *The Urantia Book*.

What of those who embrace the emerging Urantia religion but choose to remain a part of the traditional Christian church? Can anyone be intensely involved

Islam has liberated man's worship from confinement to specific places. Islam regards every place—whether it is one's dwelling place, the back of an animal, the deck of a vessel on the surface of the sea, or a mosque specifically built for worship—as pure enough for the performance of worship. Wherever a man might be, he can turn towards his Lord and enter into communion with Him

Mustafa Ahmad al-Zarqa, *The Islamic Concept of Worship*

***Jesus to his followers:
"we will so shortly begin the bold proclamation of a new religion—a religion which is not a religion in the present day meaning of that word, a religion that makes its chief appeal to the divine spirit of my Father which resides in the mind of man; a religion which shall derive its authority from the fruits of its acceptance that will so certainly appear in the personal experience of all who really and truly become believers in the truths of this higher spiritual communion." (1729)***

in this Urantia religion and be a Christian (Moslem, Jew, etc.) as well? Maybe. It depends on the brand of religion with which we are involved. The fundamentalist sects of the various religions have very little tolerance for ideas outside their theology. The few people I have spoken to who are both students of the book and members of Christian fundamentalist churches choose to conceal their involvement with the book to avoid problems with their church. On the other hand, based on personal experience, a liberal Christian has little difficulty in this religious coexistence because the theology of the book is compatible with that of the liberal Christian church. But this coexistence isn't without its consequences to the Urantia community.

When a Urantian is a part of an established religious organization such as the Christian church, I suspect that in most cases the organization or church gets more of the person's money, time and loyalty than any Urantia organization gets. Of course, there is a good reason the Christian church gets the lion's share of everything. It has the infrastructure which the Urantia community in general does not have. It offers worship services on Saturday or Sunday, and professional clergy who can counsel people, perform weddings, and represent the Christian community to the rest of the world. At its best, the church offers a social/spiritual structure within which people feel they have a place and an identity. The Urantia community struggles at a disadvantage because it lacks much of this structure; therefore it cannot command the loyalty and resources the Christian church can. Furthermore, in a culture that is so largely Christian, the Christian church has the approval and sanction of society; the Urantia community does not. When the Urantia community/religion does develop such an infrastructure, then it will begin to command more of the loyalty and resources of students of the book. For

those who long for a church that embodies the teachings of *The Urantia Book*, there is an unmet need. It appears we already have a Urantia religion; I believe it is only a matter of time before some sort of Urantia church emerges from this religion.

What will be the relationship of a Urantia church to other religious organizations, especially the Christian church? It all depends on perceptions. It's not how we see ourselves or what we call ourselves that counts; it's how those outside our community perceive us. Because our community is small and not prone to the sort of sensationalism that attracts the press, there is no general awareness of us as a Urantia religion yet. This anonymity will not last forever. When and if a portion of our community evolves into a church we'll become very visible. If the Urantia church is small, it can no doubt maintain cordial relations with all but the most conservative Christian churches, much as Unitarian Universalists do. If it grows into a real powerhouse and begins to pull in large numbers of members from Christian churches, it may be seen as a threat and perhaps some tensions will develop. If, on the other hand, this postulated Urantia church is or is perceived as a splinter Christian church, then it may blend into the Christian background so well that it's hardly noticeable. Do we want to be almost invisible to the world?

How will this Urantia church come about? Will the Urantia religion grow within the cocoon of the Christian church and eventually split off to form its own church? Or will the Christian church—or a segment of it—evolve because of its contact with the Urantia community within it and become a Urantia church? If we look to the example of the Christian church and Judaism, we note that the Christian church was built on the foundations of Judaism, but was far more than just a reformed Judaism. But the differences between Judaism and the emerging Christian religion were much greater than are the differences between the teachings of *The Urantia Book* and Christianity. The theology of the book could almost be seen as Christian theology purged of its negative aspects. I feel that there is a strong possibility of a spin-off sect. The authors of *The Urantia Book* indicate that either a new church will emerge from within the Christian church, or that the Christian church itself will be transformed from within. On page 1866 they tell us, "*It may be what will emerge does not resemble the Christian church, but it would be hard to believe that it would not at least bear traces of its ancestry.*"

It seems that rites and rituals are a necessary part of most religions, and I am sure a Urantia church will be no exception. The rites and rituals that are a part of the Christian religion have a long history and a strong identity and might be appropriated by an emergent Urantia church. Unfortunately, many of the rituals,

In describing the religion that he foresaw would be built upon the teachings of *The Urantia Book*, Bill Sadler Jr. stated:

A religion the like of which this world has never yet seen. A religion that is full of good humor. A religion which is full of the joy of existence. A religion which is totally devoid of fear of a theological or spiritual nature.

A religion which people wear casually yet earnestly. A religion which is gracious in its tolerance, in its leashed strength. A religion which has nothing to do with any one day of a week. A religion which pervades the whole of a human life, twenty four hours a day. A religion which is dealt with in a familiar friendly way. A religion which is part of a human being.

A religion which is inseparable from philosophy, from ethics, from morality, from economics, from political thinking, and everything else. A religion which seeps down through all the levels of a human personality until it becomes indistinguishable from the whole social fragrance of that human being.

This, to me, is religion which appeals. And this, to me, is a religion which you don't find much of in human history.

such as communion, have traditional meanings that are unacceptable to the Urantia community, but they could be redefined so they reflect the more positive teachings of the book. Even if a Urantia church develops totally outside of the Christian church, I suspect that there will be many similarities between the Urantia church and the Christian church. It is much easier, faster, and generally the natural human tendency to adapt existing rites and rituals rather than start from scratch. Symbols may be more of a problem.

On page 966, the authors inform us that "...even the restatement of the religion of Jesus must develop a new and appropriate symbolism." What then becomes of the primary symbol of traditional Christianity, the cross? It certainly has quite a different meaning for us who are students of *The Urantia Book*. Can this venerable Christian symbol be purged of its atonement connection and rehabilitated to symbolize the real meaning of Jesus' life and death? The problem is that the cross is primarily a symbol of Jesus' death, not his life. Perhaps a shepherd's crook would be a more appropriate symbol. Another symbol that will surely be appropriated by a Urantia church—despite any trademark laws—is that of the three concentric blue circles. This symbol is so highly regarded by so many in the Urantia community that no organization will be able to keep them from using it. I

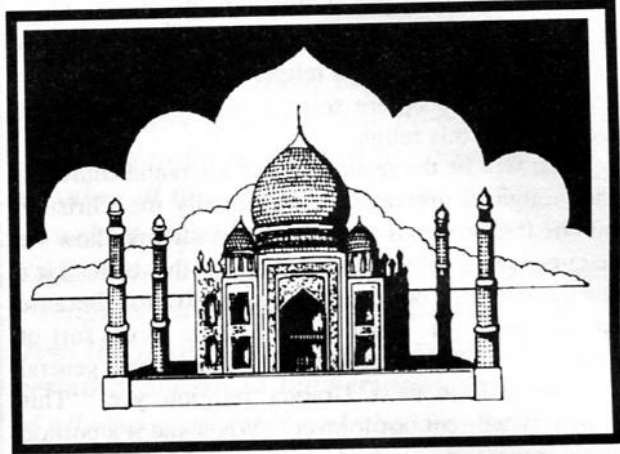
suspect we will long use well-known symbols before we develop something unique for ourselves.

A Urantia church may be a long way in the future; it will probably be preceded by recognition of our community as a religion. I feel that the Urantia community already is a religion whether or not we perceive ourselves as such. The awareness of this may come from outside our community rather than from within. The early Christians may not have perceived themselves as a religion; they didn't even name themselves, someone else did. When there comes to be a widespread consciousness of the Urantia community, perhaps we will be named. We may be known as Urantians, Urantia-ites or some other derivative of the word Urantia. The religion will possibly be known as Urantia-ism or perhaps just Urantia.

A case could be made that a Urantia church of sorts already exists. Consider: Church-goers meet periodically for fellowship and worship. Students of *The Urantia Book* gather periodically for fellowship and occasional worship at conferences. We do not have permanent buildings for these functions, or a priesthood, but we do have those talented teachers and leaders who organize conferences, lead workshops and worship. And we have an underground church of sorts in the study groups who meet in people's homes. These groups are generally educational and social, but they certainly have spiritual overtones. There was a so-called "house church" movement in the US a few decades ago. The proponents were trying to move the church away from the conventional church buildings and into the home to pray and worship as the early Christians did. Those study groups of our community which have a more spiritual focus certainly have the flavor of a house church. When a Urantia church emerges, even if it does originate from within the Christian church, the real source could be from the seeds of the more spiritual study groups. We may conjecture about from where or how a new religious organization will emerge as a result of the Fifth Epochal Revelation, but the authors of *The Urantia Book* make it clear that something will emerge. Not if, but when.

Language falls down because it is derived from concrete experience and can be applied only with difficulty to religion, which is the stretching out for more adequate experience not yet existing as a definite and palpable state to which words are specifically appropriate.

Gordon Allport, *Waiting for the Lord*



Limitations of Revelation:

Ann Bendall, Nambour, Australia

I see so many arguments and presentations from we "informed" religionists, we folks who can quote chapter and verse on the terms "revelation" and "evolution" and spend heaps of time, energy and money defending or questioning whether *The Urantia Book* is one or the other or both.

The book itself states that it is revelation simply by the process involved in its creation. "**Truth is always a revelation: autorevelation when it emerges as a result of the work of the indwelling Adjuster; epochal revelation when it is presented by the function of some other celestial agency, group, or personality.**" (1109) So seeing Divine Counselors, and Melchizedeks, and midwayers, and seraphim, etc., regard themselves as embraced within "celestial agency, group, or personality," (and I tend to agree with them) then, to me, the process in bringing the book to this planet comes within their definition of epochal revelation.

Written in the English language, the book clearly does not conform to literary ethics. It delightfully quotes from its thousand of human sources without referring to the human source in most instances, and in others not even acknowledging that it is using a human source. The revelatory commission thinks funny! Somehow they feel that all good comes from God, and all truth comes as a result of the work of our Thought Adjuster. To them the human mind is of no relevance and so they breach copyright like it was non-existent to them regarding God as the source of truth, beauty and goodness!

So the fifth epochal revelatory process finished with the production of *The Urantia Book*, and then evolution took over! Now evolution has been the thorn in the side of every carrier of a revelation. We

knowledgeable Urantia Book readers full well know the problems leading to the thwarting of the desires for the four prior epochal revelations, and we are determined that the fifth will not suffer the same fate as its forebears. The reality is that the Fifth Epochal Revelation was a resounding success, we have 2097 pages to prove this. But where do we go with the evolution consequent upon its production? Is it possible that we can, and are, learning from the mistakes of the other four post-epochal-revelation eras?

With the first revelation, the poor Dalamatia teachers had an uphill battle. *"The Dalamatia teachers sought to add conscious social selection to the purely natural selection of biologic evolution. They did not derange human society, but they did markedly accelerate its normal and natural evolution. Their motive was progression by evolution and not revolution by revelation. The human race had spent ages in acquiring the little religion and morals it had, and these supermen knew better than to rob mankind of these few advances by the confusion and dismay which always result when enlightened and superior beings undertake to uplift the backward races by over-teaching and overenlightenment."* (750)

They were doing a slow but effective job when the whole project was aborted through sin of key figures in the revelatory process.

Later came revelators number two—Adam and Eve—with double the battle of their revelatory forebears, and they stumbled into error after making great headway in a short space of time.

Things were looking pretty grim when Machiventa Melchizedek (revelator number three) decided to don a tunic and go visit a Beduoin tent in the middle of the desert. Melchizedek did a good job, but goodness he really had a holiday whilst sitting in his tent with a tunic bearing an emblem which would have a few devout believers having to collect funds for legal defence if he went around sporting it these days. Just think of the knowledge that guy possesses, and he spent approximately ninety years mainly teaching that there is only one God! I guess he did not want to intellectually overload the intellects of that day!

When once you grasp the idea of God as a true and loving Father, the only concept which Jesus ever taught, you must forthwith, in all consistency, utterly abandon all those primitive notions about God. (2017)

To believe, we need God, a soul, and the Word. Having rejected the Bible as a paper pope, many are left with the Bible as a collection of ill-composed records on a mass of paper.

Abraham Heschel, *The Insecurity of Freedom.*

Anyway, he achieved what he aimed for, and kept the idea of one God alive so as to pave the way for Jesus (the fourth epochal revelator), two thousand years later.

Jesus struck the same problem as Melchizedek. Not that we want to criticise his judgment, but if he had waited for a few thousand years perhaps his message would not have got fouled up. And what was his mission and message?

"My mission on earth is the revelation of the Father, and my message the proclamation of the kingdom of heaven?" (1635)

"The Master made it clear that the kingdom of heaven must begin with, and be centred in, the dual concept of the truth of the fatherhood of God and the correlated fact of the brotherhood of man. The acceptance of such a teaching, Jesus declared, would liberate man from the age-long bondage of animal fear and at the same time enrich human living with the following endowments of the new life of spiritual liberty:

1. The possession of new courage and augmented spiritual power. The gospel of the kingdom was to set man free and inspire him to dare to hope for eternal life.

2. The gospel carried a message of new confidence and true consolation for all men, even for the poor.

3. It was in itself a new standard of moral values, a new ethical yardstick wherewith to measure human conduct. It portrayed the ideal of a resultant new order of human society.

4. It taught the pre-eminence of the spiritual compared with the material; it glorified spiritual realities and exalted superhuman ideals.

5. This new gospel held up spiritual attainment as the true goal of living. Human life received a new endowment of moral value and divine dignity.

6. Jesus taught that eternal realities were the result (reward) of righteous earthly striving. Man's mortal sojourn on earth acquired new meanings consequent upon the recognition of a noble destiny.

7. The new gospel affirmed that human salvation is the revelation of a far-reaching divine purpose to be fulfilled and realized in the future

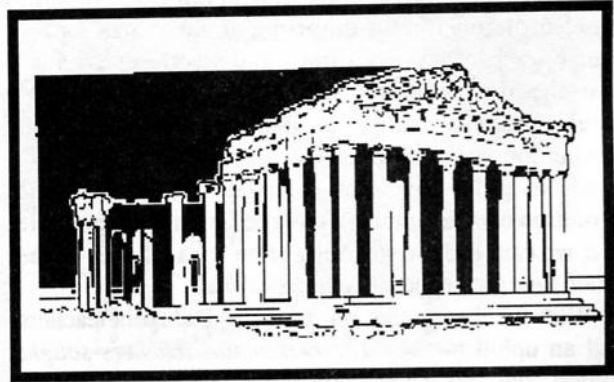
destiny of the endless service of the salvaged sons of God.” (1859)

Again and again did Jesus beseech that his apostles and disciples incorporate into evolutionary religion his teachings, but they insisted in going against his instructions, preaching instead about his life! “*Jesus foresaw that a social organisation, or church, would follow the progress of the true spiritual kingdom.*” (1865). “*The church was an inevitable and useful social result of Jesus’ life and teachings; the tragedy consisted in the fact that this social reaction to the teachings of the kingdom so fully displaced the spiritual concept of the real kingdom as Jesus taught and lived it.*” (1864)

And today, “*Christianity...the product of the combined moral genius of the God-knowing men of any races during many ages... has truly been one of the greatest powers for good on earth...(and) still contrives to move the minds of reflective men with mighty moral emotions.*” (2085) However, “*Christianity is seriously confronted with the doom embodied in one of its own slogans: ‘A house divided against itself cannot stand.’ The non-Christian world will hardly capitulate to a sect-divided Christendom. The living Jesus is the only hope of a possible unification of Christianity. The true church—the Jesus brotherhood—is invisible, spiritual, and is characterised by unity, not necessarily by uniformity.*”

The religious challenge of this age is to those far-seeing and forward-looking men and women of spiritual insight who will dare to construct a new and appealing philosophy of living out of the enlarged and exquisitely integrated modern concepts of cosmic truth, universe beauty and divine goodness. (43)

The great hope of Urantia lies in the possibility of a new revelation of Jesus with a new and enlarged presentation of his saving message which would spiritually unite in loving service the numerous families of his present day professed followers. (2086)



Uniformity is the earmark of the physical world of mechanistic nature. Spiritual unity is the fruit of faith union with the living Jesus. The visible church should refuse longer to handicap the progress of the invisible and spiritual brotherhood of the kingdom of God. And this brotherhood is destined to become a living organism in contrast to an institutionalized social organization. It may well utilize such social organizations, but it must not be supplanted by them.” (2085)

Have we learnt from the evolutionary offshoots of the fourth revelation? We formed a social organisation, not a church, in the hope of protecting against the problems of the past 2000 years. The reality is that in the eyes of the revelators such structures are one and the same, and hence the strong words of the midwayers apply to us post-fifth revelation evolutionists: “*But there is no excuse for the involvement of the church in commerce and politics; such unholy alliances are a flagrant betrayal of the Master.*” (2085) And should we as a social group of readers stoop to such ‘unholy alliances’ then: “*the genuine lovers of truth will be slow to forget that this powerful institutionalized church has often dared to smother newborn faith and persecute truth bearers who chanced to appear in unorthodox raiment.*” (2085). We run the risk of also deterring, “*Many earnest persons who would gladly yield loyalty to the Christ of the gospel find it very difficult enthusiastically to support a church which exhibits so little of the spirit of his life and teachings.*” (2085).

If we, as a social organisation insist on continuing such ‘unholy alliances’ then we ensure that *The Urantia Book’s* contents are not utilised to create a new philosophy of living as requested by the Divine counselor (43), and that the ‘great hope’ of the midwayers (2086) cannot be carried into action.

What were we supposed to do? The apostles were clearly told to preach the good news. What were we told to do? Very clearly: “*You may preach a religion about Jesus, but, perforce, you must live the religion of Jesus*”

Parental Guilt

Jacques Tetrault, Quebec, Canada

Parents who feel guilty (whatever the reason, and often without reason) are:

- **Insecure and unstable**
- **Manipulating and manipulated**
- **Lacking in self respect and not respected**

Unless you get rid of your guilt feelings, unless you learn to totally forgive yourself for your mistakes and misdeeds, your relations with your children, and even with your spouse, will be tinted with discomfort and manipulation.

You are not guilty for your mistakes, your errors or any shortcomings made in good will. You are still only a growing human being as well. Be proud of what you have so far achieved, given and succeeded in. Admit your mistakes, but give yourself credit for your good will. Your children will, in time, be able to recognize and appreciate your efforts. But if you project yourself as a guilty person, how could your children, and others around you, possibly perceive something else?

On the other hand, if you are truly responsible for deliberate misbehavior, neglect, abuse or other unacceptable doings, you must, for your own sake, admit these to yourself and forgive yourself (that is a somewhat difficult task, but it can be done). Only truthfulness and sincere regret, in the deepest and most intimate part of yourself, in the very presence of the purest, most noble and truest part of you, which I call the Divine Presence in each person, can liberate you and your children. And there our heavenly Father forgives completely and abundantly to factualize our fault and His forgiveness is fact. It only needed our admission to factualize, since it was there all ready in waiting.

Parents who feel guilty transpire guilt and communicate guilt all around themselves, and their children are trapped in it as well.

Guilt feelings are neither helpful nor useful. It is only necessary that we honestly recognize our faults and mistakes and then move on with our best will to do well on the road to growth, right from where we are.

It is needless to ask of ourselves more than we can give this day. Tomorrow we will be able to do better and more; unless some guilt feelings come by and paralyse us.

Regret? Yes! Insight? Yes! Forgiveness? Unavoidable! Guilt? Useless!

There is such a nobleness of heart in each human being, yes every single one of us. And on this nobleness we can build.

Your children are not your children.

They are the sons and daughters of Life's longing for itself.

They come through you but not from you, and though they are with you yet they belong not to you.

You may give them your love but not your thoughts,

for they have their own thoughts.

You may house their bodies but not their souls, for their souls dwell in the house of tomorrow, which you cannot visit, not even in your dreams.

You may strive to be like them, but seek not to make them like you.

For life goes not backward nor carries with yesterday.

You are the bows from which your children as living arrows are sent forth.

The archer sees the mark upon the path of the infinite

and He bends you with his might that His arrows may go swift and far.

Let your bending in the Archer's hand be for gladness;

for even as He loves the arrow that flies, so He also loves the bow that is stable.

Kahlil Gibran, *The Prophet*

A great number of us have been educated in a culture where guilt was omnipresent and overwhelming. It is high time to put a halt to its effects, both for ourselves and for our children's sake. We are worth more than that, our children also. We were not born sinful, and we are not lost souls.

When someone feels guilty, he usually tries to find somebody to share his guilt, someone whom he can charge with at least part of the responsibility. He may try to have somebody involved in his reprehensible conduct, thereby reducing, he thinks, his responsibility.

If we let ourselves be trapped in this game, we are by no means helping the one who feels guilty. We may share his guilt because of our own guilt propensity, but we are not helping our vis-a-vis to shed light and truth on his own situation of fact; in fact, our reaction is an encouragement to intensify his manoeuvre. We are then unhelpful to either party.

We would be much better advised to help the guilty person look with calm and reason at his own situation in all fairness and reassure him as to our full forgiveness and God's full forgiveness and love. This will allow him to stop lying and to forgive himself

without having to feel bad or making others feel bad.

God is not a high judge. God does not punish. God is our loving Father; always welcoming each of his sons and daughters regardless of their mistakes and faults. God always forgives, he understands. He loves us perfectly. Forgive yourself! Always forgive; to be truer, to stop hiding.

If you have faltered, clearly admit it, then forgive yourself and joyfully walk on toward better and more good.

If you needlessly develop guilt, stop this nasty habit, learn to accept both your strengths and your weaknesses, give life a smile and life will smile back at you.

Your children need your strength, your confidence and your love. They can only suffer from any guilt that lodged itself in you.

Say YES to your heavenly Father, life will say YES to you. And your children will also be better prepared to say YES to life AT LAST!

Divine Music

Sandy Garrick, Katrineholm, Sweden

My main point of dissatisfaction about the origin of the Urantia papers has always been the absence of a bonafide musician on the early Forum panel that Dr Sadler put together in his Chicago home to bring us this superb document on the magnitude of God's cosmic reality.

But how could he? In the days of prohibition in Chicago, the local gangsters often carried their machine guns in saxophone, cello, violin and trombone cases. Thus a musician was generally looked upon as someone who might threaten your life. Which might explain why no musical mind was ever invited to sit in the Forum deliberations. Can you

It would be a sad day for us if ever the music of church bells were to become silent in our villages and towns. For it is this music which calls us away from the world of visible things, the world of our scheming and talking, inviting us to gather ourselves together to hear the word of God which resounds from the invisible world of eternity.

Rudolf Bultmann, *This World and the Beyond.*

Blessed are you who cut lunches for your families and put food into lunch boxes with your love to sustain them outside the family home. You show them the

Wisdom of the Soul.

The soul is a lunchbox.

We all have one. Our task

is to fill it with our experience

of doing the will of God, of serving

our human companions in love. We carry

it with us at death to sustain us in the life to come.

Christopher Billington

imagine today, everyone who carried a music-cachee being looked upon as a potential killer? Whether in Paris, Panama, Perth, Palermo, or Pittsburgh, being a musician would be as if you were a murder suspect.

Such was the culture of the times when the Sadlers' started the study group that turned into the Forum that brought us the Urantia revelation. I had the pleasure of personally knowing three of the most prominent personalities of those early days—Clyde Bedell, Clyde Goodman, and Max Laurence. One day at lunch, Clyde was lamenting about the malady that threatens us all—our preoccupation with everything that simply doesn't matter. Such was his description of those rebellious aspects so predominant in our lives. How could we have grasped the thus translated "Symphonies of Paradise" the Revelators brought to us in their rainbow of celestial music. "We must get our priorities in order" is the battle cry of such cosmic *raison d'être*. To be "CCC"—clear, cogent, and concise.

One of the revelators, the Melchizedek-in-charge, addressed the Forum saying, "If you people would only realize what a high spiritual source you're dealing with, you would stop with these puerile investigations into detecting fraud and get on with some significant questions about our magnificent universe and the reality-totality it represents." The Forum adopted the question and answer method—but without the presence of an active music-man. Even though we're taught that the whole marvellous universal mechanism moves on majestically through space to the music of the meter of the infinite thought and eternal purpose of the first great Source and Center. How do we understand such phenomena?

Today things are not very different on this rebellion-torn world of ours, steeped in lies, misinformation and misleadings, where we are still investigating to see if these folks really knew what they were talking about. "I know whereof I speak," the actual words of a Divine Counselor, are still

questioned and our skepticism is only surmounted by those few souls who have experientially discovered the cosmic reality that such celestial beings must represent. Basic understanding is still lacking in most of us, even at the highest levels of intellectual academia. Self-seeking that equivalates to rebellion and selfishness is indeed cosmic suicide—the cosmic antithesis of the truths, beauties, and goodnesses we need to address in the actual living of the melodies of our superb revelation. “If music be the food of love, play on,” said the bard in his supernal poetry.

The harmonies of God, the Father on Paradise, are exquisitely rich—filled with the masterfully orchestrated beauty of the Perfect Central Universe. As the Son’s melodies and the superb Spirit depictions of goodnesses inherent in the musical rhapsodies of the ministry of Love and Mercy. Harmony is our Father-content. Melody is Son-content and the Spirit stands for the rhythmic component of the music of the eternal and divine purposes.

Dissonances are falsehoods masquerading in the habiliments of liberty. *Avant garde* abstractions and synthesized unmusical tendencies of a moronic dilettante are simply lies trying to wear the cloak of musical truths for further disruptive maladjustments. Distortive noise is the negative factor by which recognition of evil is thus made apparently audible even to those lacking in discriminative abilities.

Only once in a thousand lives is there any apparent capacity for the recognition of the higher, spiritually intelligent harmonies. The old Forum’s ideal of being clear, cogent, and concise (CCC) is done by increasing recognition-facilities from where we might sort, choose, and achieve.

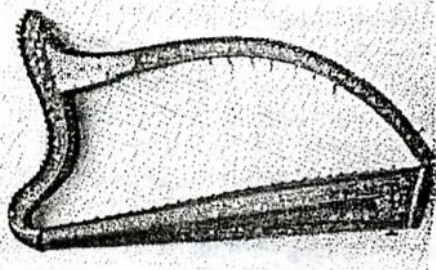
In the Melchizedek Symphony Papers (100-106), the direction is clearly, cogently, and concisely given. We are to “*dare to launch out upon the limitless and never ending universe journey in the sole company of truth.*” (1141) Harmonious, Fatherly, thought permeated, excellence-orientated *truth*. After “*having started out upon the way of life everlasting, having accepted the assignment and received our orders to advance, why fear the dangers of human forgetfulness*

Some day a real musician may appear on Urantia, and whole peoples will be enthralled by the magnificent strains of his melodies. One such human being could forever change the course of a whole nation, even the entire civilized world. It is literally true, "melody has power a whole world to transform." Forever, music will remain the universal language of men, angels, and spirits. (500)

and mortal inconstancy when, in every dark hour and at every crossroad in the forward struggle, the Spirit of Truth will speak, saying, ‘This is the way.’” (383) Why can we not recognize the Spirit of Truth? Why can we not effectively tell it apart from the rampant sham and lies that surround us on a daily basis? By their fruits we may know them.

The qualities of divinity are truth, beauty, and goodness—in this order, as ordained by the heavenly Father. There are no shortcuts, easy paths, or royal roads to Paradise. Patronage, condescension and pity do not equvalate to mercy. Procrastination, equivocation, insincerity, problem avoidance, and ease-seeking are the very first animal vestigial traits that need to be eradicated early in the morontia career—before we can get on with the music of the heavens and “light picturizations” of the heavenly reproducers. In truth, harmonious acoustic music foreshadows the Paradisical universe realities that turn the emotions of time into the thoughts of eternity. Through these truths, man attains beauty and then, by spiritual love, ascends to goodness. Faith leads to knowing God, not merely to a mystical feeling of the Divine Presence. Musical emotional consequences lead to believing and knowing, as well as to the satisfying fruits of feeling.

When we stand in awe of the Master Universe, we must pause to consider that this inconceivable creation is but a partial revelation of the Infinite Father whose face is ever turned to us as the Universal Father of Love. The Melchizedek Symphonies, which are but “*Religion in Human Experience*” will serve as a living guide (or guide for living) to those who might wish to develop a bonafide understanding of them on their way to unifying these life qualities on ever ascending levels of cosmic wisdom, harmonious self-realization, God-finding and Father worship. As presaged by Melchizedek, Jesus, our Master, is the Way, the Truth, and the Life. I am personally opting to follow Him, His Mind and His Music. Won't you follow him, too? And form an orchestra?



Harp from the Middle East—B.C. period

On Space and Nothing

Robert Webb, Hawaii

The literal substance of Paradise is a homogeneous organization of space potency not to be found anywhere else in all the wide Universe of Universes. (120) Space potency is pre-reality; it is the domain of the Unqualified Absolute. (469) In Nebadon, space potency is spoken of as *absolutum*, Paradise source material neither alive nor dead (120)

Most people I talk to think of space as always having existed and infinite. They are not aware of the above. Space is created from the literal substance of Paradise. Paradise exists without time and has no location in space. Space seemingly originates just below nether Paradise, whereas time seemingly originates from upper Paradise.

Paradise is non-spatial. It has distance. Motion is not inherent on Paradise, it is volitional. (120) As for the Universe of Universes, before space there was no reality, no nothing. All reality comes from God. Can you imagine nothing? Space is not force, energy, or power.

There is both pervaded and unpervaded space. The various space levels are: the central universe, the seven superuniverses, and the first, second, third, and fourth outer space levels. God is the upholder of the Universe of Universes. God is the Creator, and from Paradise (which is absolute), comes the potency of space.

Space potency is not subject to the interactions of gravitation. It is ancestral to all manifestations of force-energy and the organization of power and matter. It is almost indefinable—its meaning should convey the idea of the potencies and potentials existent within space including all those absolute influences and potentials that emanate from Paradise and comprise the space presence of the Unqualified Absolute. (126)

May we say that space in the Universe is the basis for all material reality? Can we say that before there was space there was nothing—no thing, no reality before space? Can your mind imagine nothingness, no reality?

Pure friendship is an image of the original and perfect friendship that belongs to the Trinity and is the very essence of God.

Simone Weil, *Waiting for God.*

The Rebuke to One Friend in Defence of Another.

Ann Bendall, Nambour, Australia

In his thirteenth year, and on his first trip to Jerusalem, Jesus and his parents paused to rest in the borders of a little village called Bethany. There Jesus first met Lazarus (same age) Mary (two years younger) and Martha (one year older), who were to become lifelong friends (1375). Later that week, he was given permission by his parents to spend the Wednesday night of the Passover week at his new-found friends' home, and here the loving bond was established between the four as Lazarus, Martha and Mary "*heard Jesus discuss things temporal and eternal, human and divine.*" (1380).

These three shared more of his life history than any other humans, believing, loving, and respecting him from the very beginning. Although thrilled to have his company, on the few precious occasions that he could visit, many were the times when they extended the hospitality of their home, so as to allow him to wander alone in their garden at night when they would have much preferred to chat.

The fact that circumstance prevented Jesus from visiting them often in no way hindered the development of their friendship. And, during the years of that friendship, it was the custom for the three to drop everything and listen to Jesus' teaching whenever he chanced to visit them, (although Martha was often "*unnecessarily distracted by numerous needless tasks*" and "*perturbed because Mary did nothing to help.*" 1797-8)

In the difficult years after his father's death, Jesus must have yearned, at times, for their company, and in his twentieth year "*Although they could hardly afford it, Jesus had a strange longing to go up to Jerusalem for the Passover.... He was not markedly conscious of it, but what he most wanted was an opportunity to talk with Lazarus and to visit with Martha and Mary. Next to his own family he loved these three most of all. (1404) with a fervent affection (1837) And he was the idolized ideal of all three of them.*" (1404)

They played a spectacular role in his later public life and two inter-related events involving the family—Lazarus being raised from the dead, and Mary's anointing of Jesus' head and feet, in anticipation of his death, have both been recorded in the gospels. What did the latter event represent, and why did Mary make this gesture?

Bethany was agog with the news of Lazarus having been raised from the dead! Jesus arrived at Bethany shortly after four o'clock on Friday afternoon, March 31, AD 30. Too many people were coming to visit

Lazarus, and so it was arranged for Jesus to stay at Simon's home (the leading citizen of the town since Lazarus' father's death) rather than with Lazarus, Mary and Martha. Simon planned a banquet in honour of both Jesus and Lazarus, on the evening after the Sabbath (six days before the Passover). This was in defiance of the Sanhedrin whose agents attended the banquet but were fearful of arresting Jesus in the midst of his friends.

Despite the apostles being a sober lot, Jesus was exceptionally cheerful and had been playing with the children up to the time of coming to the table. (1879) The apostles were apprehensive of Jesus' arrest whilst many of the guests believed that Jesus was now going into Jerusalem, in utter defiance of the Sanhedrin's decree of death, to proclaim himself king of the Jews. However, Lazarus, Martha, and Mary more fully realized that the Master was not that kind of a king and felt that this might be his last visit to Jerusalem and Bethany. (1878)

Whilst Jesus and Lazarus were placed in positions of honour at the supper, Martha busied herself directing the serving of the food, and Mary was an onlooker, as it was against the custom of the Jews for a woman to sit at a public banquet.

Mary waited until near the close of the feasting, and then went up to where Jesus reclined as the guest of honor. She proceeded to open a large alabaster cruse of spikenard (a very rare and costly ointment, equal in sum to the earnings of one man for one year—enough to provide bread for five thousand persons), and anointed her friend's head, after which she poured it on his feet, took down her hair and wiped them with it. Mary had long saved the money to buy this cruse of spikenard which she planned to enbalm Jesus' body with at his death. She knew he was shortly to die, and decided "to bestow this offering upon the Master while he yet lived." (1879).

And as the whole house became filled with the odor of the ointment, and everybody present was amazed at what Mary had done, some of the people murmured, showing indignation that so costly an ointment should be thus used.

Judas was particularly offended and, stepping over to where Andrew reclined, said: "Why was this ointment not sold and the money bestowed to feed the poor? You should speak to the Master that he rebuke such waste." (1879)

Instead Jesus protected and defended the action of Mary. There is no mention that Mary was disturbed by the criticism, and so was Jesus? or did he act to avert a more direct attack on Mary? We do not know, all we are told that, referring to no person in particular, he rebuked (scolded, reprimanded) as follows: "Putting his hand upon Mary's head as she knelt by his side and, with a kindly expression upon his face,

Yea, there are many who do say; if thou wilt show unto us a sign from heaven, then we shall know of a surety; then we shall believe. Now I ask, is this faith? Nay; for if a man knoweth a thing he hath no cause to believe, for he knoweth it.

Alma 32:17-18

Jesus said: 'Let her alone, every one of you. Why do you trouble her about this, seeing that she has done a good thing in her heart? To you who murmur and say that this ointment should have been sold and the money given to the poor, let me say that you have the poor always with you so that you may minister to them at any time it seems good to you; but I shall not always be with you; I go soon to my Father. This woman has long saved this ointment for my body at its burial, and now that it has seemed good to her to make this anointing in anticipation of my death, she shall not be denied such satisfaction. In the doing of this, Mary has reprov'd all of you in that by this act she evinces faith in what I have said about my death and ascension to my Father in heaven. This woman shall not be reprov'd for that which she has this night done; rather do I say to you that in the ages to come, wherever this gospel shall be preached throughout the whole world, what she has done will be spoken of in memory of her.'" (1879)

And at the same instant and over the same set of events one friend, Mary demonstrated a faith and belief that few at the supper demonstrated, whilst another friend, Judas "finally made up his mind to seek revenge for his hurt feelings" revenge against the one person who truly loved him—Jesus! He personalised Jesus' rebuke as directed towards himself and made his disastrous decision!

Aristotle, Fuzzy Logic, and The Urantia Book

Ken Glasziou, Maleny, Australia

Faith that all things are either black or white reaches back in the West to at least the ancient Greeks when Democritus reduced the universe to atoms and void, Plato filled his world with pure forms, and Aristotle wrote down his rules of logic that scientists and mathematicians still use to describe and discuss what is essentially a gray universe. Aristotle taught us to always draw the line between opposites, between thing and not-thing. The better you draw these lines, the more logical your mind, and the more exact your science. Aristotle's binary logic reduces to one

law—either A or not-A, either the sky is blue or not-blue, either a rose is red or not-red.

The Buddha died nearly one hundred years before Aristotle was born. He spent much of his life in formulating a belief system that penetrated the bivalent veil by thinking in terms of both A and not-A rather than either/or. His system persists to this day in the East, through Zen and Tao and its yin-yang emblem of opposites—both thing and not-thing. Now it bursts forth into the world of science and technology in computer and control systems based upon parallel processing using simulated neural networks that learn by experience.

In the West, the basic principle underlying these new developments has been labelled with the popular name, fuzzy logic (more formally, multivalent logic). Forward-looking thinkers predict that fuzzy logic will bring about revolutionary changes to the way we in the West think about our science, our technology, and our society in general.

The simplification that accompanies binary logic—either A or not-A—has had untold benefits, but at a price. It introduced the problem of oversimplification when it became a law rather than a guiding principle.

Some of our greatest thinkers in the West appreciated that a problem existed, but at the same time they tended to avoid facing up to the consequences. These may be particularly bad when we ignore the fact that binary logic does not describe reality. Einstein acknowledged that this is so in these words: "So far as the laws of mathematics refer to reality, they are not certain. And so far as they are certain, they do not refer to reality." Bertrand Russell put it this way, "All traditional logic habitually assumes precise symbols are being employed. It is therefor not applicable to this terrestrial life but only to an imagined celestial one." Hemmingway challenged the world to produce a single fact that is 100% true or 100% false. So far, no one has met the challenge. In spite of such reservations, the philosophy of logical positivism (that adheres closely to the "A or not-A" principle) has dominated scientific thinking during the twentieth century.

Logical positivism holds that if you cannot test or mathematically prove what you say, you have said nothing. Problems of God and metaphysics and goodness and value reduce to mere pseudo-problems. In the words of logical positivist, Moritz Schlick, "In the end, they (philosophers) will no longer be listened to. They will come to resemble actors who continue to play for some time before noticing that the audience has departed. Then it will no longer be necessary to speak of philosophical problems."

When fuzzy logic was introduced in the West it met with either ridicule or disdain. Fuzzy logic accepts



that the black and white terminology of formal logic describes only the limiting values of facts, situations, and systems in which many of the examples are some shade of gray. In industrially developed nations of the East where the background philosophy was markedly influenced by Buddhism, the concept that reality is not at the edges but somewhere in the middle brought no clash with established thinking habits. However, this would probably have passed unnoticed if it had not been for the fact that their science and technology picked up the novel new system and developed it to the point that it can no longer be ignored.

In effect, systems that use fuzzy logic simulate the way our brains work. Whereas the digital computer works with a series of steps that are either on or off, our brain works with a network of interconnected neurones that function in parallel. In Japan, Taiwan, and Korea an enormous effort has been invested in the development of parallel processing computers that, when confronted with a task, are able to learn from experience in order to improve performance.

So what has this to do with *The Urantia Book*? The Revelators do not subscribe to our Western concept of black or white, true or false, A or not-A. The book tells us, "*Truth is a living and flexible factor in the philosophy of the universe.... That which apparently may be wholly true in one place may only be relatively true in another segment of creation.*" (42) "*Truth is relative and expanding; it lives always in the present, achieving new expression in each generation of men—even in each human life.*" (888) "*But when truth becomes linked with fact, then both time and space condition its meanings and correlate its values. Such realities of truth wedded to fact become concepts and are accordingly relegated to the domain of relative cosmic realities.*" (1297) "*Static truth is dead truth, and only dead truth can be held as a theory. Living truth is dynamic and can enjoy only an experiential existence in the human mind.*" (1949)

Because of the habits of thinking in the Western world, it is virtually inevitable that our cultural heritage, based as it is upon Aristotelian logic, would

incline our minds to interpret *The Urantia Book* with an A or not-A viewpoint. When first coming into contact with a book purporting to be the Fifth Epochal Revelation, for those born into our Western habits of thinking, it is almost impossible not to immediately confront ourselves with the question of whether or not we are dealing with absolute truth.

The book makes this statement: "In olden times the fetish word of authority was a fear-inspiring doctrine, the most terrible of all tyrants which enslave men. A doctrinal fetish will lead mortal man to betray himself into the clutches of bigotry, fanaticism, superstition, intolerance, and the most atrocious of barbarous cruelties. Modern respect for wisdom and truth is but the recent escape from the fetish-making tendency up to the higher levels of thinking and reasoning. Concerning the accumulated fetish writings which various religionists hold as sacred books, it is not only believed that what is in the book is true, but also that every truth is contained in the book. If one of these sacred books happens to speak of the earth as being flat, then, for long generations, otherwise sane men and women will refuse to accept positive evidence that the planet is round." (969) Surely these words contain a warning about how we should look upon and interpret *The Urantia Book*? (fetish: inanimate object irrationally worshipped, Oxford dictionary)

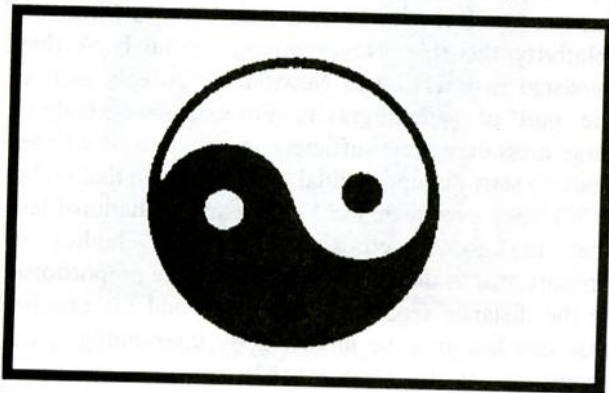
Within the next decade, our habits of thinking about what is wholly true and what is wholly false will undergo a forced change. With that change, difficulties that have presently arisen because of differences in the way some readers and the Revelators view truth in *The Urantia Book* will evaporate into nothingness—along with the sound of one hand clapping.

Reference: Kosko, B. (1993) "Fuzzy Thinking" (HarperCollins, London, 1994)

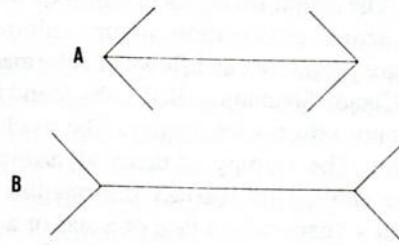
On Fuzzy Thinking.

[note: The prior article, "Aristotle, Fuzzy Logic, and The Urantia Book" introduces the reader to Fuzzy Logic.]

In the previous issue of Innerface we reviewed the work of David Bohm on quantum theory. Bohm



A is shorter than B? Answer: Yes or No or Maybe



Try it and see!

believed that the Schrodinger wave function really determines a quantum potential representing active information which gives form to the motion of particles moving under their own energy. Physicist John Bell is the well known originator of Bell's theorem, a 'break-through' step that provided the basis for empirical testing of non-local effects at the quantum level. Bell stated that Bohm's papers (1952) were a revelation that helped him grasp the implications of quantum theory. In a recent review, David Albert said that Bohm's theory accounts for all the unfathomable-looking behaviors of electrons every bit as well as the Copenhagen interpretation (Bohr). Moreover it is free of any of the metaphysical perplexities associated with quantum-mechanical superposition.

How can a wave supply the information to guide particle behavior? *The Urantia Book* has these words: "The interelectronic space of an atom is not empty. Throughout an atom this interelectronic space is activated by wavelike manifestations which are perfectly synchronized with electronic velocity and ultimatic revolutions." (478) A strange statement indeed compared with 1935 thinking about Schrodinger's wave function.

It is interesting that Bart Kosko, whose expertise is in computer logic, mathematics and electrical engineering should come up with this comment: "The universe is information. Something like a computer chip. I think that someday we will find that energy connects with information. There may be information waves or particles or *infotons*. Information may be quantized in smart little infinitesimal particles like Leibniz's monads." Kosko's book has a very extensive bibliography but no mention anywhere of Bohm. Presumably he came to his conclusions independently of Bohm. Impressed by the power of mathematics to reveal and predict reality, in the final chapter of his

book Kosko writes:

The more we look at nature, the more information we see in the structure. The structure is the information. Our DNA is just genetic information made flesh. The neural networks in our brain and spine code and store information. Our cultures and economies are just stores and flows of information. In the 1940's Claude Shannon at Bell Labs found the first "laws" of pure information theory. The world seems to obey them. The entropy of thermodynamics is the same as the entropy of abstract information theory. What we call a "pattern"—a face or a star or a galactic cluster—tends to be a local point of maximum information or minimum entropy. In 1957 physicist E.T. Jaynes at Stanford showed that the basic math law of statistical quantum mechanics (the Gibbs probability distribution) follows from maximizing the entropy of information theory.

What we seem to be glimpsing is information. Now fuzzy logic, fuzzy maths, fuzzy physics and fuzzy machine intelligence are taking us further. We can replace probability and relative frequency with the subethood of fuzzy logic. We can turn loose ever bigger neural nets and computers and linked neuro-computer networks to see more math and find more structure and gain more information. And this will be only the start.

That raises the next question: Is God information? That may not be as strange as it sounds. We have made Him just about everything else: love, power, mind, energy, nature, maximum probability. But I don't think God as information is right or even makes sense. The universe is information. The physical structure is information. The universe is to God as the eye is to sight.

I think God has to do with how science tracks math when it does not have to. There I think we recognize Something we cannot define. We recognize a blueprint. Or Blueprint. With each new math insight and each new fuzzy fact we estimate a blueprint or math structure. This may all change in the next second. The science bush may stop tracking the math bush. Fact may stop tracking logic. But suppose it does not. Suppose science keeps tracking math for hundreds or thousands or millions or billions of years. The blueprint hypothesis will grow in fuzzy truth. The Pythagorean theorem and all the other theorems will still give orders and we will still take them. The sense of shadow, the glimpses, the pattern we recognize but cannot define, will pass into clear view: There may be no God but the Mathmaker, and Science is His Prophet.

God is He who wrote the math. Or She who wrote the math. Or It that wrote the math. or the Nothingness that wrote the math. The Mathmaker.

Reference: Kosko, B. (1993) "Fuzzy Thinking" (HarperCollins, London)

Logic is valid in the material world, and mathematics is reliable when limited in its application to physical things; but neither is to be regarded as wholly dependable or infallible when applied to life problems. Life embraces phenomena which are not wholly material. Arithmetic says that, if one man could shear a sheep in ten minutes, ten men could shear it in one minute. That is sound mathematics, but it is not true, for the ten men could not so do it; they would get in one another's way so badly that the work would be greatly delayed. (1476)

COSMIC REFLECTIONS
CO2WIC REFLECTION2

Gravity, Newton, Einstein, and The Urantia Book.

"The increase of mass in matter is equal to the increase of energy divided by the square of the velocity of light. In a dynamic sense the work which resting matter can perform is equal to the energy expended in bringing its parts together from Paradise minus the resistance of the forces overcome in transit and the attraction exerted by the parts of matter on one another." (474)

Regardless of whether one labels the above statement from *The Urantia Book* as metaphysical nonsense, it remains a fact that, in 1935, few human beings were equipped with the necessary knowledge to write such "nonsense." The statement indicates that the authors (the Revelators) were familiar with Einstein's relativity theories. Nevertheless, in the book they persisted in referring to Newtonian concepts such as the "pull" of material gravity. For example—a body of large mass may exert sufficient gravity pull on a lesser body to start disruptive tidal convulsions in that body. (170) They even state the Newtonian gravitational law that the force acting between two bodies is proportional to their masses and inversely proportional to the distance separating them, but add the proviso that this law may be modified by intervening space forces such as anti-gravity. (482)

Does this mean that the Revelators are refuting Einstein's proposal that the supposed attractive force of gravity merely reflects the curvature of space-time and that inertia and gravity are indistinguishable? Or are the Revelators doing what so many physicists do in practice—using the Newtonian concepts as an adequate simplification in many instances, such as, for example, for placing a satellite in orbit around the earth?

The Urania Book states that energy, as light or in other forms, traverses space in straight lines except as acted upon by superior forces and in obedience to the linear gravity pull inherent in material mass. (461) It also states that gravity-responding energy is the ancestor of all universe matter (470), and that no measurable linear gravity pull is exerted on free, unattached, and uncharged electronic energy particles. (476) Would that last statement indicate that a neutron star would exert no gravitational effects?

A recently publicized theory appears to be consistent with all of these statements in the book, as well as being in line with Newtonian gravitational concepts rather than the curved space-time postulates of Einstein's relativity. It proposes that there is no such thing as mass, only electric charge and energy which together create the illusion of mass. The physical universe is made up of massless electric charges immersed in a vast, energetic, all-pervasive electromagnetic field. The interaction of those charges and the electromagnetic field creates the appearance of mass.

Modern physics recognizes an electromagnetic force and a weak force involved in radioactive decay. These two forces have been shown to be manifestations of a single force, appropriately named the electroweak force. The hope of modern physics is that a way will be found to unite this force with the strong force that holds atomic nuclei together to give a unified field theory. Until now, gravity has resisted all attempts at unification with these other

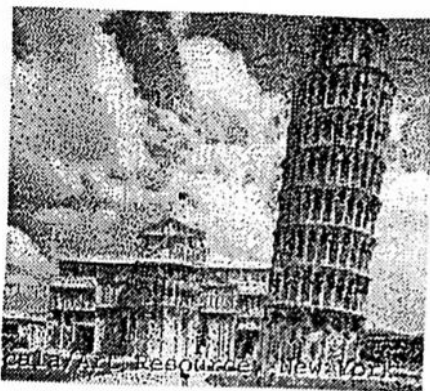
fundamental forces. If the new view is correct, gravity would not need to be separately unified. Just as mass would arise from the electromagnetic force, so would gravity.

Early in this century, Lorentz, Poincare, and Abraham suggested that inertial mass might arise from an effect, the electrostatic self-energy, through the equation $E=mc^2$. However, the theoretical mass derived from their equation was orders of magnitude larger than observed mass. The more recent ideas suggest inertia is a property arising out of an all-pervasive electromagnetic field called the zero-point field (ZPF). This field is held to exist in a vacuum—even at the temperature of absolute zero. It can be thought of as a sea of electromagnetic radiation that is both uniform and isotropic (the same in all directions). It differs from the cosmic microwave background radiation in that the energy of ZPF rises sharply with the frequency of the radiation—in fact, is proportional to the cube of the frequency. There are two differing views as to its origin, one via orthodox concepts of quantum theory, the other from an updated concept termed stochastic electrodynamics proposed earlier by Einstein, Planck, Nernst, Hopf, and Stern.

In contrast to the 19th century concept of "ether," ZPF has the property of being Lorentz invariant and is only detectable when a body is accelerated through space. In the mid 70's, Paul Davies and William Unruh showed that, as a moving observer accelerates through the ZPF, the ZPF spectrum becomes distorted. A recent analysis showed that when an electromagnetically interacting particle is accelerated through the ZPF, a force is exerted on the charge in direct proportion to the acceleration but acts in the opposite direction. In other words, the charge experiences an electromagnetic force as resistance to acceleration. This resistance is interpreted as the very inertia that Newton regarded as an innate property of matter. Hence, in Newton's second law, $F=ma$, the term 'm' simply becomes the coupling constant between acceleration and an external electromagnetic force. Thus Newton's second law can be derived from the laws of electrodynamics provided one assumes an underlying zero-point field.

From this new viewpoint what we formerly called mass, having the property of inertia, comes about because an electromagnetic force acts upon the charge lurking inside matter. A more parsimonious view is not even that there is charge lurking inside matter, but that there is only charge. The presence of charge and its interaction with ZPF creates the forces we all experience and attribute to the existence of matter, even for an apparently electrically neutral particle such as the neutron which, at a deeper level, consists of charged quarks.

According to Einstein, inertia and gravitational mass are indistinguishable. If so, then ZPF, which



Galileo's Gravity-testing Pisa Parlor

gives rise to inertia, must in some way generate gravity. This idea was proposed in 1968 by Russian physicist, Andrei Sakharov, and developed by another Russian, H.E. Puthoff within the framework of stochastic electrodynamics. The underlying principle is remarkably intuitive. If a charged particle is subjected to ZPF interactions, it will be forced to fluctuate in response to the random jostlings of the electromagnetic waves of the ZPF (is this the Lamb effect?). Fluctuating charge emits an electromagnetic radiation field, the result of this being that all charges in the universe must emit secondary electromagnetic fields in response to their interactions with the primary field, the ZPF.

The secondary electromagnetic fields turn out to have a remarkable property. Between any two particles they give rise to an attractive force, regardless of whether the charges are positive or negative. This attractive force may be identified with gravity. The fluctuations are relativistic, moving at, or close to, the speed of light. The energy associated with them is interpreted as the energy equivalent of gravitational rest mass. Gravitational mass is not the source of gravitation, its source is the driven motion of a charge, not the attractive power of mass. To interpret Einstein's equation, $E = mc^2$, we need to say that mass is not equivalent to energy, mass is energy.

ZPF is treated as real, not virtual. The real force seen in the Casimir force between two parallel plates would be attributable to it. In quantum theory the Casimir force is attributed to virtual particles. In the

Sakharov—Puthoff model, the ZPF does not itself gravitate. The gravitational force results from perturbations of the ZPF, and the uniform ZPF does not contribute to the curving of the universe.

How can this new theory of Newtonian-like gravity be reconciled with 20th century measurements of effects predicted only from general relativity? Sakharov suggested accounting for the effects of general relativity by introducing the concept of an elasticity of space analogous to the curvature of space-time. (Urantia Book, p.123: "*we do not know the actual mechanism of space respiration; we merely observe that all space alternately contracts and expands.*")

It is early days yet and time only will tell whether these ideas will be verified. Its authors submit that a theory that offers new insights with such elegance and simplicity is a compelling approach to reality. A similar argument was put forward by Paul Dirac when he proposed to account for a solution involving the negative root of a quadratic equation by attributing it to antimatter. At the time, many thought that Dirac's proposal was quite preposterous. Nowadays, antimatter is manufactured as matter of course. No doubt the progress of these ideas will be followed by Urantia Book readers and compared with what appeared to be a somewhat naive treatment of gravity, relativity, and quantum theory in the Urantia Papers.

Reference: B. Haisch, A. Rueda, and H.E. Puthoff. (1994) *The Sciences*, 34, 26-31 (New York Academy of Sciences, N.Y.)

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