



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

On Copyright and Plagiarism.

At the conclusion of the Foreword to *The Urantia Book*, the Revelators tell us that more than 1000 of the highest human concepts have been collated in producing the first part of the book and, for Part 4, thought gems and superior concepts have been assembled from more than 2000 human beings who lived on Earth from the days of Jesus down to the time of editing these revelations—more correctly restatements.

Nowhere in the book have these humans been named in order to acknowledge their contributions and, in many instances, what are known to have been quotations derived directly from human sources have not been identified with quotation marks. The author of a recently published critique of *The Urantia Book* names this as *shameless plagiarism*.

An interesting article on the pro's and con's of private and public ownership of knowledge has appeared on the Internet Information Highway and has been summarised by *Urantia Book* reader, Dr Matt Neibaur. The Internet article was entitled *Speculations on the History of Ownership of Oral, Typographic, and Electronic Knowledge* by Doug Brent who suggests as follows:

Ownership of Oral Knowledge

In primary oral culture that has never known literacy, knowledge is not owned; rather it is performed. Without print, knowledge must be stored, not as an abstract set of ideas, but as a set of concepts embedded deeply in the language and culture of the people. Strictly procedural knowledge—how to build a boat, how to fight a war—is passed on directly from craftsman to craftsman through the process of apprenticeship. However, the more abstract knowledge of the tribe—not just their history but also their values, their concepts of justice and social order—is contained

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in the epic formula, recurrent themes, and mythic patterns and plots out of which the story-tellers of the tribe weave their narratives. This knowledge exists in a pre-existing network of interconnected, extraordinarily complex, and non-linear ways, all of which is known, at least in outline, to the storyteller's audience even before he begins. In such cultures, knowledge was held as common property, entrusted to tellers of tales who were maintained by the tribe, not for their individual contribution to the growth of ideas, but for their ongoing duty to keep knowledge alive by performing it. Thus there was no such thing as ownership of

knowledge—or, more aptly, there was no such thing as private ownership of knowledge.

Ownership of Knowledge in Literate Societies

With the introduction of writing, all of this changed. According to Ong (1982) and his anthropological school of communications history, writing had a number of profound effects, including the development of the self-conscious, rational self and the power of abstraction, and, as a further consequence, the entire Western system of logic. It also had the important result of separating text from performer and knowledge from knower, thereby creating a fossilized text that can achieve an independent existence quite apart from its knower.

If knowledge can be separated from knower, it can be owned by individuals. In an oral society, plagiarism is unthinkable, simply because the survival of the culture depends on plagiarism. As the manuscript society came into existence, it became common to attribute written tales to their sources in prior texts. Appropriating another's ideas, once an essential means of keeping the ideas alive, now became the act of a plagiarist, a plunderer of what rightly belonged to another. Typography made the written word a commodity. The communal oral world split into privately claimed freeholdings.

Copyright was originally created more as a means of breaking the stationer's monopoly on texts rather than as a means of protecting authors' rights. But by the 18th century, copyright had become firmly established, not only as a means to ensure that an author would be paid for his ideas, but also to ensure that he would have the right to protect integrity by granting him the sole authority to correct, amend, or retract them.

The modern abhorrence of plagiarism does not mean that one should not use another's ideas. The practice of bringing ideas forward and integrating

The kingdom of heaven in the hearts of men will create religious unity (not necessarily uniformity) because any and all religious groups composed of such religious believers will be free from all notions of ecclesiastical authority—religious sovereignty. (1487)

The moment you lose sight of the spirit sovereignty of God the Father, some one religion will begin to assert its superiority over other religions; and then, instead of peace on earth and goodwill among men, there will start dissensions, recriminations, even religious wars, at least wars among religionists. (1487)

them into later works is fundamental to the modern belief that knowledge is cumulative and improvable. However, a crucial difference from the oral tradition is that, as knowledge diffuses through knowledge networks of research disciplines, it leaves behind the tracks of its passage in the form of citations.

The effects of printed text is somewhat paradoxical. On the one hand, the explicit pointers to earlier text reinforce the fact that knowledge is built communally through the interaction of thousands of individuals. On the other hand, the fact that each idea can, theoretically, be labelled with the name of its contributor has created the romantic myth of the individual creative genius—in the arts as the figure of the brooding artist creating in solitude, in the sciences as the individual inventor, the Nobel prize winner who sees what no one has seen before.

It has long been observed that the myth of the individual discoverer of knowledge is exactly that—a myth. The sociologists of science support the conception of knowledge as communal rather than as individual. For example, Diana Crane's seminal study, *Invisible Colleges* (1972), documents the extent to which ideas are nourished and developed through networks of interaction among scientists who may come from many different disciplines but who form a powerful social group around a common problem. Yet the print technology through which this communally developed knowledge is typically delivered continually enforces the opposite message—that knowledge is individually discovered and owned.

Commentary

Matt Neibaur adds as follows:

"I believe that the Revelators adhered to the view of community knowledge-ownership. Knowledge that benefits the community—mankind—is to be owned by the community for the common good. Jesus, in

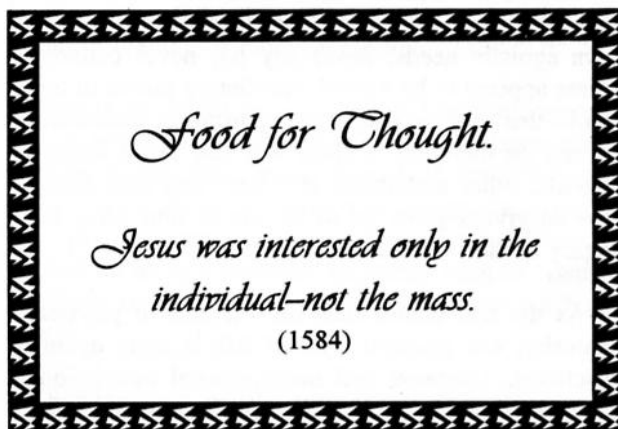
discussing wealth, made the following recommendations:

"If you chance to secure wealth by flights of genius, if your riches are derived from rewards of inventive endowment, do not lay claim to an unfair portion of such rewards. The genius owes something to both his ancestors and his progeny; likewise is he under obligation to the race, nation, and circumstances of his inventive discoveries; he should also remember that it was as man among men that he labored and wrought out his inventions." (1464)

"If the inventive genius owes something to the society in which such creativity was nurtured, would the same not hold for the inventor of text? Clearly, the Revelators of *The Urantia Book* take a more enlightened view of individual ownership of intellectual property than does modern society. It is indeed ironic that the copyright mores could be ignored by them, yet fanatically endorsed by the community to which the book was given. This makes me doubt the authenticity of a mandate to copyright the *Urantia Book* text. A radical reform of our ideas of individual ownership of text will certainly come to pass as the electronic media invades our lives. Perhaps then, we will begin to heed the advice of Jesus on ownership and reward as we advance in the direction of light and life."

Answers from *The Urantia Book*.

- Q. What is will?
- Ans. Will is the deliberate choice of a self-conscious being.
- Q. What is the will of God?
- Ans. The will of God is the way of God, partnership with the choice of God.



*Real families
are built upon
tolerance, patience, and
forgiveness.*

Michael of Nebadon

- Q. How can we know what the choice of God would be?
- Ans. Ask ourselves, "What would Jesus have done?"
- Q. And how can we know what Jesus would have done?
- Ans. One of the most important things in human living is...to know the religious life of Jesus and how he lived it. (2090)
- Q. How can we do the will of God?
- Ans. We do the will of God by becoming more and more God-like.
- Q. What is God-like?
- Ans. Like Jesus.
- Q. If we do all this, what then?
- Ans. We will discover that all men and women are our brothers and sisters.
- Q. What will that mean?
- Ans. We will enjoy knowing them—knowing their problems and by doing so, getting to understand them.
- Q. Why would we want to do that?
- Ans. In doing so we will learn to love them.
- Q. And?
- Ans. We will begin to enjoy the supreme experience of living.

Reference: *The Urantia Book*, Paper 130, Section 2.

God-Playing

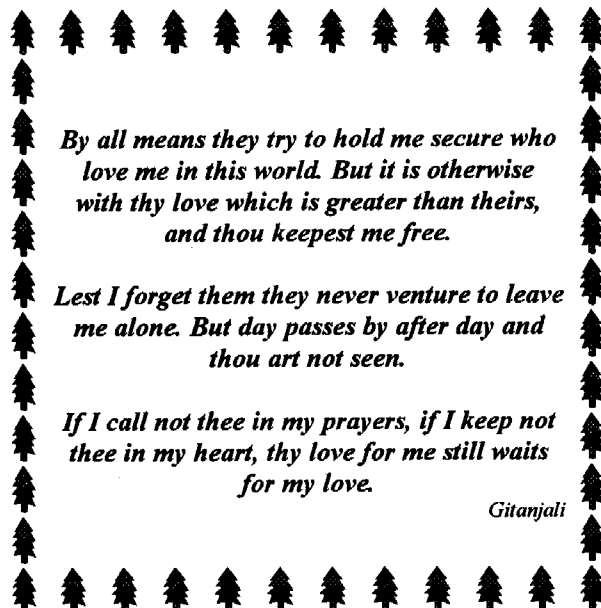
Condensed from the *Kingdom of Self*.
by Earl Jabay. (Logos International, New Jersey)

Earl Jabay is an ordained minister with an extensive grounding in modern psychiatry. While working on the staff of the Neuro-Psychiatric Institute at Princeton, he had a personal revelation that, for all of his life, he had been god-playing. He discovered that there is a vast difference between a petition to God for help and the "You take over" prayer that signals our submission to the will of God. In the first, God is asked to be the co-pilot, in the second, the Pilot.

When he began his work as a mental hospital chaplain, Jabay was accustomed to commence the day with a prayer that God would go with him and help him to do his work. In doing so, he was the occupant of the throne in the "Kingdom of Self." Contact with members of Alcoholics Anonymous changed all that. He learned from them how to place God on the throne, to ask God to take charge of his life. Now he understands that when he enters the hospital ward, God is already there. His learning experiences are detailed in his book, and are excerpted or summarized in what follows.

The authority issue—we might call it the "god-problem"—is a core problem in human life. It is almost insultingly simple. It seeks to answer the question: "Who is Number One?" The candidates are only two, God or self. For much of our lives, all humans nominate themselves.

Right from the very beginning, most of the precious time in our lives is devoted to the resolution



By all means they try to hold me secure who love me in this world. But it is otherwise with thy love which is greater than theirs, and thou keepest me free.

Lest I forget them they never venture to leave me alone. But day passes by after day and thou art not seen.

If I call not thee in my prayers, if I keep not thee in my heart, thy love for me still waits for my love.

Gitanjali

of the difficult yet fascinating problem of who is in charge. The first thing a baby does when it comes into the world is to seek to establish its kingdom. It is hungry. It cries. A weary mother hears, understands, and responds. At a later time, the baby will feel uncomfortable in its nether regions. Again it will cry. Each time the king cries, it is obeyed. Roughly nine times each day, it cries to be fed or have its diaper changed. Each occasion tests the authority of its kingdom. And after each victory, the king will conclude there is none in the world higher than itself. The king is number one. The king is a god.

Not too far into the future, its authority will be challenged. Mostly the problem is mother. Over matters such as toilet training. The king is furious about lack of consultation. The enemies are recognized. The battle begins. Every parent can testify to the unbelievable strength and persistence of a young child's will. The tragedy is, of course, that when a young child wins the contest of wills, it loses. The battle continues throughout childhood into adulthood, with individuals all the time learning increasingly sophisticated strategies to get their own way. A great deal of time is spent on learning divide and conquer tactics. When firstly parents and later, other authorities, are divided, it is possible to go through the breach. The holy crusade graduates from the home to the schools, the streets, and the community.

Are there instances when an individual relates to authority with a healthy obedience? There are many but they are episodic. The security and peace experienced under authority is short lived. The demands of being king incessantly drive a person back to a conflict with any and all outside authority—parents, teachers, employers, police, God.

There is a diabolical way to make this maturation period peaceful. Peace will prevail if the authorities default in the use of their authority. A pseudo-tranquillity will reign if those authorities, out of their own egoistic needs, never say no, never counter. There appears to be a cruel, retributive justice in this world that ordains that if the appropriate authorities do not do their job, a child will rise up to destroy parents, other authorities if it can, and then itself. The survivors grow up to be adults who carry the legacy of their childhood.

As the self comes into the fullness of physical maturity, our godlike style of life is more openly disclosed. Unstated and unrecognized convictions take deep root. Among these are a conviction of

power, the desire to be always right, to be the sole source of ultimate truth, to evade the reality of the present, to have messianic aspirations, to be the law, to be perfect. Other symptoms are: Desire to be leader, winner, special, chosen, superior, see your name/photo in print, expectations of gratitude from others, being judgmental, grabbing the center-stage, fear of losing, harboring resentment, self-pity, victimhood, lust for power, fault-finding, condescension, perfectionism, retaliation, and many others. A problem with being god is that we have to be so busy, to carry so much responsibility. It is a staggering task to run the universe. No wonder that Jesus said, "Blessed are the humble."

One of the saddest and most painful expressions of adult egoism is loneliness. We egoists often tend to isolate ourselves from our fellows. The reason for this is simple. We can't stand people and they can't stand us. We may recede from people and, enthroned and alone, we begin to suspect that people are against us. Baffled and weary, we may choose to leave the battlefield to live by and unto ourselves, excusing our behavior by labelling it as self-reliance or independence. Life at the center of one's world is the loneliest spot in the universe. It is a place that God alone should occupy. Displacing God and taking his place, we egoists are liable to withdraw from people. We are too proud to ask favors in case of refusal, to ask questions because someone might laugh, or to express an opinion in case someone might criticize. It surely is lonely at the top.

Though we might be kings in our kingdom, we are all in bondage to something. Our bondages may include anger, fear, guilt, hatred of authority, an attraction to violence, or to material goods, words, sex, drugs, even ideologies. Or we may become hooked on being a protester no matter what the issue. All these are expressions of our egoism, our bondage to self.

Bondage may be of a type from which, try as we

may, we are unable to break free. It is like being seated on a toboggan in the snow at the top of a hill. A little push and we start to slide. We are free, out of bondage. But when we want to stop there are no brakes or steering apparatus. And so, though wanting to stop, we are unable to do so, we are trapped in our bondage. This is the problem of the addict, those unfortunates enslaved by alcohol, tobacco, drugs, etc. But it also the problem of all humanity, for we all commence our lives plagued with the universal addiction of nominating ourselves as being the focal point of the kingdom of self.

Earl Jabay found release after many distressing failures in his ministry, failures that brought him to the point of wanting to resign as a chaplain and get into something more useful. His release came through association with recovering alcoholics from Alcoholics Anonymous. He had even written a paper against these people before he discovered that they were what he himself needed. On meeting them, he found they were new people. Their whole style of life was changed. They were quiet inside—something they called serenity. They were also joyful. Best of all, they were free, free from their alcoholic prisons and a number of other prisons besides.

God's Grandeur

*The world is charged with the grandeur of God.
It will flame out, like flaming from shale soil,
It gathers to a greatness, like the ooze of oil
Pushed. Why do men then now not reck his rod?
Generations have trod, have trod, have trod,
And all is seared with trade; bleared, smeared
with toil,
And wears man's smudge and shares man's smell
the soil
It's bare now, nor can foot feel, being shod.
And all for this, nature is never spent;
There lives the dearest freshness, deep down
things,
And though the last lights off the black West went,
Oh, morning, at the brown brink eastward, springs—
Because the Holy Ghost over the bent
World broods with warm breast and with ah!
bright wings.*

Gerard Manley Hopkins

At first he felt anger and jealousy towards them. As an ordained minister with qualifications in psychiatry, he felt he had faithfully served God in seeking to serve those whom he felt should benefit from his expertise. The secret turned out to be that these alcoholics knew God in a way quite foreign to himself. They spoke of God as a higher power, a person who was alive, as one to whom they had chosen to give authority over their lives. They had resigned from the throne of self, and had granted God his kingship. Quite suddenly, Jabay realized his folly. He had plenty of religion and plenty of psychiatry, but he had no real God. Though not an alcoholic, he buried his pride and asked his newly found friends to help him through the twelve steps of

their program, because he knew that he, too, had an addiction. These steps are:

- 1. Admission of their powerlessness over alcohol—that their lives had become unmanageable.
- 2. To believe that a power greater than themselves could restore them to sanity.
- 3. To turn their will and their lives over to the care of God.
- 4. To make a searching and fearless moral inventory of themselves.
- 5. To admit to God, to themselves, and to another human the exact nature of their wrongs.
- 6. To be ready and willing to have God remove all these defects of character.
- 7. To humbly ask God to remove their shortcomings.
- 8. To make a list of all the persons they had harmed, and to be willing to make amends to them all.
- 9. To make direct amends to such people wherever possible, except when to do so would injure them or others.
- 10. To continue to take personal inventory, and when wrong to promptly admit it.
- 11. Through prayer and meditation to seek to improve their conscious contact with God as they understand Him, praying only for knowledge of His will for them, and the power to carry that out.
- 12. Having had a spiritual awakening as a result of these steps, to try to carry this message to alcoholics and to practice these principles in all their affairs.

When God's will is your law, you are noble slave subjects; but when you believe in the new gospel of divine sonship, my Father's will becomes your will, and you are elevated to the high position of the free children of God, liberated sons of the kingdom.

(1588)

Jabay says that these steps work, not only with alcoholics, but with mixed-up ministers. God became real to him for the first time in his life, and so, ten years after his ordination, he vacated the throne and stumbled into the kingdom.

The basic problem with man, Jabay says, is not that he is an immature child but rather that he is an egocentric godplayer. Granted that we may feel the opposite—small, weak, and victimized—but we act like gods. We can prove this to ourselves by remembering how we have judged and punished others, or how we have tried to do the work of two, or how we have bucked authority. Man, in relation to God, tries to displace Him, compete with him, forget Him, even destroy Him. Each of us wants to be ultimate. (Oxford Dictionary: **ultimate**, (a), beyond which no other exists).

To explain our dilemma, the most constant themes in the psychological literature are the evil effects of the parents upon their children and the evil effect of institutions upon adults. If parents and institutions can be faulted for one's problems, the individual is relieved of all responsibility. Jabay says he can no longer buy that, and that he has gone back to the ancient answer—his own wilfulness. This is an accurate description for many of our emotional illnesses. We are not weak people as far as our wills are concerned. Our feelings may be raw, our minds may be playing strange tricks on us, and our nervous systems may be overloaded, but our wills are as strong as iron and set in the firm concrete of our egocentric lives. To this, there is but one answer—vacate your throne and yield your will and the throne irreversibly and irrevocably to its only legitimate claimant, the living God.

Although apparently signalling capitulation, a cry for divine help is inappropriate. Almost invariably, it is a disguised plea to aid us to regain the driver's seat, to reclaim the throne. That is not the prayer that God is waiting to hear. What He awaits is our word of obedient surrender. Strange though it may seem, therein there is true freedom and liberty.

Jesus never prayed as a religious duty. To him, prayer was a transcendental surrender of will.

(2088)

Remarks on Suicide

Robert B Walker, Soquel, CA

The Urantia Book gives humans hope for personal salvation through faith in God. In doing so, it provides many reasons for humans not to commit suicide—reasons that are directly related to explanations of faith itself. Putting aside the moral issue of whether suicide is a faithless act, it may be instructive to enumerate reasons supplied in the book for not ending this earthly life.

From our temporal viewpoint, the book teaches us to relate our 'so short lives' from a projected Paradise perspective. We learn to envisage destinies and long range goals that require thousands of years to complete. Setbacks experienced in frenzied temporal life are not of such significance and do not have the same emotional impact for mortals who grasp this greater continuity of life.

Being privy to vast details about the actual existence of life hereafter diminishes a person's sense of cosmic isolation and uncertainty, allowing some religionists to live as though heaven were now on earth. Learning that what we do not accomplish in this life, we can achieve in the life hereafter, removes a lot of pressure from having to accomplish everything in this life. Our sometimes abortive attempts at psychological fulfilment will be righted by 'remedial' training. For example, those who did not raise a child to puberty and/or marry will have morontial experiences with the approximate emotional endowment that attends these earthly experiences. Knowledge of the gradual re-keying process of spiritual attunement through numerous morontial forms also provides us with a specific sense of place within the universe existence and progression. Seeing such an incremental process functions in the spiritual worlds underlines for mortals the oft used phrase *one step after another is the way to achieving the goal*, making it mentally comfortable for mortals to adopt this approach when dealing with different temporal goals.

To paraphrase, the book says all that is ultimately important in this life is the survival of one's soul, not the achievement of material or popular success. All else can be made up—retrieved in the life hereafter. It states that what we are becoming slowly and sincerely is the fabric which forms spiritual progress, not that we must be merit scholars or most valuable players today, nor bishops by age thirty or saints by seventy. It also says anyone who pays a modicum of attention

to his Adjuster's leading survives this life to go on to an existence not fraught with evolutionary survival-of-the-fittest, or hampered by animal fears. Yes, faith is ultimately the greatest bulwark against despair, but that even a minimal response to God can create and build into an enduring belief which experience can then turn into factual knowledge of spiritual realities also relieves spiritual pressures on mortals to find God, truth and understanding through some dramatic spiritual transformation or experience.

Jesus' life provides vivid example of how to face the vicissitudes of temporal existence with fortitude and cosmic stamina. In describing how he met setbacks in his life by facing them, the book indirectly acknowledges the difficulties with which this life is beset but simply says, "with effort, obstacles will be overcome." None of the celestial writers asserts humans cannot supplement their psyche with the vision of a more peaceful existence after death to bolster their resolve to endure this life, but just by enduring it with determination, growth and spiritual development will result and augment their lives, making temporal existence here meaningful, and hence more satisfying, if not enjoyable.

Archaeology and The Urantia Book

There are more than one hundred and sixty items of archaeological interest—place names or information about places and people—contained in Part 4 of *The Urantia Book*. The revelators state that their mandate required that they use human sources whenever possible. For Part 4 more than 2000 such sources have been used. (1343) It follows that we may be able to discover many of the sources of archaeological information in Part 4 that pertain to first century Palestine. Over the years, a number of Urantia Book readers have taken an interest in locating these sources.

For many readers, the spiritual and cosmic truths of *The Urantia Book* are self-authenticating, and the factuality of its materialistic content is of little consequence. But there are others, in particular new or casual readers, who have yet to attain the necessary degree of confidence in the ministry of the Spirit of Truth enabling them to embrace, in faith, the spiritual and cosmological truths revealed in the book. It is for these people that attention needs to be drawn to the predictive science component of *The Urantia Book*, as well as the wealth of its archeological and historical

content that, at the very least, required an enormous input of time and effort to extract and verify from obscure and difficult-to-obtain source materials.

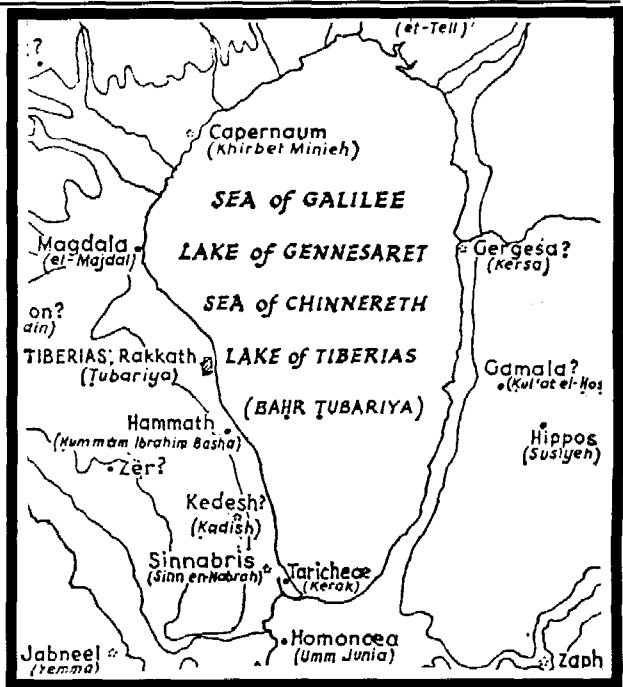
Assertions have been made that the text of *The Urantia Book* was channeled, perhaps by Wilfred Kellogg, and later edited by Dr. Sadler. Our current research shows that the authors (hypothetical or otherwise) were extremely well versed in the history and content of the Old Testament, had a profound knowledge of the archaeology of first century and Old Testament Palestine, a first hand knowledge of the terrain of parts of Galilee, and a detailed geographical, sociological, and historical knowledge of both the Roman Empire and Palestine itself.

Rather than being the nocturnal meanderings of an unconscious human mind, we perceive Part 4 of *The Urantia Book* as being an unsurpassed exposition of historical, ideological, and spiritual realities associated with the life of Jesus, the description of which is commensurate with the highest levels of scholarship embracing a wide diversity of fields of knowledge.

The quality of the textual material of Part 4 is surely indicative of the dedication and sincerity of its authors. Curiously though, it appears to describe its own version of the life and teachings of Jesus as bequeathing to the universe an inspirational and idealistic inheritance suitable for the spiritual guidance and moral instruction of all ages on all worlds, then goes on to add that the teachings it describes stand apart from all religions and, as such, are the living hope of every one of them. (1583) Coming from human authors, such statements would usually be taken as a sign of deranged and deluded minds.

In future issues of Innerface, we will provide an index of archaeological material and also articles on items of interest concerning Part 4 of *The Urantia Book*. Perhaps these will aid hesitant readers to decide for themselves whether Part 4 could have been the product of unconscious, deranged, or insincere human minds.

The article that follows concerns the location of Tarichea on the Sea of Galilee. To gather the necessary information about places such as Tarichea, human authors could not have been unaware that the exact location of Tarichea was a matter of considerable dispute. Hence such authors would have had nothing to gain and a lot to lose by even referring to a definite location, which is what they have done. From the available evidence, we think that there was



a Tarichea as identified in the book. However, over the period under consideration it is also quite possible that the name, Tarichea, became associated with more than one location on the Sea of Galilee.

Tarichea

Whereas *The Urantia Book* places Tarichea at a location where the Jordan River flows out from the Sea of Galilee (p.1561), many authorities now assert that Tarichea was the Greco-Roman name for Magdala, a town that was situated about 4 miles to the north of Tiberias and, reputedly, the hometown of Mary Magdalene.

Tarichea achieved notoriety during the Jewish wars with Rome in 67 A.D., a so-called naval battle that was fought there ending in a bloody massacre of the town's defenders and the selling into slavery of more than 30,000 of its former inhabitants. Almost all of the evidence bearing on the location of Tarichea in the first century derives from the writings of the Jewish-Roman historian, Josephus. Unfortunately there are inconsistencies in his account that make it difficult to reach a definitive conclusion.

Josephus was born in Palestine in 37 A.D. While still in his early twenties he became one of five of the regional commanders in Palestine, with authority assigned to him in Galilee. However his position there as Governor was disputed by the citizens of many of its towns and it was only through considerable cunning

and daring, that he finally gained acceptance. However his triumph was short-lived as he soon became engaged in the disastrous defence of Jotapata against the Roman forces under Vespasian who had been sent by Nero to quell an outbreak of rebellion in many Jewish cities.

According to Josephus, the siege at Jotapata was an heroic affair lasting about five weeks that culminated in the sacking of the town and the capture of Josephus under circumstances that brought him no credit with his own countrymen. But, above all, Josephus was a survivor, and not averse to changing sides out of perceived necessity. With typical cunning he turned Jewish prophet and managed to inveigle himself into the good graces of Vespasian, reputedly by prophesying that Vespasian would eventually become emperor of Rome—which he duly did in 69 A.D. Later, Josephus moved to Rome, became a Roman citizen and died there sometime after A.D. 100. Following the Jotapata seige, Vespasian, with his forces, retired to Caesarea-Philippi, the seat of King Agrippa. Whilst there, new outbreaks of rebellion arose in cities such as Tiberias, Tarichea, and Gamala.

Having rested his troops at Caesarea-Philippi, Vespasian decided to move against the rebels at Tiberias and nearby Tarichea. From Josephus' account in *The Jewish War*, we read: "So he (Vespasian) sent his son Titus to Caesarea (Maritima) to bring the forces still there to Scythopolis—the biggest city of the Decapolis, not far from Tiberias—where he himself met him. Advancing at the head of three legions, he encamped three and a half miles from Tiberias at a station well within view of the rebels, called Sennabris."

In this instance, the rebels were the people of Tiberias who wisely decided to capitulate when confronted with three Roman legions at the gates of their city. For the record, a legion was composed of 60 'centuries' each of 100 men headed by a *centurion*. Thus, there were around 18,000 men in Vespasian's force. In addition his son, Titus, headed a cavalry group of 600 horsemen and there was second group, headed by Trajan, of 400 horsemen.

Vespasian's next problem was with rebels at the city of Tarichea into which "an endless stream of insurgents were pouring...from Trachonitis, Gaulanitis, Hippus, and the Gadarene district....The town was, like Tiberias, at the foot of mountains, and, except where washed by the lake it had been fortified all around by Josephus." Earlier in *The Jewish War*, Josephus stated that completion of the

How to make Friends.

"Become interested in your fellows; learn how to love them and watch for the opportunity to do something for them which you are sure they want."

Jesus

fortification of Tarichea was hampered by a lack of funds. In another work, *Vita*, Josephus is reported to have said that **Tarichea was washed on both sides by the waters of the lake**. According to the weight they give to such statements, historians base their opinions about the most likely location for places such as Tarichea.

The battle for Tarichea commenced while Vespasian was still organizing the defences of his camp site. A defensive wall was being built when one of the Tarichean rebels, Jeshua by name, along with a daring band of volunteers, sallied forth from their lines to attack those building the wall. It was a gesture of defiance rather than a significant military operation and success was short-lived. Vespasian's legionaries formed ranks and counter-attacked, compelling Jeshua and his men to retreat to their own lines. When the Romans continued their pursuit, Jeshua and his followers took to their boats which they then lined up off-shore just within arrow range of the Roman forces. A ineffective dual then occurred with both sides throwing stones and arrows at one another.

While this was happening, Vespasian learned that the great bulk of the Tarichean forces had marshaled themselves on the plain before the town, whereupon he commissioned his son Titus with 600 picked cavalry to go and deal with them. Arriving there, Titus found himself grossly outnumbered and decided to ask for reinforcements. The request was granted, 2000 bowmen under Antonius Silo being sent to "seize the **hill opposite the town** and pin down the defenders **on the wall**." Trajan then appeared on the scene with his 400 cavalry. This appeared to spur Titus and his men into a hunt for glory and, without waiting for the reinforcements to achieve their goals, Titus attacked. His bold action threw the city's defenders into panic and those that could escape the fury of Titus and his cavalry beat a hasty retreat back into the city.

It appears that only a highly belligerent minority of the city's inhabitants really wanted a fight with the Romans. A fierce argument broke out in the city

within earshot of Titus and his men who then decided to take advantage of the situation by continuing their attack. Titus leapt into his saddle and, "**Riding through the water** he entered the town at the head of his men. His audacity filled the defenders with terror, and not a man stayed to offer the least resistance. Abandoning their posts, Jeshua and his supporters fled across country while the rest rushed down to the lake where they ran into the enemy advancing to meet them. Some were killed as they got into their boats, others tried to swim to those who had put out before."

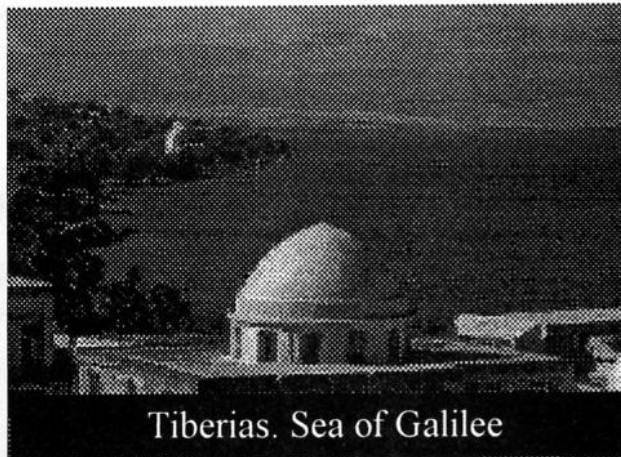
Titus mopped up the rebels in Tarichea and accepted the surrender of its residents. Josephus relates: "Those who had taken refuge on the lake, when they saw the town had fallen, put out **as far from the enemy as they could.**" On receiving news of the surrender, Vespasian entered the city to take charge. "**The next day** he (Vespasian) went down to the lake and ordered rafts to be put together for the pursuit of the fugitives. They were soon ready, as there was an abundance of wood and no lack of carpenters."

Josephus continues, "Preparations completed, Titus put on board as much of his force as he thought adequate to deal with their opponents in the boats, and the pursuit began. Thus **encircled**, the Jews could neither escape to land where the enemy was in full possession, nor fight it out on the water with any hope of success. **Their boats were small and built for piracy**, and the men on board each one were so few that they dared not come to grips with the Romans."

None got away.... "the entire lake was stained with blood and crammed with corpses...the beaches were thick with wrecks and swollen bodies." The dead, including those who perished earlier in the town totalled 6,700.

Now if the boats were small and built for piracy they were also fast and manoeuvrable relative to the heavy Roman rafts. The Romans were said to be in full possession of any escape route by land. However the Sea of Galilee is egg-shaped, about 13 miles long and 6 to 7 miles wide at its widest point. The **perimeter is not less than 30 miles.** Yet the small, fast boats could not escape even during the night! It seems as if the boats must have been trapped in some very much smaller enclosure than the Sea of Galilee.

A map published with the Penguin Classics' version of Josephus' *The Jewish Wars* places Tarichea at the southern end of the Sea of Galilee. So also does a map published in vol.1 of Hasting's *Dictionary of Christ and the Gospels*, (1906) and other maps



Tiberias. Sea of Galilee

published in George Adam Smith's *Historical Geography of the Holy Land*. (1894) from The Palestine Exploration Survey. The latter map is interesting as it shows **Tarichea as situated on a peninsular** or perhaps a breakwater that protrudes into the Sea of Galilee to form a **small sheltered bay**. The Jordan is shown as flowing out from this bay.

Without too much imagination it is possible to construct a possible site for Tarichea on or at the start of a peninsular/breakwater that would enclose a portion of the Sea of Galilee, thereby matching the description of the disastrous naval battle of Tarichea. To match the description to the Magdala site is more difficult.

A site where the Jordan leaves the Sea of Galilee known as Kerak is a possible site for Tarichea. It was said to be located on a peninsular and is the only position on the coast which suits Josephus' description of Tarichea being washed on more than one side by the sea.⁴

Other evidence is provided in the literature that favors the southern site. H.V. Morton³ in his book *In the Steps of the Master* states that Magdala was the site of a dyeing industry while Tarichea in the south had an industry for the salting of fish. Apparently salt from the Dead Sea was brought to a site south of Tiberias. The word "tarichea" means "pickling place." The Urantia Book states that there was a fish drying industry at Tarichea. (1566)

One of the points in favor of the northern location is that Vespasian with his combined forces came up from Scythopolis and arrived first at Tiberias. One authority, van Kasteren, holds that Vespasian could have advanced on Tiberias via the plateau rather than the coast.⁴ Josephus¹ states that Vespasian was at Caesarea-Philippi and Titus at Scythopolis before they joined forces. It was Vespasian and his forces that

went to Scythopolis. If he went via the coast road, he would have first passed Magdala, the postulated northern location for Tarichea—and risked being attacked by the hotheads. After that he would have had to pass Tiberias. As he believed his forces were inadequate for engaging the Jews at this stage, it seems likely that he would have taken the plateau road. He could have returned the same way and if so, some of the objections to the southern site disappear.⁵ Those remaining are Josephus' statement about the locations of both Tiberias and Tarichea at the foot of mountains and the archers firing from an elevated site on the walls of Tarichea.¹

There seems to be a lot of things in favor of the site at Kerak and it gets strong support⁴ by van Kesteren, Conder, Schurer, and Guthe (who switched his opinion away from the north site). Smith⁴ notes that the harbor could shelter a fleet of vessels, a statement appearing to derive from Josephus' description of events at Tarichea of which there were two separate incidents¹. The first of these was during Josephus' struggle to assume command in Galilee. He was at Tarichea when Tiberias revolted against his command. So he collected 230 boats with not more than 4 sailors in each and set off to bluff Tiberias that he had a large force with which to subdue its people. He had the fleet stand off well out into the lake so that the number of men in each could not be ascertained. Then he approached the city in on a single boat. Ten top citizens came down to bargain with him. He took them out to the main fleet, left them, came back and 50 more leading citizens unwisely came to him for consultation. He did the same with them, followed by the whole town council of 600. All these were sent off to Tarichea. It seems he then went ashore and ordered the arrest of 2000 private citizens who were also conveyed in the boats to Tarichea. That makes 2660 citizens to go on his 230 boats, plus the four already manning each boat—14 to 15 men per boat. Thus, the boats were not tiny rowing boats and would require a fair sized harbor to accommodate them all.

Given a good sized harbor with a narrow entrance and with Tarichea on a peninsular washed on two sides by the sea, Josephus' account of the subsequent inability of the boats and their occupants to escape during the night of the battle for Tarichea becomes explicable—as does Titus' second attack on the city when he jumped on his horse and “dashed through the water.” That action could have taken him behind the city wall at the commencement of the peninsular and account for his victory being so rapid and so easy.

Regardless of its exact location, the information about Tarichea is interesting. Pliny says that in his day

(52 B.C.), it gave its name to the whole of the lake and had a large population. Cassius (the lean and hungry one?) wrote about it to Cicero when he visited in 43 B.C., and it gets a mention from Strabo who says it supplied excellent pickling places. The pickled fish of Galilee was known throughout the Roman world, being sent round the Mediterranean area in barrels as well as supplying large quantities to Jerusalem during the feasts such as Passover.^{4,3}

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5. Schurer, Emil. *The History of the Jewish People in the Age of Jesus Christ*. (T & T Clark, Edinburgh) Notes to the 1973 edition state: "There is no good ground for supposing that he (Vespasian) continued his march towards the north (from Tiberias). Rather, after occupying Tiberias, he pitched his camp at Ammathus, 'between Tiberias and Tarichea,' as appears from a comparison of B.J. iv 1,3 (11) with iii 10, 1 (462). But since the warm springs of Ammathus are clearly south of Tiberias, Vespasian, after the occupation of Tiberias, must have turned towards the south. Those who place Tarichea to the north of Tiberias must do the same to Ammathus." The notes assert that the identification of Ammathus with the modern Hammam (south of Tiberias) cannot be reasonably questioned.

“YE ARE THE SALT OF THE EARTH.”

Perhaps the above account of a large fish pickling industry at the Sea of Galilee offers an explanation for the puzzling comment by Jesus, recorded in Mathew 5, 13: “*Ye are the salt of the earth: but if the salt have lost his savor, wherewith shall it be salted? It is thenceforth good for nothing, but to be cast out, and to be trodden under foot of men.*” (KJ version). Common salt is composed of the two elements, sodium and chlorine, occurring together as their salt, sodium chloride. As such its *savor* is indestructible by any means that are likely to occur in normal household circumstances. So how could it lose its savor?

Apparently the salt for the pickling industry came up from the Dead Sea area. There was a hill of salt in the south of the Dead Sea area which may have been the source, but it could also have come from salt works that used evaporated Dead Sea water. The hill of salt may have been fairly pure but the Dead Sea salt would certainly carry a swag of other elements. The

Jordan originates in limestone country, so the Dead Sea waters must contain a load of calcium as well as other metals. Because of this, salt derived from evaporation of water from this source may be such that it becomes wetted very easily if exposed to humid air (calcium chloride is highly hygroscopic). Perhaps then, it was wet salt that the fish picklers of Galilee considered to be of no further use and fit only to be trodden underfoot. [note: alternative translations of Matthew 5, 13 are *if salt should lose its strength* or *if salt loses its saltiness*.]

A LEAP OF FAITH?

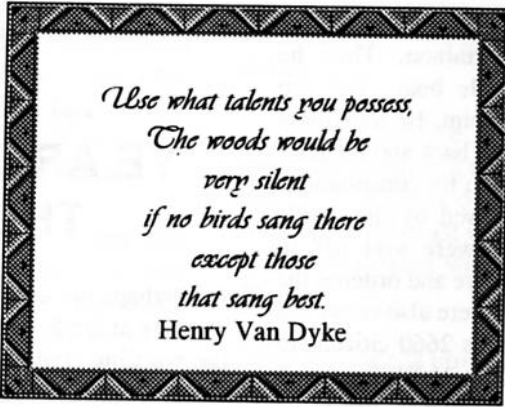
Dick Bain

How was it that at the ripe old age of 16 I found myself debating myself about the existence of God? Perhaps because no one tried to indoctrinate me with their theology—thank goodness. But I occasionally had some incentive (read crisis) that motivated me to seek some help from a higher power. It occurred to me on one of these occasions that I wasn't sure if I believed in such a being. How could I pray to someone in whom I didn't believe? After a long internal dialogue, I decided that it was more logical (and much more comforting) to believe in a created universe than in a universe that always existed. Therefore, a creator existed. Yes, I did have to justify my decision with feeble logic, nevertheless it was for me a leap of faith.

I have always tried to walk the middle path between cynicism and gullibility, but perhaps I tended to lean toward the gullibility side. As a science fiction fan, it was no problem for me to suspend my critical faculties to accept a way out scenario, such as space ships that can travel faster than the speed of light. Perhaps this is why I didn't have a problem with *The Urantia Book*. I was willing to suspend my judgment about it as I read it. I wasn't confronted with the question of whether I believed this book until I had been studying it for five years, and someone asked derisively if I actually believed "that stuff." After a bit of thought, I said I did. After five years of study, the book seemed a logical, reasonable and consistent picture of total reality, provided I was able to accept a few basic assumptions like the existence of God. This was my second leap of faith and perhaps an exercise in logic as well. This was the first time I considered the question of the book's authenticity, but not the last.

When I began writing articles about the science of the book in my now extinct journal, *Cosmic Reflections*, I began to notice what seemed to be errors in the science of the book. I was not too distressed because the authors had said that some of the science in the book would be found in error as our human science advanced. While I was not bothered by the apparent errors, my perspective on the science of the book began to change. I had started out looking for scientific discoveries that validated the science of the book, but ended up deciding that the science of the book is not totally reliable. Of course, the same can be said of our human science. Nevertheless, where human science has found laws verifiable by the scientific method and consistent in all situations, I feel such laws or ideas are correct. If such well established ideas or laws disagree with *The Urantia Book*, then I feel justified in concluding that this is one of the erroneous ideas the authors permitted in the book for whatever reason.

The shift in perspective is this: Now I do not disregard human science just because it doesn't agree with *The Urantia Book*, and I do question the science of the book when it appears to disagree with adequately verified human science. I must now use my logic and reason to make a judgment about which is correct. But then there are those times I must either suspend my judgment or provisionally accept *The Urantia Book* science concepts until more progress is made in human science.



*Use what talents you possess,
The woods would be
very silent
if no birds sang there
except those
that sang best.
Henry Van Dyke*

Are there 100 ultimatons in an electron? I have no reason to disbelieve it, so I will accept it tentatively. Was our solar system formed from material pulled out by the Angona system? Many astronomers would not accept this idea now, but the evidence shows that their theories have flaws as well, so I can provisionally accept the scenario presented in the book pending incontrovertible evidence to the contrary. Does Mercury keep the same face to the sun or not as indicated in *The Urantia Book*? Using several different methods, scientists have verified the fact that Mercury does not keep the same face to the sun, so I relegate this *Urantia Book* concept to the category of theories disproved by modern science. And so on. Unfortunately, this makes life much more complicated.

When I accepted the science concepts in the book as true, I didn't have to go through all this evaluation; life was easier and less complicated. But what of the non-science concepts of the book? Can they be exempted from the logical scrutiny I have given the science of the book?

Martin Gardner's recently published book, *The Urantia Cult*, challenges the veracity of much of *The Urantia Book*. During a conversation we had before the book was published, he claimed that its content came from Mr. Kellogg's subconscious and was heavily edited and added to by Dr. Sadler.

While I can't finally disprove this point of view, I find too much truth, beauty and goodness in *The Urantia Book* to dismiss it as the upwellings of one man's subconscious combined with the tinkering of a benign but misguided editor. I have seen reasonable comments by others that challenge some of the non-science facts and concepts in the book. I am forced into a provisional acceptance of the book. The book that seemed to offer such clear answers to the major questions of life has become in some ways an enigma to me. But even with the doubts, there is that within me that recognizes the value of this book to our planet and the great spiritual truths it contains.

While researching his book, *The Urantia Cult*, Martin Gardner invited a number of people to his home so he could interview them; I was one of those people. He seemed determined to convince me that *The Urantia Book* is a hoax, that it was not presented in its present form by celestial beings to a group in Chicago. But he was unable to convince me that the book is not at least in part a revelation of some sort. I informed him that I am now a pragmatist regarding this book. I judge the book by its value to our world and to individuals, not on the flaws I may see in it.

I can't in all honesty say that all of the book is a revelation. I judge the worth of the book by the effect it has had on my life (inner and outer) and on the lives of other Urantians. I judge it by the vision that it gives us of our possibilities and those of our world in the future. This vision is, in my opinion, unexcelled by any other. And if there is something our troubled world needs now it is a vision of what we and our progeny can do if we align ourselves with the will of our spirit Father. I asked Martin if he thought that the book would be beneficial or detrimental to those who studied it. He didn't have an answer to that. I do.

My journey with *The Urantia Book* started with curiosity, moved through a leap of faith to a bit a skepticism and finally to a pragmatic outlook.

Jesus laid great emphasis upon what he called the two truths of first import in the teachings of the kingdom, and they are:

The attainment of salvation by faith and faith alone, associated with the revolutionary teaching of the attainment of human liberty through the sincere recognition of truth. (1593)

Perhaps this is the best relationship I could have with this body of writings. I once worked with a fellow who proclaimed himself agnostic. We often argued about the existence of God. He finally said to me one day, "Why don't you admit it, you believe in God because you made a leap of faith." After a moment of thought, I admitted that he was right. But what of my all but vanished faith in *The Urantia Book* as completely revelational? My own definition of faith is a trusting relationship between two persons. As such, faith is appropriate in our relationship with God, but not in our attitude towards a book. God is the end, *The Urantia Book* is but one of the means.

Those Christians.

Prepared from Huston Smith, *The Religions of Man*, (1965, Harper and Row, N.Y.), by Ann Bendall, Nambour, Qld.

The man in the street who first heard Jesus' disciples proclaiming the Good News was as impressed by what he saw as by what he heard. He saw lives that had been transformed—men and women, ordinary in every way, except for the fact that they seemed to have found the secret of living. They evidenced a tranquillity, simplicity, and cheerfulness that their hearers had nowhere else encountered. Here were people who seemed to be making a success of the greatest enterprise of all, the enterprise of life itself.

Specifically there seemed to be two qualities in which their lives abounded. The first was mutual affection:- "See how these Christians love one another." In spite of differences in function or social position their fellowship was marked by a sense of real equality.

Just before his crucifixion Jesus told his disciples, "My joy I leave with you." This joy was the second

quality that pervaded the lives of the early Christians. Outsiders found this baffling. These scattered Christians were not numerous. They were not wealthy or powerful. If anything, they faced far more adversity than the average man or woman. Yet in the midst of their trials they had laid hold of an inner peace that found expression in a joy that was almost boisterous. Perhaps radiant would be a more exact word, though Paul himself describes the Holy Spirit as intoxicating.

What produced this love and joy in these early Christians? The secret, insofar as we are able to gather it from the New Testament record, is that three intolerable burdens had suddenly and dramatically been lifted from their shoulders. The first of these was fear, even the fear of death.

The second burden from which they had been released was guilt. No one can live without drawing distinctions of some sort between what he judges to be better or worse. Out of these distinctions there arises in every life a concept of what life might be. Paralleling this, there inevitably runs a sense of failure. The times that we violate our norms are not confined to ones in which we treat people less well than we should; they include opportunities that we let slip irretrievably.

Unrelieved guilt always reduces creativity. In its acute form it can rise to a fury of self-condemnation that stifles creativeness completely and brings life to a standstill.

The third release the Christians experienced was from the cramping confines of the ego. In Paul's, "I live, yet not I, but Christ liveth in me," the circles of self are broken, leaving love to flow freely from its former self-demanding constraints.

It is not difficult to see how release from guilt, fear, and self could give men a new birth into life. But how did the early Christians get free of these burdens? And what did a man named Jesus, now gone, have to do with the process that they should credit it as his achievement?

There is locked within every human life, a wealth

"The evidence to all the world that you have been born of the spirit is that you sincerely love one another."

Jesus, The Urantia Book, p. 1601

By the accident of fortune a man may rule the world for a time, but by virtue of love he may rule the world forever.

Lao Tse

of love and joy that partakes of God himself, but it can be released only through external bombardment, in this case, the bombardment of love. We see this clearly in child psychology. No amount of threat or preaching will take the place of the parents' love in nurturing a loving and creative child. We are beginning to see the point likewise in psychotherapy where love is coming to be the key term in theories of treatment. The best evidence, however, is that of personal experience.

Just imagine the change that would have come over the early Christians if they really knew themselves to be loved by God? Imagination may fail us, but logic need not. If we too really felt loved, not abstractly or in principle, but vividly and personally by one who united in himself all power and perfection, the experience could melt our fear, guilt, and self-concern forever. As Kierkegaard said, "If at every moment both present and future, it were eternally certain that nothing has happened or can ever happen, not even the most fearful horror invented by the most morbid imagination and translated into fact, which can separate us from God's love—here would be reason for joy."

This love of God is precisely what the first Christians did feel. They became convinced that Jesus was God and they felt directly, the force of his love. Melting the barriers of fear, guilt, and self, it poured through them as if they were sluice gates, expanding the love they had hitherto felt for others until the difference in degree became a difference in kind and a new quality, which the world has come to call Christian love, was born. Conventional love is evoked by the lovable qualities in the beloved—beauty, gaiety, friendliness, cheerfulness, personal charm, or some other. The love men encountered in Christ needed no such virtues to release it. It embraced sinners and outcasts, Samaritans and enemies; it gave not prudentially in order to receive, but because giving was its nature.

The strength that this love personally gave the first Christians who preached the Good News throughout

the Mediterranean world was the fact that they did not feel themselves to be alone. They were not even alone together, for they believed that their leader was in their midst as a concrete, energizing power. They remembered his having said, "Wherever two or three are gathered together in my name, there am I in the midst of them."

As we modern day Christians look back at the early heady days of the disciples of Jesus, should we envy them? Or, alternatively, should we thank them for their experiences and, by adopting their beliefs, become as loving and joyous as they were?

COSMIC REFLECTIONS

Zwicky

from Freeman Dyson, "From Eros to Gaia" (Penguin Books, London, 1992)

In large suns—small circular nebulae—when hydrogen is exhausted and gravity contraction ensues, if such a body is not sufficiently opaque to retain the internal pressure of support for the outer gas regions, then a sudden collapse occurs. The gravity-electric changes give origin to vast quantities of tiny particles devoid of electric potential, and such particles readily escape from the solar interior, thus bringing about the collapse of a gigantic sun within a few days. It was such an emigration of these "runaway particles" that occasioned the collapse of the giant nova of the Andromeda nebula about fifty years ago. This vast stellar body collapsed in forty minutes of Urantia time. (464)

Freeman Dyson is a professor of physics at the Institute for Advanced Study, Princeton. In recent years he has taken to writing historical material, for most of which he was either a participant or had personal knowledge of the participants. The section he devotes to astrophysicists, Fritz Zwicky and Walter Baade is of great interest to scientifically-minded

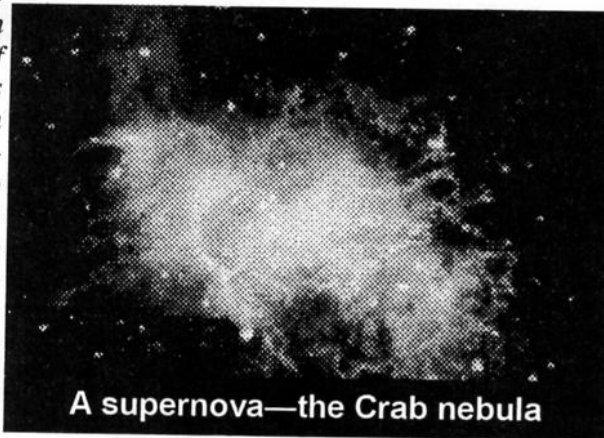
Urantia Book readers as it describes the history of discovery of neutron stars. What follows is an extract:

"Once in their lives, when Zwicky and Baade were both young and before they had become enemies, before either Zwicky's 18-inch telescope or Baade's 200-inch existed, they wrote together a theoretical paper of extraordinary originality. Their paper appeared in 1934 with the title, "Cosmic rays from Supernovae." This was just two years after James Chadwick had discovered the neutron. At the end of their paper Baade and Zwicky put the following paragraph:

"With all reserve we advance the view that a supernova represents the transition of an ordinary star into a neutron star consisting mainly of neutrons. Such a star may possess a very small radius and an extremely high density. As neutrons can be packed much more closely than ordinary nuclei and electrons, the gravitational packing energy in a cold neutron star may become very large, and under certain conditions may far exceed the ordinary nuclear packing fractions..."

Freeman Dyson continues: "These remarks of Baade and Zwicky were ignored for a long time [except in *The Urantia Book*]. They were ignored by astronomers for thirty-three years, until neutron stars were discovered by radio astronomers. Now we know

that almost everything Baade and Zwicky were saying in 1934 was true... If they had remained friends, neutron stars may have been discovered ...in 1942 instead of 1967. It happened that in 1942 Baade used the 100-inch telescope to take the classic pictures of the Crab Nebula, the most spectacular visible remnant of a supernova. Baade knew the Crab was the



A supernova—the Crab nebula

debris from the supernova explosion of 1054. He also knew that there is a peculiar star at the center of the nebula which he suspected of being the stellar remnant of the explosion. According to the Baade-Zwicky paper of 1934 it ought to be a neutron star. Baade asked his friend Rudolf Minkowski to take a spectrum of the star. Minkowski, using the 100-inch telescope, found it completely featureless, with no lines at all, unlike any other star in the sky. Minkowski calculated the temperature of the star and found it to be half a million degrees, ten times as hot as any other star....But Baade and Minkowski did not go

further...they did not mention, in their 1942 paper, the possibility that it might be a neutron star....How can their disinterest be explained...the simplest hypothesis is that the more speculative part of the 1934 Baade-Zwicky paper was written by Zwicky alone (the two were now sworn enemies). From a human point of view Baade's reaction is understandable. But from a scientific viewpoint it was a great opportunity missed.

Dyson writes, "A few years ago we had a Princeton graduate student observing the thirty times a second flashes of the Crab and measuring the period with a 1-meter telescope under the polluted sky of New Jersey. Zwicky could have done just as well (in 1942) with his 18-inch telescope under the clear sky of Palomar. All he needed was a recording photo-detector...this was the way the flashes were finally discovered in 1969 by Cocke, Disney, and Taylor. Zwicky could have done it twenty-five years earlier."

So it does not matter much if we accept the 1934/5 date of receipt of the Urantia Paper 41 or the date of publication of *The Urantia Book* in 1955—the paragraph cited above from p. 464 remains a remarkable statement about the formation of neutron stars, and the more so because it also describes the release of vast quantities of tiny particles devoid of electric potential. These are the neutrinos that are now known to carry away close to 99% of the energy of the explosion. The existence of neutrinos was proposed by Wolfgang Pauli in 1932 but when Nobel laureate, Enrico Fermi, submitted a paper on neutrinos to

"Nature" in 1933, it was rejected as being too speculative. The existence of neutrinos was conclusively demonstrated by Cowan and Reines in 1956. Direct confirmation of the neutrino burst accompanying a supernova was obtained in 1987 from observations of a supernova in our satellite galaxy, the Cloud of Magellan. The tiny, unreactive neutrino particles can make the journey from the nuclear core of a star to its surface in about 3 seconds compared with the million-year journey taken by light-energy to make the same trip. This is the opaqueness which is related to the back-pressure counteracting gravitational collapse. Opaqueness to neutrinos occurs at a density of about 400 billion g/cc.

Depending on its initial mass, once the silicon-burning phase commences, the collapse of a star to the Chandrasekhar limit of 1.2-1.5 solar masses may take hours or days, but the subsequent collapse may be less than a second.

It would be of great interest to discover the actual dates for publication of any pre-1950's papers that provide information on the rates of collapse of large stars and/or the essential role of the "tiny particles devoid of electric potential" (neutrinos) that are the vehicle for explosive transit of energy from the core of collapsing stars. If any readers discover such information would they be so kind as to inform us. An E-mail message to Ken Glasziou (kglasziou@ozemail.com.au) would suffice. In due course, this paper, plus any comments will be posted to the Urantial board on Internet.

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