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WILL THE WORLD END IN 2012? A SURVIVAL GUIDE TO MAYA PROPHECIES

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During the decade of the 1960s a Maya monument was found in El Tortuguero, Tabasco, Mexico, in which reference was made to the end of the thirteenth calendric cycle on 4 Ahaw 3 Unii, or December 21, 2012. The reference is important because it points to the end of an impressively long Maya calendric cycle of 5,126 years, which is also the winter solstice. This reference and the well-known Maya interest in astronomical phenomena and prophecies has spurred wide speculations and claims that the Maya prophesied the end of the world as we know it towards the end of 2012. This article studies the Maya conception of history and time and its implications for the meaning of Monument 6 of El Tortuguero, Tabasco, Mexico. It concludes that the purpose of Monument 6 was celebratory and not prophetic. It also studies the nature of Maya prophecies and their intriguing similarity to astrology.

Key Words: Maya, prophecies, astrology, eschatology, 2012, catastrophe

Mac to ah bovat, mac to ah kin bin tohol cantic u than uoob lae?
Who will be the prophet, who will be the priest who shall
interpret truly the word of the Book?
—Last Statement of *The Book of Chilam Balam of Chumayel*

1. Ancient Prophecies and the Fall of the Itzá Maya

The last independent native kingdom of Mesoamerica succumbed to the Spanish Empire on March 13, 1697. This was the end of the Maya civilization and way of life that had lasted for millennia. The story of the end of the Mayan world is enthralling, not only because of the military and political prowess of the Spanish conquistadors, but because of the fact that it happened in precise fulfillment of ancient Mayan prophecies. In the

book *The order of the Days*,¹ David Stuart, former professor of Harvard University, current professor of Mesoamerican Art and Writing at the University of Texas, and considered as the world's foremost expert on Maya culture, chronicles the striking fact that in the decades leading to their fall, the Itzá Maya had prophesied their own end. Numerous reports describe that Kanek',² the last Mayan king, had "a strong sense of his inevitable defeat, when . . . a new era of the Maya calendar called *k'atun* would begin."³

The Itzá Maya kingdom was set in a beautiful island called Nohpeten ("Great Island") and occupied a large region of what is today the Island of Flores in northern Guatemala. In ancient times, the place was a wild territory of dense jungles that resisted the advances of the Spanish armies and civilization for almost two centuries. The first to visit the kingdom was Hernán Cortez in 1525, just four years after the defeat of the last Aztec emperor Motecuhzoma II. He sought to reach the Caribbean coast of Honduras to suppress the rebellion of a Spanish officer and passed through this isolated kingdom in a most grueling march. The Maya received the Spaniard army with suspicion but in peace and provided much needed information to Hernán Cortez. When Cortez was preparing to leave he discovered that one of his horses had a large splinter in its foot and so he was forced to leave the utterly exotic animal⁴ with the king who promised to take good care of it. Later historical accounts show that the Itzá Maya came to worship the horse as a divine being. They called it Tziminchaak and the Maya priests fed it with flowers and birds as a deserving god. The poor beast starved to death but the Maya made a large stone image of Tziminchaak and enshrined it at Nohpeten.

Almost one hundred years later, in September of 1618, Fray Bartolomé de Fuensalida and Fray Juan de Orbita traveled for weeks through the jungle with the ambition of converting this remote kingdom to Christianity. The Itzá Maya, however, gave the Franciscan priests a cold reception. In their fascinating written account, Orbita and Fuensalida vividly describe the response of the king Kanek': "It is not yet time to abandon our gods. . . . Now is the age of Three Ahaw." Kanek' then explained: "The prophecies tell us the time will yet come to abandon our gods, years from now, in the age of Eight Ahaw. We will speak no more

¹ David Stuart, *The Order of Days: The Maya World and the Truth about 2012* (New York: Harmony Books, 2011), 1–29.

² The name means "snake star."

³ Stuart, *The Order of Days*, 2.

⁴ Horses were unknown in the new world before the arrival of Columbus.

of this now. You would best leave us and return another time.”⁵ The failure of Orbita and Fuensalida was in fact predictable. Earlier on in the day, they had come across the image of a horse in one of the shrines near the center of the island. The natives explained that it was an image of Tziminchaak, the horse that Cortez had left there. In a fit of zealous rage, Orbita destroyed the horse idol at the spot causing a deep consternation among the people who had venerated the image for almost a hundred years. Orbita and Fuensalida knew that they were not welcomed anymore and returned to Christian territory where they reported to their superiors the intriguing prophecy that the Maya recognized as valid. Five years later (1623), Diego Delgado and a party of ninety Spanish and Maya allies returned to Nohpeten with the ambition of converting the kingdom but were taken prisoners immediately and sacrificed. Delgado’s heart was offered to the Itzá Maya gods in retaliation to Orbita’s smashing of the horse idol.⁶

Seventy years later, in 1695, Fray Andrés de Avendaño y Loyola visited Nohpeten again. Avendaño was both a zealous evangelizer and deep student of Maya culture. He spoke the Mayan language well and had studied over and over the traditional Maya lore and the intricacies of the Maya calendar to understand the heathen prophecies. Avendaño knew that the age of Eight Ahaw mentioned by the king Kanek’ almost two centuries before would arrive in two years and that it was time to act. When Avendaño arrived to the Itzá Maya kingdom, the king led him immediately to the largest, highest temple on the land where they saw the bone leg or thigh of a horse held in a curious box that hung from the shrine’s ceiling. It was the remains of Tziminchaak, the horse of Cortez, which the natives continued to venerate almost 200 years later! Then, Avendaño told the king that they had come in fulfillment of the Maya prophecies to convert them to Christianity. If we believe Avendaño’s own account, he tells that the Maya were particularly surprised and impressed by his mention of the Maya prophecies and his ability to interpret them.⁷ But things did not go well. Prominent Itzá Lords and the king’s own wife saw the king’s relationship to the Spanish priests and his interpretation of the prophecies as troubling and plotted against Avendaño who fled in the middle of the night into the security of Christian territory. Two years

⁵ Stuart, *The Order of Days*, 7.

⁶ Juan de Villagutierre Soto-Mayor, *History of the Conquest of the Province of the Itza* (trans. R. Wood; Culver City, CA: Labryinthos, 1983), 92. See also, Grant D. Jones, *The Conquest of the Last Maya Kingdom* (Stanford, CA: Stanford University Press, 1998).

⁷ Stuart, *The Order of Days*, 15.

later, Martín de Ursúa, governor of Yucatán, who was also aware of the prophecies, decided to invade the Maya Itzá kingdom. But the expected great battle did not occur. When Ursúa arrived to Nohpeten, the place was deserted. The houses, the palaces, and the temples had been abandoned. In one shrine they found old horse bones. A frail old woman left behind explained that these were the remains of Tziminchaak. It was March 13, 1697, the age of Eight Ahaw, when the last standing Maya kingdom fell in precise fulfillment of Maya prophecies.

How could the Maya prophets predict with such precision the overthrow of their own civilization? Had the Maya access to privileged information about the future? If they were able to predict their own downfall, could they prophecy the end of the world?

2. December 21, 2012, in Maya Prophecy

Many people think that ancient Maya stone tablets found in southeast Mexico, predict that the world will end in December 2012. During the decade of the 1960s a large concrete factory was built in the small town of El Tortuguero, Tabasco, Mexico.⁸ As some man-made hills were bulldozed, workers were surprised to find among the rubble several carved stone tablets. The tablets were eventually deposited in Mexican museums as curiosities. Since nobody could read the glyphs, the significance of the tablets was unknown and they were mostly forgotten. The site was one of the most important smaller sites in the region, subject to the impressive city of Palenque that lays to the south in the neighboring state of Chiapas, Mexico. Most of the carved monuments came from the reign of King Balam Ahau, A.D. 644–679, which was also the heyday of the city.

Maya glyphs were finally deciphered in the 1980s thanks to the collaborative efforts of many scholars.⁹ Today it is possible to read 80 to 90% of all Mayan texts. With this advancement, scholars remembered the stone tablets of El Tortuguero, especially the one known today as Monument 6. The tablet was broken in several pieces and had been scattered: four in a local Mexican museum, one in the Metropolitan Museum in New York, two in private collections, and several others are lost. In 1996, Stephen Houston and David Stuart, both renowned Maya

⁸ For a brief story of Monument 6, see Matthew Restall and Amara Solari, *2012 and the End of the World: The Western Roots of the Maya Apocalypse* (Lanham, MD: Rowman & Littlefield, 2011), 7–10.

⁹ For the story behind the deciphering of Maya glyphs, see Michael Coe, *Breaking the Maya Code* (New York: Thames & Hudson, 1992).

Scholars, were able to publish for the first time a translation of this monument.¹⁰

Here is what it says: *Tzuh tzahoom uyuxlahuun pikta / Chan Ahau ux unii / Uhtooma ili / Yeni yen bolon yookte kuh / Ta chak hohoyha.*

Literal translation:

The thirteenth one will end on 4 ahau, the third of Uniiw. There will occur blackness and the descent of the Bolon Yookte' god to the red.

Idiomatic translation:

The thirteenth calendrical cycle will end on the day 4 ahau, the third of Uniiw, when there will occur blackness (or a spectacle) and the God of the Nine will come down to the red (or be displayed in a great investiture).¹¹



Figure 1. Monument 6, El Tortuguero, Tabasco, Mexico

The tablet called attention for several reasons: The date referred in the tablet is 4 Ahaw 3 Unii which transliterated in our numbers is 13.0.0.0.¹² The date in our calendar is December 21, 2012, which is also the winter solstice, the shortest day in the year. A foreboding aspect of the date is that it is the end of an impressively long calendric cycle of 5,126 years. The beginning of the cycle was in the year 3114 B.C., which is also the creation day in Maya lore. That great span of time takes us back to the dawn of human civilization—the beginning of dynastic Egypt, the rise of the Minoan civilization, and the inception of Stonehenge. Does this tablet predict the end of the world as we know it on December 12, 2012? The proponents behind the 2012 excitement argue that it does. They find support in the following arguments.

¹⁰ Stephen D. Houston and David Stuart, "Of Gods, Glyphs, and Kings: Divinity and Rulership among the Maya," *Antiquity* 70 (1996): 289–312.

¹¹ Restall and Solari, *2012 and the End of the World*, 8–10.

¹² Every number represents a cycle in the Maya calendar. Those cycles are from right to left: a day, a week, a year, a cycle of about 20 years, and a cycle of about 394 years. See a more detailed explanation of the Maya calendar on page 11.

The Maya believed that the world was created repeatedly and that floods destroyed previous creations because of perceived deficiencies (e.g., the man of wood was not capable of worshiping their creators). We are currently in the third or fourth creation, which is the age of Maize (corn), the crop that sustains humans in Maya worldview.

John Major Jenkins, a prominent author of books about the Maya Calendar and 2012, argues that an important key is the image in the stela 25 at Izapa, a site in Chiapas, Mexico. The man in the image is interpreted to be one of the Hero Twins who in Maya creation Mythology shoots a bird deity named Seven Macaw with a blowgun in order to usher in the transition from one world creation to the next. The caiman in the picture is the Milky Way (the spots in the back are stars), the polar center is at the top and the Seven Macaw is the Big Dipper constellation. All are aligned in the way the sky looked in the summer solstice when the stela was erected (600–100 B.C.). It is argued that this is a dateless reference to creation in 3114, and, therefore, recreation in 2012.¹³

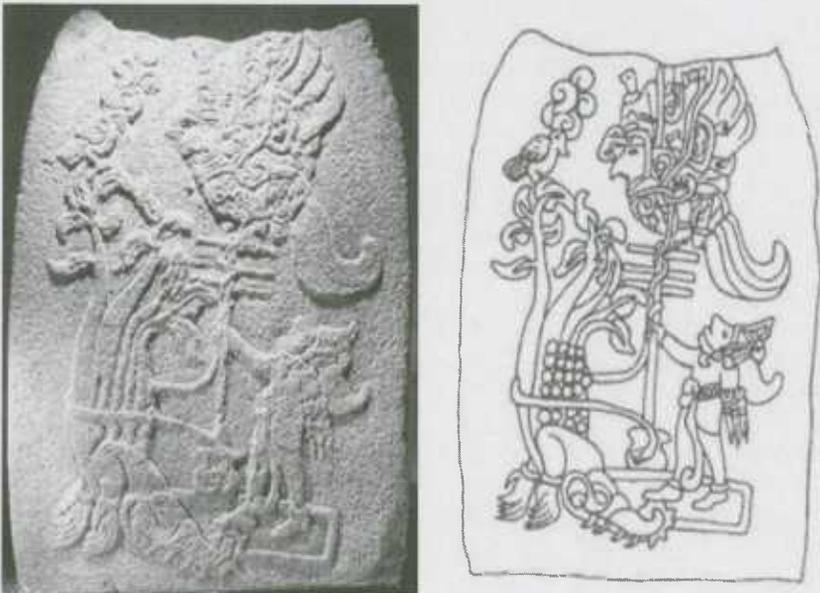


Figure 2. *Stela 25 at Izapa, Chiapas, Mexico*

¹³ See a more detailed explanation of the Maya calendar on page 15–16.

It seems that the end of the calendric cycles was important for the Maya. For example, the Stela 63 in Copán (Honduras) highlights the date 9.0.0.0.0 (A.D. 435). [See Figure 3]



Figure 3. Stela 64. Copan, Honduras

Similarly, the impressive Stela C in Quiriguá (southeast Guatemala) affirms that the kingship of Cauac Sky (A.D. 724–785) was rooted in the moment of the most recent creation 13.0.0.0.0 (3114 B.C.). [See Figure 4]



Figure 4. Stela C, Quiriguá Guatemala.

It is argued that if the turn to the 9 calendric cycle was important as shown in this document, the 13th referred in Tortuguero's Monument 6 was even more significant.

What did the Maya think would happen when the world was destroyed and recreated? One possible answer to this question is what seems to be described in the last page of the Dresden Codex.¹⁴ This is a bark-paper book created by Maya scribes in the fourteenth century A.D. The book has details about the movements of the moon and the planets and their relation with the calendric cycles. The document concludes with the image of a large caiman vomiting of what appears to be water from the sky. The glyphic text has the old goddess Chac Chel pouring down water out a jar in the center of the text and the god Chac painted in black menacing with weapons of destruction. [See Figure 5] This apocalyptic interpretation of the picture in the Dresden codex seems compelling because of the fact that a great deluge or flood is mentioned in other Maya and Mesoamerican sources. The Aztec creation mythology says that the fourth and most recent destruction and recreation occurred with a flood. In the Quiché Maya narrative of the *Popol Vuh*, the humans made of wood from the previous creation were washed away by a flood. *The Books of Chilam Balam*, a Maya alphabetic text produced in colonial Yucatán but containing ancient traditions, describes the flood as being provoked by the battle between the God of the Thirteen (Oxlahuntiku, god of the sky that has 13 levels) and the God of the Nine (Bolontiku, god of the underworld that has 9 levels).¹⁵

¹⁴ It is the oldest and best-preserved book of the Maya. It is found in the Saxon State Library in Dresden and contains various almanacs, divination calendars, astronomical tables, ritual regulations, and numerous representations of gods. For more information on the codex, visit the following site: <http://www.slub-dresden.de/en/collections/manuscripts/the-dresden-maya-codex/> (April 13, 2012).

¹⁵ For a brief introduction to Maya views of the cosmos, read Stuart, *The Order of Day*, 87–92.



Figure 5. Last page of the Dresden Codex

This takes us back to Tortuguero's Monument 6. Using the information gathered from Maya inscriptions here and there and a diversity of Mesoamerican traditions, the stone tablet has been read in the following way (notice the interpretation in the bracketed text):

The thirteenth one will end on 4 ahau, the third of Uniiw [December 21, 2012]. There will occur blackness [disaster: as in the weapon-wielding god Chac painted in black in the Dresden codex] and the descent of the Bolon Yookte' god to the red [the manifestation of this god heralds the flood in The Books of Chilam Balam].

The late Munro Edmonson, one of the translators of the *Chilam Balam* literature, argues that the texts for the celebration of the end of a Maya calendric cycle that took place in Merida, Yucatán, in 1618, contain several references to the fact that the cycle [*Baktun*] finishes in a great flood.

Here is when it shall end, the telling of the *katun*; that is what is given by God; the flood shall take place for the second time; this is the destruction of the world; this then is its end.¹⁶

¹⁶ Restall and Solari, *2012 and the End of the World*, 25.

This celebration honored the beginning of an even *baktun*: 12.0.0.0.0.¹⁷ There were 20 different ceremonies the third of which was a cycle-ending ceremony. This ceremony featured a battle in which the god of the underworld (God of the Nine) defeats and sacrifices the god of the sky (God of the Thirteen). Thus, the apocalyptic interpretation of the end of the calendric cycle seems evident.

3. 2012 and Apocalyptic Concerns

This alleged prophecy has caused great excitement so that the amount of books, web sites, and blogs produced about the end of the world in 2012 is truly impressive. This includes the movie *2012*, directed by Roland Emmerich and released on November 13, 2009, with a revenue of around 769 million USD. There is even a book titled *The Complete Idiot's Guide to 2012*¹⁸ and a website where every kind of survival supplies can be bought (www.2012supplies.com).¹⁹

The 2012 excitement goes beyond the Maya long count calendar and includes a variety of religious, esoteric, and scientific predictions. The most prominent current predictions related to the Maya prophecies in one way or another are the following:

1. Solar Storms. Several scientists have mentioned that there could be solar storms particularly strong in 2011 and 2012 produced by "coronal mass ejections" that would hit the earth with magnetic energy and possibly produce the disruption of cell phone communications, electrical power outages, radio blackouts, and even earthquakes. It is noted that in September 1 and 2, 1859, a solar storm disrupted electrical grids and communications systems. It even shorted out telegraph wires causing fires.²⁰

2. CERN (European Organization for Nuclear Research) and the Large Hadron Collider (LHC). The LHC is a particle accelerator and collider that causes two beams of subatomic particles to collide at very high energy

¹⁷ This was in A.D. 1618, the year that marked the beginning of the last *baktun* cycle (of around 394 years), which will end on December 2012.

¹⁸ Synthia Andrews and Colin Andrews, *The Complete Idiot's Guide to 2012: An Ancient Look at a Critical Time* (New York: Alpha, 2008).

¹⁹ For more information about the 2012 excitement, see Raymond C. Hundley, *Will the World End in 2012?* (Nashville, TN: Thomas Nelson, 2010), ix–xxiv; Andrews and Andrews, *The Complete Idiot's Guide to 2012*, 122–48.

²⁰ Hundley, *Will the World End in 2012?*, 21–23. See also, Andrews and Andrews, *The Complete Idiot's Guide to 2012*, 122–123.

levels at 99.99 percent the speed of light. Scientists believe that these collisions may produce never-before-seen particles they can study to understand secrets of how atoms and our universe work. Others are concerned that it could produce a black hole or "strangelets" (a form of matter thought to be at the center of neutron stars) that could destroy the world. The CERN research board and other famous scientists assure, however, that the LHC poses no risks to the planet.²¹

3. Predictions of Nostradamus. The book called *The Prophecies of Nostradamus* is a collection of eighty watercolor images by the famous sixteenth-century soothsayer that some think predicts the end of the world on December 21, 2012. Italian journalists Enza Massa and Roberto Pinotti discovered the collection in the Central National Library of Rome in 1982. There is a considerable controversy, however, whether the watercolors were actually drawn by Nostradamus.²²

4. Reversal of the North/South magnetic poles. Geophysicists have observed with concern a crack in the magnetic field of the earth that protects us from harmful radiation that comes from the sun. This crack is found in the Atlantic Ocean between Brazil and Africa. The weakening of the earth's magnetic field could lead to a reversal of the magnetic poles and leave us vulnerable to radiation from the sun.²³

5. Collision with "Planet X." Nancy Lieder claims that aliens called "Zetas" warned of a collision or near miss in 2012 with a Planet X, which is four times as big as the earth.²⁴

Our planet is constantly bombarded with rocks hurtling around our solar system. Every five minutes a fragment of rock the size of a pea hits and burns in the earth's atmosphere. Once or twice a century, a rock 40-50 meters in size hits our planet. They are large enough to obliterate a city if they strike it directly. It is estimated that there are between 500 and 1,100 asteroids 1 kilometer or more in size that have trajectories that cross that of the earth. An asteroid of this size would have devastating

²¹ Hundley, *Will the World End in 2012?*, 27-38.

²² *Ibid.*, 39-52.

²³ *Ibid.*, 53-60. See also, Andrews and Andrews, *The Complete Idiot's Guide to 2012*, 123-125.

²⁴ Lieder has made other predictions and failed. For example, she announced based on revelations by the "Zetas" that Planet X would pass close to the earth in the spring of 2003 causing the axis of the earth to tilt by 90 degrees and wiping out 90% of humanity. When the date passed, Nancy claimed that the date was intended to "confuse" the establishment (i.e., agencies like NASA, CIA, and scholars working for universities, etc.). She then claimed that "Zetas" gave her further revelations that Planet X would hit the earth in 2012, Hundley, *Will the World End in 2012?*, 68-69.

consequences in a global scale lofting enough pulverized debris to plunge the earth in a freezing cosmic winter for years. Three hundred twenty of asteroids of this size have already been identified and their trajectories are being projected in time to see if they pose a threat in the medium term. This is only part of the threat. There are also comets that are larger, travel faster, and are much more difficult to track. We would get only six months of warning of a future comet impact. There is no known threat, however, of a hit by an asteroid or comet for 2012.²⁵

6. Earth's alignment with the galactic plane. John Mayor Jenkins, one of the main proponents of the 2012 excitement, argues that our solar system will align with the center of the Milky Way galaxy on December 21, 2012. This will interrupt the energy that supposedly flows from the center of the galaxy to the earth producing either a crescendo of natural disasters or a change in the consciousness of humanity (which is Jenkins's own view). Dr. David Morrison, senior scientist at the NASA Astrobiology Institute argues that the alignment of the earth and sun with the center of the galaxy occurs every December with no devastating consequences. Additionally, he states that the claims that we are about to cross the galactic plane are just untrue.²⁶

7. Eruption of the super volcano. There are fears that the super volcano that is found below Yellowstone Park might make eruption.²⁷ The eruption of this volcano would be a thousand times more powerful than the eruption of Mt. St. Helens in 1980 and 10 times larger than the explosion of volcano Tambora in 1815.²⁸ According to scientists, the largest explosion ever was that of volcano Tambora 73,500 years ago. It was so massive that it tore a hole of 100 kilometers wide and ejected 3,000 cubic kilometers of debris—enough to cover the whole of India under 1

²⁵ See Bill McGuire, *A Guide to the End of the World: Everything You Never Wanted to Know* (Oxford: Oxford University Press, 2002), 135–68.

²⁶ Hundley, *Will the World End in 2012?*, 71–82.

²⁷ *Ibid.*, 83–92. The term supervolcano is applied to a volcanic center that has had an eruption of a magnitude 8 on the Volcano Explosivity Index (VEI). This means that the measured deposits for that eruption are equal or greater to 1,000 cubic kilometers. For more information on this and super volcanoes in general, visit the website "Yellowstone Volcano Observatory" [<http://volcanoes.usgs.gov/yvo/index.php>] (April 16, 2012) created and maintained by the U.S. Geological Survey (USGS), Yellowstone National Park, and the University of Utah. For a brief introduction to super eruptions, see McGuire, *Guide to the End of the World*, 93–133.

²⁸ McGuire, *Guide to the End of the World*, 98–99.

meter of ash.²⁹ An explosion of this type would cause a volcanic winter among other things and threaten the survival of the human race.

8. The Web Bot Project. Clif High and George Ure developed a software that they claim is able to predict future events by tracking keywords in the Internet.³⁰

The fact is that most of 2012 predictions have no credible evidence behind them. We know that there are real threats to the survival of our planet. Scientists all over the world have warned about them.³¹ These threats, however, are not directly related to December 2012. A serious book describing the natural threats that humanity faces is *A Guide to the End of the World* by Bill McGuire and published by Oxford University Press. Bill McGuire is an "eminent volcanologist and expert on the ominously-titled high-impact, low-frequency mega-geohazards." His book "reveals just how fragile and violent the planet we inhabit can be, while at the same time explaining the science behind the threats." He focuses on four kinds of threats: global warming, a new ice age, geological threats (super eruptions, giant tsunamis, and great quakes), and threats from space (impacts of Asteroid or comets).

The question, however, still remains: Did the Maya predict that the world would end on December 21, 2012? If yes, how were they able to predict with such precision the demise of their own civilization? Is there something we can learn from Maya prophecies?

4. Did the Ancient Maya Predict the End of the World as We Know It in 2012

If we want to understand the Maya Monument 6 of El Tortuguero and its meaning, we need to understand Maya calendars and their understanding of time. Maya calendars are complex. They used three calendars, all of which were interrelated: a lunar or gestational calendar of 260 days,³² a

²⁹ McGuire, *Guide to the End of the World*, 103.

³⁰ Hundley, *Will the World End in 2012?*, 93–100.

³¹ See suggestion for further reading in William R. Stoeger, "Scientific Accounts of Ultimate Catastrophes in Our Life-Bearing Universe," in *The End of the World and the Ends of God: Science and Theology on Eschatology* (ed. John Polkinghorne and Michael Welker; Theology for the Twenty-First Century; Harrisburg, PA.: Trinity, 2000), 19–28. Also, Isaac Asimov, *A Choice of Catastrophes: The Disasters That Threaten Our World* (New York: Simon and Schuster, 1979).

³² Stuart, *The Order of Day*, 146. For an analysis of the 260-day calendar origin, see *Ibid.*, 152–155.

solar 365-day calendar,³³ and a long count calendar that registered the passing of time on a large scale similar to our centuries and millennia. The 260-day calendar approximates the time of gestation for human beings and it was the calendar that Mayas used for divinatory purposes. This calendar pervaded all the aspects of life and continues to be used among the high-land quiche Maya of Guatemala.³⁴ The 365-day calendar provided a framework for agricultural and communal festivities and ceremonies. Both the 260-day and the 365-day calendars make a Calendar Round of about 52 years.³⁵

The Long Count calendar was developed somewhere in the second or third century B.C. This calendar counts elapsed time from a starting point in the past, which is August 11, 3114 B.C. It is a vigesimal counting system in which the number thirteen has special importance.³⁶ Mayanists record dates with five numbers separated with a dot.

Going from right to left, the units of time indicate the following:

K'in: 1 day (the word means "sun" as well as "day")

Winal: made of 20 k'ins (= 20 days)

Tun: made of 18 winals (= 360 days)

K'atun: made of 20 Tuns (= 7200 days, close to 20 years)

Bak'tun: made of 20 k'atuns (= 144,000 days, around 394 years)

For example the date 0.0.0.0.1 would mean that 0 Bak'tuns, 0 K'atuns, 0 Tuns, 0 Winals, and 1 k'in (=day) have elapsed from the starting point, which is August 11, 3114 B.C. This is the date of the beginning of the Long Count Maya Calendar. The total long count cycle is of 5,126 years in total. The full cycle of the Long Count Maya takes us from 3114 to 2012. Thus, December 21, 2012, will be 13.0.0.0.0, which is the same as 0.0.0.0.0, that is, the end of the age and the beginning of a new one.

There are several reasons why the end of the Maya Calendar did not mean for the Maya the end of the world:

1. El Tortuguero's Monument 6 is not prophetic but dedicatory. When the Tortuguero tablet was first deciphered in 1996 by David Stuart and Stephen Houston it was the first monument of its kind to be found and

³³ Stuart, *The Order of Day*, 155–160.

³⁴ *Ibid.*, 115–155.

³⁵ *Ibid.*, 155–160. This means that any date would receive two names because of the two ways of reckoning the time—the 260-day calendar and the 365-day calendar. The same two names for any given date would repeat every 52 years. The two calendars coincide or synchronize about every 52 years. This is the calendar round. See also Andrews and Andrews, *The Complete Idiot's Guide to 2012*, 61–71.

³⁶ For a fuller explanation, see *ibid.*, 162–194.

deciphered. Later, two other monuments of a similar genre were found in Naranjo (dated to A.D. 593) and La Corona (dated to A.D. 677) both in Guatemala. The Naranjo document refers to 10.0.0.0.0 (A.D. 890) and the La Corona to 9.13.0.0.0 (A.D. 692). Both of these documents, like the one at El Tortuguero, were erected to celebrate the completion of new buildings. The numbers that refer to the future are nice round numbers. None of the monuments predicts disasters or the like. It is not clear, however, why they refer to future dates. Most probably it could mean something like: "Built in 1900, this will stand in 2000."³⁷ This would fit the reference in Monument 6 from El Tortuguero to the God of the Nine seen and displayed "in a great investiture."

Both David Stuart and Stephen Houston, the first translators of the Monument 6 of El Tortuguero, are outstanding Maya scholars.³⁸ Sixteen years after translating the document and speculating it was prophetic in nature, Stephen Houston recognized in the face of new discoveries that Monument 6 "had nothing to do with prophecy."³⁹ But it was too late. They had spurred unwittingly broad and bizarre speculations.

2. There may be no special significance for the date at the start of the calendar. Zero years in calendars often refer to significant events in history, religion, or politics, like the birth of Jesus Christ, or the year when Mohammed left La Mecca, or Japan's mythical founding by emperor Jimmu. Regarding August 11, 3114 B.C., the starting date of the Long Count calendar, Maya texts explain that "the gods of creation were set in order."⁴⁰ It is a mythical creation date.⁴¹ This probably refers to the initial ordering of broad categories of divine beings (gods of earth and gods of heaven) as suggested in the Vase of the Seven Gods. Astronomers tell us, however, that nothing significant occurred in 3114 B.C. in terms of the night sky or in terms of planetary alignment. Complex civilization of any sort would come well after this date and Maya civilization two and a half

³⁷ Restall and Solari, *2012 and the End of the World*, 28.

³⁸ I have already spoken about David Stuart at the beginning of the article. Stephen Houston is Dupee Family Professor of Social Science and professor of Archaeology and Anthropology at Brown University, Providence, Rhode Island. He also teaches in the department of Anthropology. On July 21, 2011, Houston was awarded the prestigious Order of the Quetzal by the vice president of Guatemala for his contributions to the study of Maya culture. Visit his web page at http://research.brown.edu/myresearch/Stephen_D._Houston (December 4, 2011).

³⁹ Restall and Solari, *2012 and the End of the World*, 29.

⁴⁰ Stuart, *The Order of Day*, 216.

⁴¹ *Ibid.*, 170–173.

millennia later. Mayanists conclude that it is better to understand this date as an artificial construct.⁴²

3. We are not 100% sure of the correlation between the Maya dates and our dates. The correlation most scholars use today is called GMT (after the initials of Goodman, Martínez, and Thompson). Not all scholars accept these dates, however.⁴³ There has always been a doubt, for example, whether the date from Monument 6 of El Tortuguero really falls on December 21 or December 23 of 2012. The difficulty to ascertain the correlation is well illustrated by an inscription found at Santa Elena Poco Uinic, a very remote place in Chiapas, México. It records the date 9.17.19.13.16, which according to the GMT correlation system fell on July 13, 790 A.D. The accompanying glyph depicts a sun with two elements covering the top and its sides. Mayanists thought that it referred to a sun eclipse. After doing some research they found that there had been a sun eclipse over southern Chiapas three days after, on July 16. This, of course, would agree more with correlation dates falling on December 23, 2012. The truth may be, however, that both counting systems are correct and that the use of the calendar was not entirely consistent either throughout history or throughout the Maya world.⁴⁴

4. Mayas stop using the Long Count Calendar a little after A.D. 910. The Maya created and used their two short calendars (the 260-day and 365-day calendars) long before creating and using the Long Count Calendar. The Long Count calendar is intimately related to the institution of the sacred ruler, the *kol ahaw*. In fact, both institutions rose, flourished, and fell together. The purpose of the great long dates in the stone monuments was to glorify the great kings.⁴⁵ Once kings lost power, the reason for the long dates ceased to exist.⁴⁶ The last Long Count date

⁴² Stuart, *The Order of Day*, 170. See also Restall and Solari, *2012 and the End of the World*, 31.

⁴³ See a brief analysis of the "correlation question" in Stuart, *The Order of Day*, 186–94.

⁴⁴ *Ibid.*, 191–92.

⁴⁵ See Stuart, *The Order of Day*, 252–74. See also Restall and Solari, *2012 and the End of the World*, 32.

⁴⁶ All period endings finished occur in the same "ajaw/ahaw" which means "lord, noble." These days were the rulers of the period and its character was described by the number of the period. The k'atun period (20 years) was considered a ruler who was enthroned every 20 years. The ascension monuments were dedicated on the first period ending of a new king (not on his actual crowning date) so that local kingship (history) and time were fused. We need to understand, then, that the king was the embodiment or bodily manifestation of the period and their function (among others) was to tend time and to "replant it" at the period endings. Kings,

registered on a Maya monument dates from A.D. 910, six centuries before the Spaniards arrived. The Maya themselves abandoned the Long Count Calendar long before the time of the Spanish conquest.

5. Maya believed that the world existed before 3114 B.C. and would continue to exist after A.D. 2012. The Long Count date of December 21, 2012, is 13.0.0.0.0. Did the Mayas expect further events after that date and/or how would they record these events? The Long Count Maya calendar works like the odometer of a car. The date 13.0.0.0.0 will be also 0.0.0.0.0 and will mark the beginning of a new cycle. The Stela 1 at Cobá also shows that Maya would add an extra digit indicating the beginning of a new age in the calendar. [See figure 6] Thus, December 22, 2012 will be simply 1.0.0.0.0.1 and it would continue as time marched indefinitely. Did the Mayas expect events to happen after this date? Yes, they did. One glyphic text in the Temple of the Inscription at Palenque, Chiapas, celebrated that the 80th round calendar anniversary of the reign of the great king K'inich Janaab' Pakal (known as Pakal) would take place eight days after the end of a 8,000-year Long Count cycle called the *pictun*. This refers to October A.D. 4772, almost three millennia after 2012. Evidently, the Mayas did not believe that the world would end in 2012.



Figure 6. Stela 1 at Cobá.

however, did not control time. At the final of a calendar round of 52 years among the Aztecs the king performed the most important ceremony of the new fire. Among the Mayas periods ended more frequently.

Maya inscriptions also refer to events before the starting point of the Long Count calendar. A Maya glyphic text in the Temple of the Cross at Palenque records the birth of a woman and a man 7 to 8 years before the beginning of the Long Cycle (i.e., 3122–3121 B.C.). These were probably creation deities who engendered the three patron gods of the local dynasty.⁴⁷ It seems clear that the creation date in 3114 is a momentous occasion but not one marked by cataclysm or destruction. See the text of the document:

On 12.19.13.4.0 [December 7, 3121 BC], First Lady Sek was born. Five months and eight years after she was born, the era was wrapped up; the 13 cycles of 400 years were completed on 13.0.0.0.0 [August 13, 3114 BC]. A year, 9 months, and 2 days after the face of the new era was revealed, Hun Ye Nal Chac, appeared in the sky; on 13.0.1.9.2 [February 5, 3112 BC] he dedicated the Raised-Sky House, the Eight Chac House was its holy name, the home of the North.⁴⁸

Thus, the end of the era was more like the resetting of the clock than about death and destruction. Indeed, the deity that best signifies the beginning of a new era was Ix Ahaw Na, Lady House. She is not a harbinger of doom but represents the Dawn. In a Maya alphabetic text from the colonial period this goddess is called Ix Kin Suintal, meaning literally "She of the sun's turn."⁴⁹ A more idiomatic translation could be Lady of the Returning Sun. Another Palenque tablet has the date 12.10.1.13.2 in which one of the gods (GI) is seated in kingship before creation date. So, there were kings before creation but we are not sure of what they ruled.⁵⁰ All these tablets connect events in the present with events in the past. Maya loved to connect the king's ceremonies to events in the mythical past. In fact it is possible to say that they fudged the dates to make the symmetries that they loved to display on the monuments.

6. The Cycle Finishing in December Is Just a Part of a Much Greater Cycle. The scale of our deep time cosmology pales in comparison to that of the Maya. According to scientists our universe began to exist around 14 billion years ago. For the Maya, however, time began 28 octillion, 679 septillion years ago. That is 28 followed by 27 ceros. 14 billion is not even 0.0000000000000005 percent of Maya deep time.⁵¹ Stelae 1 and 2 in Coba,

⁴⁷ Stuart, *The Order of Day*, 247.

⁴⁸ Restall and Solari, *2012 and the End of the World*, 33–34.

⁴⁹ *Ibid.*, 34–35.

⁵⁰ Stuart, *The Order of Day*, 248.

⁵¹ *Ibid.*, 230.

México, have very interesting inscriptions. [See figure 7] Both mention the creation date (13.0.0.0) but prefixed by 19 units of 13. This means that the creation date was in fact an abbreviation of a still longer date. This equals 8,285,978,483,664,581,446,157,328,238.631 years of elapsed time from the true beginning of time in Maya conception of the cosmos. That is 28 octillion years in the past. Now, if we extend to the future, the Maya Calendar projects 43 octillion years (43,517,152,096,098,311,708,523,306,538). That is well beyond the time that according to scientific calculations our sun will cease to exist.⁵²



Figure 7. Stela 2 at Coba.

In summary, December 21, 2012 is an important anniversary of creation date (August 13, 3114) not as the “end” but as the first of many future

⁵² According to these calculations the sun was born 4.5 billion years ago and will become a white dwarf star at a little less than 13 billion years old. Then it will take some trillions of years to cool off completely. See Harold Zirin, “Sun: Evolution,” *Encyclopaedia Britannica Standard Edition 2005 CD-ROM*. Version 2005, 1994–2005; Richard W. Pogge, “The Once and Future Sun,” Public lecture given on June 12, 1997, at the Perkins Observatory in Delaware, Ohio, as part of the New Vistas in Astronomy Series. Available from <http://www.astronomy.ohiostate.edu/~pogge/Lectures/vistas97.html> (April 16, 2012).

repetitions. An identical repetition will occur in a little more than 100 thousand years from now (that is, after 13 pictuns have elapsed after 2012).⁵³

7. There is no evidence that the Maya were aware of precession. John Mayor Jenkins, the leader of 2012 enthusiasts, suggested, in his book *Maya Cosmogenesis 2012* published in 1998, that the Galaxy, or even the universe, will be realigned or altered in a way that will either usher in a new and improved era (Jenkins's own position) or destroy the earth. The Maya with their vaunted astronomic observation abilities are credited with having anticipated this event.

"Precession is the astronomical term that refers to how the sun becomes gradually aligned with the Milky Way."⁵⁴ As the earth rotates around the sun it wobbles, which results in a little difference between the solar year (how long it takes for the earth to rotate around the sun) and the stellar year (how long it takes to line up with the stars). Hipparchus, a Greek Astronomer, observed this phenomenon in 128 B.C. The truth is that we are not sure if Mayas were aware of precession. They could, but we just don't have the evidence. Even if they did, the truth is that a precession cycle is of about 26,000 years and cannot be predicted through observation to a specific date. It can be predicted to a period of a few centuries but not to a year, much less to a specific date.

In fact, we have evidence that Mayas were not as good at astronomy as sometimes credited to be. The famous Venus Tables of the Dresden Codex show that they are not merely tallies of observed data but astronomical observations for long periods that were "tweaked" to conform to other ritual cycles that were important for the Mayas. Note the differences between the Maya observations of the mean intervals of Venus that Ernst Försterman deciphered in the Dresden Codex and astronomical reality (figures between brackets):⁵⁵

Visible as a morning star	236 days [263 days]
Invisibility of Venus at superior conjunction	90 days [50 days]
Venus again visible as an evening star	250 days [263 days]
Venus disappears at an inferior conjunction	8 days [8 days]

The only figure that really matches is the last one. What was important for the Maya time keeper was that a number *conceptually* accommodated the different types of heavenly phenomena.

⁵³ Zirin, "Sun: Evolution," 311.

⁵⁴ Restall and Solari, *2012 and the End of the World*, 43.

⁵⁵ Stuart, *The Order of Day*, 292-93.

8. The Maya were not Map Makers. The famous Maya Stela 25 at Izapa probably was not a cosmic map of creation as 2012 enthusiasts argue. There are no other maps in the vast corpus of Maya literature and art.⁵⁶

In their book *2012 and the End of the World: The Western Roots of the Maya Apocalypse*, Maya specialists Matthew Restall and Amara Solari argue that explosion of interest and speculation about 2012 and supposed Maya prophecies tell more about modern western culture and its obsession with millennialism and apocalyptic fears than of ancient Maya beliefs.⁵⁷ The supposed Maya prophecies are in the end more an excuse than the basis of the 2012 phenomenon.

9. The interrelationship between the future and the past in Maya prophecies. One last question posed at the beginning of this article was: Did the Itzá Maya predict the fall of their own civilization? Did the Maya prophets in this case know the future, were they just lucky in their predictions, or are there other factors that we have not yet taken into account?

For the ancient Itzá Maya, time was not just a measure for history; it was also a "deterministic, shaping force in human experience."⁵⁸ Each k'atun was named after the day in the calendar in which it ended and had its own personality and character. Thus, each k'atun had its own idol, its own priest, and its own prophecy of events.⁵⁹ The names of the k'atun would repeat every 256 years. This was a large cycle made of 13 k'atuns.⁶⁰ The system was cyclical and the Maya believed that history was based on familiar recurring patterns and, therefore, "prophecy" was in fact "a reflection of events and trends of the past."⁶¹ This is why it is so difficult

⁵⁶ Restall and Solari, *2012 and the End of the World*, 44.

⁵⁷ For a popular introduction to apocalyptic views regarding the end of the world in different cultures from the ancient civilizations to our time, see Sharan Newman, *The Real History of the End of the World* (New York: Berkley, 2010). A more scholarly introduction is the massive book by Jerry L. Walls, ed., *The Oxford Handbook of Eschatology* (New York: Oxford University Press, 2007). For a popular introduction to the influence of John's Book of Revelation in western culture, see Jonathan Kirsch, *A History of the End of the World: How the Most Controversial Book in the Bible Changed the Course of Western Civilization* (New York: HarperOne, 2007).

⁵⁸ Stuart, *The Order of Day*, 17.

⁵⁹ Fray Andrés Avendaño y Loyola, *Relation of Two Trips to Peten, Made for the Conversion of the Heathen Itzaex and Cehache* (trans. C. P. Bowditch and G Rivera; Culver City, CA: Labrynthos, 1987), 39.

⁶⁰ Similarly, there was also a 260-day cycle. For an explanation of how these cycles worked, see Stuart, *The Order of Day*, 115–7.

⁶¹ Stuart, *The Order of Day*, 20.

to differentiate between history and prophecy in Maya thought and documents.

The ancient prophecies of the Itzá Maya said that the time they would abandon their gods would be the age Eight Ahaw (or 8 Ahaw). Since time was a deterministic force based on recurring patterns it is important to know about what had happened in the previous ages of Eight Ahaw. The events are quite revealing:

(Katun) 8 Ahau was when *Chichen Itzá was abandoned*. There were thirteen folds of Katuns when they established their houses at Chakanputun.⁶² (Emphasis mine.)

13 katuns later, we find a similar event. (I am not sure of the format) (Katun) 8 Ahau was when Chakanputun was abandoned by the Itzá men. Then they came to seek homes again. For thirteen folds of katuns had they dwelt in their houses at Chakanputun. *This was always the katun when the Itzá went beneath the trees, beneath the bushes, beneath the vines, to their misfortune.*⁶³ (Emphasis mine.)

13 katuns later, history repeats itself. (I am not sure of the format) (Katun) 8 Ahau was when *the Itzá men again abandoned their homes because of the treachery of Hunac Ceel*, because of the banquet with the people of Izamal. For thirteen folds of Katuns they had dwelt there, when they were driven out by Hunac Ceel because of the giving of the questionnaire of the Itzá.⁶⁴

It is quite fascinating to note that events and trends of history repeated itself from one era to the other. There was a pattern of rises and falls throughout the history of the Maya, and the priests who read the calendars and explained the meaning of the days in which they lived were in fact recognizing the pattern of history and applying it to the future. This means that the Maya were not masters of time but slaves of their own history. They were deterministic in their understanding of history. In some sense they fulfilled their own prophecies. Since many people as well as influential individuals believed in these "prophecies," they worked. Thus, it was not pure prediction that we find in these Maya documents but self-fulfilling prophecies where one would sufficiently believe the prophecy, which produces reactions, that ultimately fulfill the prophecy.

The ancient Mesoamericans were not different to us today in this respect. They had something similar to our horoscope. The Aztecs called

⁶² Ralph L. Roys, *The Book of Chilam Balam of Chumayel* (Washington, DC: Carnegie Institution, 1932), 136.

⁶³ Roys, *The Book of Chilam Balam of Chumayel*, 136.

⁶⁴ *Ibid.*, 137.

their 260-day cycle the *tonalpohualli*, which means "count of days." It contained the full array of numbers and day names that were the essential tool for the Aztec soothsayers to foretell the future. These manuals of fate were known as *tonalamatl* ("books of days") and day priests would use it to understand the supernatural forces and influences associated with a given day.⁶⁵ Every day (260 of them) was a *tonalli* that had positive and negative associations (sometimes both). The *tonalli* referred to the life force that was thought to reside in the head of the person. Once a baby was born, the child was ritually bathed and assigned his or her *tonalli*.⁶⁶ Fray Bernardino de Sahagún, a sixteenth-century priest who worked among the Aztecs and documented many aspects of the Aztec civilization, gives us an example:

[The day sign] One Flower . . . The man born upon it, they said, and it was averred, would be happy, quite able, and much given to song and joy: a jester, an entertainer. And it was said that women were great embroiderers. It was said that this sign was indifferent; that is to say, a little bad and a little good.⁶⁷

The *tonalli* readers were called *tonalpouhque* and were considered among the wisest and most important members of the community. Their prognostications penetrated all aspects of life. In fact, the day count has survived to the present time in remote areas of Mesoamerica. It is because of this belief on the power and nature of time itself that ancient Maya prophecies had such a power in the life of the Maya people. The horoscope has a similar power on those persons who believe in it. Charles Strohmer, a former practitioner of astrology, describes how this system works and why it has such powerful influence in some people but is uncompromising in asserting that astrologers do not and cannot know the future. Astrology is, instead, a shaping force that ends up governing the life of those who believe in it.⁶⁸

⁶⁵ For a brief description of how this system worked, see Stuart, *The Order of Day*, 119–129.

⁶⁶ If the day was bad, the rite could be delayed in a specific period of time, see *ibid.*, 120.

⁶⁷ Fray Bernardino de Sahagún, *The Florentine Codex* (transl. A. J. O. Anderson and C. Dibble; Santa Fe, NM: School of American Research and University of Utah Press, 1950–1982), 4:23.

⁶⁸ Charles Strohmer, *What Your Horoscope Doesn't Tell You* (Wheaton, IL: Tyndale House, 1988), 39–55.

5. Conclusion

The story of Monument 6 of El Tortuguero, Tabasco, Mexico, has been remarkable. The speculation of the Maya scholars who first translated it that it was prophetic in nature has produced wild speculations. Nevertheless, new discoveries and a better understanding of the Maya culture and worldview have thrown new light on the meaning and significance of this fascinating monument. Tablets found at Naranjo and La Corona, Guatemala, suggest that Monument 6 is not prophetic but dedicatory. Its purpose was to celebrate the completion of a new building and its permanence into the far future. Inscriptions at Palenque, Mexico, also refer to dates long after 2012 suggesting that the Mayas did not believe in an intervening destruction. The Maya believed that 2012 marked the end of a cycle that was part of larger cycles. In fact, Maya conceptions of time go deeper into the future and the past than modern science does.

There are, however, important similarities between Maya conceptions of the forces that shaped history and certain sectors of modern society. The Maya were deterministic in their worldview. For them, time was a force that shaped history and was largely out of the control of humanity. That ancient worldview mirrors current beliefs in astrology and/or other deterministic forces among different sectors of human society today. In the end, the way we read Tortuguero's Monument 6 may tell more about our beliefs and worldview than those of its creators.

CREATION BELIEFS, MORAL VIEW, AND SATISFACTION WITH LIFE

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This study analyzes the relationship of creation beliefs, moral view, and satisfaction with life of selected college students in the Philippines. The sample of the study consists of 395 college students of three Adventist colleges in the Philippines. The data shows that creation beliefs, moral view, and satisfaction with life have an influence on ethical perceptions and sexual behaviour.

Key Words: Creation, morality, satisfaction of life, doctrinal beliefs, biblical world view

1. Introduction

In every human being exists a set of beliefs of anything that she perceives and encounters in life experiences; and, within those seeds of beliefs are the inner resources that change one's perspective and practice in life either satisfactorily or unsatisfactorily. The Bible alludes to this when Paul speaks of the "transformation and the renewing of the mind for a reasonable and pleasing service to God" (Rom 12: 2-3). Paul referred to the transformation of beliefs, values, and practices to that which is moral or spiritual and would produce a meaningful reflection of life that is "holy and pleasing to God" (Rom 12:1-3).

At present, there is a global interest in the study of religiosity and personal well-being or life satisfaction. Koenig, McCullough, and Larson in their comprehensive review of 100 studies, found that 80% of these studies indicated a positive relationship between religious beliefs and life satisfaction.¹ One of the major conclusions drawn as cited by Kozaryn is that religious faith predicts life satisfaction as it creates purpose and

¹ H. Koenig, E. McCullough, & D. Larson, *Handbook of Religion and Health* (New York, NY : Oxford University Press, 2001).

meaning in life.² This conclusion shows that one's belief in the Creator-God promotes or creates a positive self-image and consequently makes the human being satisfied.

While several studies and religious literature attest to this finding, a more focused study describing the dimensions of religious faith was done by Kozaryn.³ His study shows that the social dimension of religious faith is related to life satisfaction rather than belief in God. He further explained that religiosity that promotes social capital tends to predict high in life satisfaction. On the contrary, any forms of religiosity that do not promote social capital do not predict high life satisfaction. Thus based on this conclusion, it appears that belief in a Creator-God does not promote life satisfaction. It appears that his conclusion is contradictory to that of the previous studies.

This apparent contradiction exists more specifically between the belief in the Creator-God and morality. Bergman cited the acclaimed Oxford zoologist Richard Dawkins when he argued that people who believe that life was created by God for a purpose are not only mistaken, but are ignorant.⁴ He further pointed out that "only the scientifically illiterate believe we exist for a higher purpose."⁵ The central message of Dawkins' writings is that belief in a Creator-God is useless because the universe has "no design, no purpose, no evil and no good, nothing but pointless indifference." Thus to him morality based on the belief in the Creator-God does not make sense. However, several studies have shown that belief in God as the Creator of the universe has a relationship to morality worldview.⁶

This study is an attempt to verify based upon existing theories and theological assumptions whether these three significant constructs are related to each other. Both experience and empirical research show that there are significant variables that contribute to life satisfaction of human beings, but very limited in relation to creation beliefs and moral worldview. Literature in the areas of theology and philosophy speak of religion as one of the significant factors in life satisfaction and morality, but no study has been done to establish the relationship of creation beliefs, moral view and satisfaction of life. There is a need to bridge the

² A. Kozaryn, "Religious Life and Satisfaction Across Nations," *Mental Health, Religion & Culture*, 13 no. 2 (2010): 155-169.

³ *Ibid.*

⁴ J. Bergman, "The Effect of Darwinism on Morality and Christianity."

⁵ *Ibid.*

⁶ B. Gillespie, "Christian World View;" R. Overman, "Comparing Origins Beliefs and Moral Views."

gap resulting from the contradicting results of previous studies and to verify its authenticity through empirical quantitative research.

The aim of this study, therefore, is to find out whether there is a relationship between creation beliefs, moral views, and satisfaction with life. If such relationship is established, the result may bridge the apparent gap on the issues mentioned above. The secondary purpose is to find out the trend of ethical and moral response to selected moral issues such as holding hands, kissing, heavy petting, and sexual intercourse in relation to creation beliefs and moral view. Understanding its trend will benefit educators and other academic stakeholders on what measures could be taken to help students understand the impact of creation beliefs and moral view in their lives.

2. Literature Review

2.1 The Importance of the Creation Account

The creation account is crucial to Christian theology, morality, and perspective in life. Much of our Christian teachings such as marriage, stewardship, environmental care, obedience, education, diet, and leadership are grounded on the historical accuracy of the creation story. Looking at the Genesis account, we can also find several issues significant and crucial to Christian practices. In it we can find morality, ethics, sexuality, responsibility, freedom, and other social issues. The creation story even helps one to see the significant meaning of life in relation to one's worth as created in the "image and likeness" of God (Gen 1:26). John T. Baldwin, Leonard R. Brand, Arthur Chadwick, and Randall W. Younker emphasizing its importance pointed out that

Special creation preserves the integrity of Scripture, safeguards the loving, praiseworthy character of God, establishes the reality of the atonement and redemption, and the soundness of the seventh-day Sabbath. These reasons, and more, show why a special creation worldview matters so deeply to the Adventist message and mission.⁷

King added that the creation account is important for various reasons.⁸ He pointed out that aside from the fact that the Bible has a clear position on it from the book of Genesis down to the book of Revelation—as the latter

⁷ J. Baldwin, L. Brand, A. Chadwick, and R. Younker, "Creation Wonders: Why special creation matters."

⁸ G. King, "Is biblical Creation important? Seven reason why it really does matter what we believe about Creation."

foreshadows creation, Jesus also explicitly referred to it in His teachings. Further, he added that biblical creation is crucial because it relates to one's salvation and it has implications when it comes to man's worship on the context of the Sabbath and to the very nature of God as the object of true worship.

2.2 Impact of Creation Beliefs

Dfish mentioned that what we believe about creation and God is going to have a major effect on every area of our Christian life and affect our relationship to God.⁹ This statement is affirmed by Matt Slik citing the study research of Barna that "about half of all adults (54%) claim that they make their moral choices on the basis of specific principles or standards in which they believe."¹⁰ He further pointed that "our beliefs about the absolute God, the creation of man in God's image, the fall of man, Christ the remedy of restoration and redemption, God's providence in creation and the Bible, all affect our behaviors and practice."

One of the devastating and damaging effects in one's belief system is the teaching of evolution. Zinke has pointed out that theistic evolution has embedded tremendously in the belief system of the society that puts the foundational teachings of the Bible such as the doctrine of the Sabbath and salvation, man's nature, the nature of God, sin and salvation, the law, the cross and Christ's ministry into a shadow of doubts.¹¹ Bergman after undergoing an objective critique on the acclaimed work of the famous zoologist Richard Dawkin of his best selling book, *The Selfish Gene*, pointed that Darwinism has had a devastating impact, not only on Christianity, but also on theism.¹² He noted that the widespread acceptance of Darwinism, the "Christian moral basis of society was undermined."

2.3 Significance of Creation Beliefs to Creation Worldview

Our belief system cannot be underestimated. It is crucial to human existence. Aside from it being a gift from God, it helps us determine our values and purpose in life. How this happens depends on how it

⁹ Dfish, "Does Creation Matter?"

¹⁰ Matt Slik, "What are some Christian Worldview Essentials?"

¹¹ E. Zinke, "Theistic evolution: Implications for the role of creation in Seventh-day Adventist Theology," in *Creation Catastrophe and Calvary*, (ed. John Baldwin, Hagerstown: Review & Herald, 2000).

¹² See Bergman, "The Effect of Darwinism on Morality and Christianity."

influences and controls one's view in life. Gillespie emphasizing its importance pointed out that beliefs along with attitudes and values shape one's worldview to the point that it becomes a signal tower for man.¹³ Further, worldview is the product or distillation of fundamental beliefs that helps "individuals interpret what they see and experience, and gives them direction for the choice they made."¹⁴ Thus, the comment of Kraft is noteworthy when he pointed out that through worldview, individuals will be able to explain things that are difficult to understand and enable human beings to integrate other aspects and issues and through this process may consequently affect his/her behavior.¹⁵

There is a need to strengthen the Christian worldview especially the worldview of the growing children. In the age of postmodernism, home and school should work together to design ways and means on how students can develop a stronger worldview. Religious activities and programs should help students in these matters. Brickhill found that the worldview of Middle-school students tends to be secular but that religious attendance has an impact on their biblical worldview.¹⁶ The students who graduated from Christian schools have a higher Christian worldview but not very significant.¹⁷ Students who spend time in reading the Bible, prayer, and meditation show the effects of these activities.¹⁸ Students who attend church activities regularly have a higher biblical worldview compared to those who do not participate in church activities.

This is not only true to religious activities and programs. There is a need to place the children in schools that emphasize a Christian worldview. Dewitt found that students who attended a public high school had a significantly weaker creation worldview than those who attended Christian high schools or home school.¹⁹ A school that promotes a Christian worldview will most likely produce students who are strong spiritually. Dewitt also found that students who attended seminars on biblical creation and were taught creation perspectives showed a much

¹³ Gillespie, "Christian World View."

¹⁴ D. Dewitt, S. Deckard, C. Berndt, M. Filakouridis, & T. Iverson, "Role of educational factors in college students' creation worldview."

¹⁵ C. Kraft, *Christianity in Culture* (New York; Orbs Books, 1996).

¹⁶ C. Brickhill, "Comparative Analysis of factors Influencing the Development of a Biblical Worldview in Christian Middle-School."

¹⁷ Ibid.

¹⁸ Ibid., 58

¹⁹ D. Dewitt, S. Deckard, & T. Henderson, "Impact of a young-earth creationist apologetics course on student creation worldview."

stronger creation worldview.²⁰ These results demonstrate the importance and the clear impact of teaching students from a biblical creation perspective.

2.4 Comparing Evolution and Creation Concepts

There is a danger that the biblical concept of creation and the theory of evolution are not clearly understood and differentiated by teachers and students. This results into a confused or garbled concept and a tendency to accept theistic evolution. Deckard in his study of the origin's beliefs of American teachers found that 44% of these teachers agree that evolution is a fact while 39% of his respondents do not agree.²¹ He also found that 69% of them believed that there is a Creator. The conclusion of the study seems to indicate that the respondents do not understand that the Bible and evolutionary theory are diametrically opposed. He also pointed out that this may be indicative of a theistic evolutionary tendency in the beliefs of these science teachers. This results in a confused theistic evolutionary tendency which is of concern to the creationist community since the potential for a mixed message is great.

Deckard in his study of high school students' attitude to creation and evolution compared their worldview on issues regarding education, God, Christianity, religion and social ethics.²² He found that students holding creation beliefs scored higher in issues related to education, religion, God, and Christianity but were "lukewarm" or passive when it comes to social issues such as homosexuality, capital punishment, pre-marital sex, and the definition of family. This study only proves that the Christian worldview has an impact on the religious, moral and social behaviors of students.

2.5 Creation Beliefs and Morality

The relationship of creation beliefs and morality is grounded both in theology and in empirical theory. It is evident from the Bible that when God's people turn their beliefs away from God, their moral behaviors also change. This happened in the case of the people of Israel who turned to other gods thus demonstrating a life practice and worship based on their beliefs of Baal. We have evidences from the Old and New Testament proving this fact. Philosophically, we can invoke the teachings of Plato

²⁰ D. Dewitt, S. Deckard, & T. Henderson, "Impact of a young-earth creationist apologetics course on student creation worldview."

²¹ S. Deckard, "Origins Beliefs Among American Science Teachers."

²² *Ibid.*

and Aristotle. Plato taught that a person needs to know so that he can be good. Aristotle on the other hand advocated that a person should reinforce knowledge with practice so that he can be good. Cotton mentions that the question of right or wrong has everything to do with the origin of our beliefs, and not just the substance of it.²³ No matter how a person is convinced of the accuracy and sincerity of his right decision, the true test is in the origin of that belief. God is the only universal and absolute origin to all morality.

2.6 Religious Beliefs and Life Satisfaction

Although there is no particular study to establish the relationship of creation beliefs and satisfaction in life, a number of researches correlating religion and life satisfaction positively have been reported. Considering that creation belief is part of the fundamental teachings of Christian religion, it is in order to look at religious beliefs as a jumping board to start our understanding of their relationship. In fact the early fathers devoted much of their time, teaching, and life to the Christian religious confession because they found meaning and satisfaction in living and in proclaiming its teachings. Looking at the influence of religious beliefs to life satisfaction, Koineg conducted a meta-analysis of 100 studies.²⁴ He reported that 80% of these studies have a significant positive relationship on religion as it gives meaning and purpose in life. This finding however was challenged by the recent study of Kozaryn.²⁵ In a more focused study, he categorized religious beliefs in God and religion as social capital. He found that religious beliefs in God do not give satisfaction to life but rather, it is the social aspect of religion that gives satisfaction. The result of this study poses a challenge to the biblical assumption that belief in God contributes to one's personal well-being. David expressed this when he said "he that keepeth the Law, happy is he" (Prov 29:18). Solomon expresses this when he declared that the true meaning of life is in God.

Since creation belief is a part of religious beliefs, it is noteworthy to look in a more generic way on how religious beliefs relate to life satisfaction. Wombles²⁶ citing Dorahy, Lewis, Schumaker, Akuamoah-

²³ Ray Cotton, "Morality Apart From God: Is It Possible?"

²⁴ Koineg, *Handbook of Religion and Health*.

²⁵ Kozaryn, "Religious Life and Satisfaction Across Nations."

²⁶ K. Wombles, "Spiritual Well-Being and Life Satisfaction When Part of a Diverse Religious Affiliation."

Boateng, Duze, and Sibiya²⁷ indicated that examination of cross-cultural groups and the intersection of religious beliefs and life satisfaction found that for men, religion seems to make a greater difference in life satisfaction than for women, although women may express greater religiosity.

3. Conceptual Framework

The study focused on three significant constructs namely, creation beliefs, moral views, and satisfaction in life. There are also demographic profiles that were factored in to test their contributions to the three main variables cited. Figure 1 depicts the relationship of these variables and the direction of the study. The figure assumes that there is a relationship between creation beliefs, moral view, and satisfaction with life. Further, the diagram hypothesizes that creation beliefs and moral views have influence on the moral view of the respondents in relation to holding hands, kissing, heavy petting, and sexual intercourse given the scenario of a couple who are in love but not married.

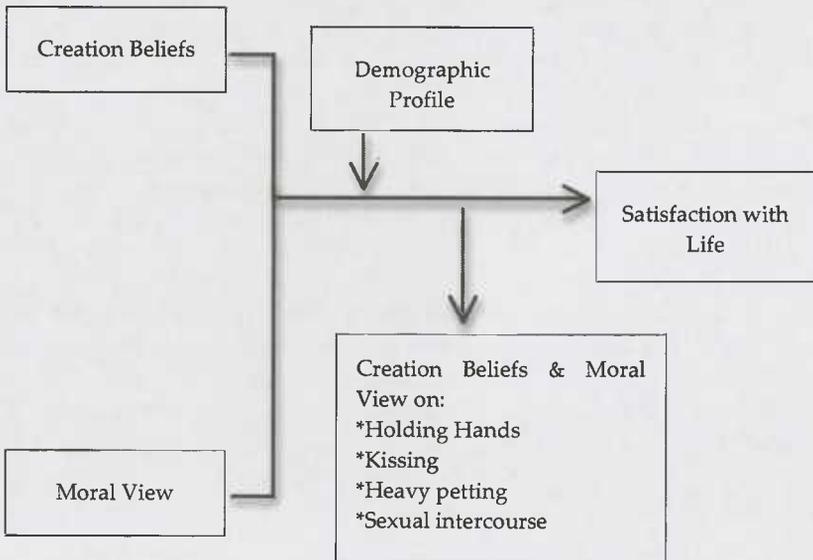


Figure 1.

²⁷ M. Dorahy, C. Lewis, J. Schumaker, R. Akuamoah-Boateng, M. Duze, M., & T. Sibiya, "A cross-cultural analysis of religion and life satisfaction. *Mental Health, Religion & Culture*," *Mental Health, Religion & Culture* 1/1 (1998): 37-43.

4. Statement of the Problem

The main problem addressed in this study was to determine the relationship of creation beliefs, moral views, and satisfaction with life among selected Adventist college nursing students in the Philippines. Secondly, the study was focused on finding the influence and trend of respondents' creation beliefs and moral view on the ethical issues of holding hands, kissing, heavy petting, and sexual intercourse, given a scenario of a couple who love each other but is not married.

4.1 Research Questions

In order to answer the main problem, the following research questions were answered:

1. What are the extent of the creation beliefs, moral views, and satisfaction in life of college nursing students in selected Adventist colleges/university in the Philippines?
2. Is there a significant relationship between creation beliefs and moral views of Adventist college students in the Philippines?
3. Is there a significant relationship between creation beliefs and satisfaction with life of Adventist college students in the Philippines?
4. What is the trend and influence of respondents' creation beliefs and moral view on the moral issues of holding hands, kissing, heavy petting, and sexual intercourse, given a scenario of a couple who love each other but is not married?

4.2 Hypothesis of the Study

This study was guided with four major hypotheses:

1. There is a significant relationship between creation beliefs and moral views.
2. There is a significant relationship between creation beliefs and satisfaction with life.
3. There is a significant relationship between moral views and satisfaction with life.
4. There is a significant trend of respondents' view of holding hands, kissing, heavy petting, and sexual intercourse in relation to creation belief and moral views

5. Methodology

The methodology used in this study is descriptive and correlational. The three variables which are creation beliefs, moral view, and satisfaction with life were described and compared using descriptive statistics of mean, percentages, and standard deviation. These three variables were also correlated to determine their relationships. Statistical test was done to find out the effect of creation beliefs to the moral worldview and life satisfaction of students. Multiple regression analysis was employed to determine the influence of creation beliefs and moral views on the issues of holding hands, kissing, heavy petting, and sexual intercourse.

6. Population and Samplings

The respondents of this study are the college nursing students in the Philippines who were enrolled in school year 2011-2012. There were 405 students who willingly participated in filling out the survey questionnaires but only 395 were used due to incomplete responses. To have representation from other SDA colleges/university in the Philippines, three colleges/universities were chosen from the three major geographical areas of the Philippines-Luzon, Visayas, and Mindanao. Purposive sampling was done in each Adventist college /university in the Philippines in respect to their year level. The choice of the sample was on the basis of the following assumptions:

- a. Nursing students have more exposure to teachers who are more oriented to the theory of evolution.
- b. These students are also more immersed to textbooks/and other sources with evolution concepts.
- c. These students are presumed to have been raised in Adventist families and have attended Adventist schools, therefore, are presumed to understand the teachings of the Bible especially on creation and morality based on the scripture.

6.1 Instrumentation

There were two instruments used in collecting the data. One is an integrated questionnaire used by the Institute for Creation Research which covers both creation beliefs and moral views. The Satisfaction in Life Scale was used in measuring life satisfaction. All of these questionnaires were used with permission.

6.2 Validity and Reliability of the Instrument

The instrument on Creation beliefs and moral views was validated by Overman.²⁸ He reported that there were creation scientists and atheists who looked into the content and face structure of the instrument. Their inputs were integrated into the final instrument before the collection of the data. The reliability test was also done through field test of 129 respondents. Overman reported a fair coefficient alpha as the reliability score of the instrument.

The reliability and validity of the Satisfaction with Life Scale was examined in this study. Diener, Emmons, Larsen, and Griffin reported the psychometric property of the instrument. Based on the test-retest of 176 undergraduate psychology students, the correlation coefficient was 0.82 and coefficient alpha was 0.87.²⁹ In this present study, the instrument was submitted to the panel of experts to both creation teachers and theologians coming from Adventist University of the Philippines (AUP) and from Adventist International Institute of Advanced studies (AIIAS). All the suggestions and comments were considered in the final revision of the instrument. The reliability of the instrument was done through pilot test of 30 nursing students. The coefficient alpha for the joint instrument of creation beliefs and moral views was 0.76 and the Satisfaction of Life Scale was 0.73. Although the coefficient alpha was marginal, it is still considered valid and reliable. Reinard mentioned that a fair measure should have at least 0.70 reliability.³⁰

For creation beliefs and moral view instrument, a modification was done due to cultural reason as suggested by the panel of experts. Instead of retaining the range of agreement from "strongly agree" to "strongly disagree", the order was changed from "strongly disagree" to "strongly agree." This however does not affected the interpretation of the data.

6.3 Scoring of Instruments

For Creation Beliefs and Moral View scales a scoring procedure was done in order to observe the full range of creation beliefs and moral view. Since the creation beliefs scale is a combination of both creation and evolution items reversing of both negative and positive items was done. By way of explanation, those with a pure creationist belief would answer with a "5"

²⁸ R. Overman, "Comparing Origins Beliefs and Moral Views."

²⁹ E. Diener, R. Emmons, R. Larsen, and S. Griffin, "The Satisfaction with Life Scale," *Journal of Personality Assessment* 49, 1(1987): 72.

³⁰ J. C. Reinard, *Introduction to Communication Research* (Madeson, USA: Brown and Benchmark, 1994).

(strongly agree) to the creation oriented questions and with a "1" (strongly disagree) to the evolution oriented questions. Since there are 4 of each type of questions (creation oriented or evolution oriented), the average would be a "3." Therefore, differentiation between the two is made by reversing the answers to the creation oriented questions (#4,8,12,16). In so doing, those with a pure creation orientation will have an average score of "5" and those with a pure evolution orientation will have an average score of "1." The same scoring procedure was done for Moral View Scale in order to get the full range of those who have a positive or negative moral view.

6.4 Statistical Tests Used

For research questions that deal on descriptive analysis, percentages, mean, and standard deviation were used. The verbal interpretation code was also used to determine the extent and levels of each item. The means of 1-2.49, (verbally interpreted as "strongly disagree" to "disagree") for evolution beliefs and negative moral view items means an orientation towards evolution or negative moral view. From 2.50-3.50 is considered as uncertain, or undecided of either response to creation/evolution or positive/negative moral views items. From the means of 3.51- 5.00, (from agree to strongly agree) for creation beliefs and positive moral view means an orientation towards creation beliefs or positive moral view. This criterion was also used to determine between a satisfactory and unsatisfactory life.

For research questions that deal on relationships, Pearson Product-Moment correlation was used. To determine the influence and trend of relationships of variables, multiple regressions was used with curve fit to help visualize the trend of variables being considered.

7. Presentation of Findings and Analysis

The findings of the study are presented based on the sequence of the research questions. However, the demographic profiles of the students are also presented to serve as a complimentary background for the rest of the findings.

7.1 Demographic Profiles

1. Gender. Of the 395 college students who responded to the instruments, the majority were female (64.7%) compared to male respondents (35.3%).

2. Educational Background. The respondents' educational background was varied. Only 48.8% were able to study in Adventist elementary schools, and the remaining 51.2 % studied in both public and private schools. In their middle school or high school education, only 55.6% were able to attend Adventist Academies, while 44.4% studied in both private and public schools.
3. Age. Majority of the respondents were between the ages of 17-25 years old (93.6%). It was found that the respondents were spread from first year to third year in their college education.
4. Religious Life and Church Involvement. A bigger portion of the respondents indicated that they spend at least 15 minutes a day in personal prayer and meditation (77.3%) and reading their Bible (79%). Further, about 76.2% indicated that they are mere members of the Seventh-Day Adventist church while 23.8% are officers.
5. Source of Creation Beliefs. Respondents indicated that they learn their creation beliefs from different sources namely, parents (67%), school (16.5%), church (16.2%), and from self-study (0.3%).
6. Source of Morality View. The sources of the respondents' moral world view were from the following major sources; from parents (47%), church teaching (22%), school (18%), and from other sources (13%).
7. Exposure to internet and media. About 51.6% indicated that they are investing an average time of 2-3 hours a day in the internet and other media entertainments. The remaining 49.4 % indicated that they spend 30 minutes to one hour in the internet and TV entertainments.
8. Effect of Creation Beliefs. The respondents indicated that their creation beliefs give them meaning and satisfaction in life (53.2%), give them hope of the future (40.3%), and only about 4.8% indicated that it does not make any difference in their lives.

7.2 Descriptive Findings Based on Research Questions

Research Question 1: Extent of creation beliefs, moral views, and life satisfaction. To determine the extent of creation beliefs, the means and standard deviation with the verbal interpretation code were used.

a. Extent of creation beliefs

Figure 2 describes that the first five items bear the responses ranging from "agree" to "strongly agree" with some variability for items 2, 4, and 5 indicating that the respondents were not homogenous in their perception of these items. It is also noted that in item 5, the respondents manifested agreement of an item that bears evolution concept. Further,

items 6-8 were answered "uncertain" or indicating that the respondents were uncertain of their response.

The overall mean ($M = 3.83$, $SD = 0.53$) indicated that the respondents were marginally oriented towards creation beliefs although in some items they indicated some uncertainties evolution issues.

Items	Mean	Std. Deviation	Verbal Interpretation
1. Stories in Genesis ...are historically true	4.5864	.76830	Strongly Agree
2. Eternal Creator made the physical Universe	4.3559	1.09362	Agree
3. Space, time, and matter were created.	4.2814	.97179	Agree
4.. Major kind of plants and animals were made essentially as they appear today	3.9831	1.10182	Agree
5. Biological life developed by a series of natural process	3.7695	1.11319	Agree
6. Theory of evolution is a fact	3.2441	1.17576	Undecided
7. Life evolved from simple to complex	3.2407	1.49137	Undecided
8. Evolution is neither a theory nor fact	3.1525	1.53877	Undecided
Valid N (395)			

Legend: (1) 1-1.49 "Strongly Disagree" (2) 1.50-2.49 – "Disagree" (3) 2.50-3.50 "Uncertain" (4) 3.51- 4.49 "Agree" (5) 4.50- 5.00 "Strongly Agree"

Figure 2

b. Extent of moral view

The overall mean of moral view ($M = 3.63$, $SD = 0.52$) is in the marginal range of "agree" which can be interpreted that the respondents tend to have marginal positive moral views. However, looking at Figure 3, two important things can be observed. First, respondents tend to demonstrate agreement on items that have pragmatic or relative characteristics (items 3, 5, and 6). Second, there are also items where the respondents tend to be uncertain of their responses on the moral issues presented. This is indicated in the marginal "low agreement" and also on the "undecided" items (items 6-10).

Items	Mean	Std. Deviation	Verbal Interpretation
1. Bible as standard of truth	4.7288	.68090	Strongly Agree
2. Christ is standard by which all truth is Measured	4.6814	.71914	Strongly Agree
3. The right of a person in a given situation may not be right for another person who encounters the same situation.	4.1356	.88174	Strongly Agree
4. Social drink of alcohol is always wrong	3.8746	1.30196	Agree
5. Absolute truth is that which is right for all people, in all places, at all times	3.6678	1.21140	Agree
6. People define truth in different ways and still be correct	3.6610	1.08500	Agree
7. Mercy killing is wrong	3.5390	1.22516	Agree
8. Whatever feels or seems right as long as it does not harm people is the best philosophy	3.3797	1.36212	Undecided
9. Lying is sometimes necessary	3.2983	1.16897	Undecided
10. In real life there is no absolute moral Authority	2.8102	1.25542	Undecided
Valid N (395)			

Legend: (1) 1-1.49 "Strongly Disagree" (2) 1.50-2.49 - "Disagree" (3) 2.50-3.50 "Uncertain" (4) 3.51- 4.49 "Agree" (5) 4.50- 5.00 "Strongly Agree"

Figure 3

c. Extent of Life Satisfaction

The overall mean of satisfaction with life of the respondents is marginally low ($M=3.70$, $SD=0.982$). It falls under the range of "agree" which indicated that they are marginally satisfied. Looking however at item 5, in Figure 4 shows that the respondents seemingly are in doubt and uncertain of their responses.

Items	Mean	Std. Deviation	Verbal Interpretation
1. In most ways my life is close to my Ideal	4.0068	1.20089	Agree
2. The conditions of my life are Excellent	3.7390	1.18509	Agree
3. I am satisfied with life	3.7322	1.23421	Agree
4. So far I have gotten the important things I want in life	3.5593	1.16162	Agree
5. If I could live my life again, I would change almost nothing	3.4812	2.60344	Undecided
Valid N (395)			

Legend: (1) 1-1.49 "Strongly Disagree" (2) 1.50-2.49 - "Disagree" (3) 2.50-3.50 "Uncertain" (4) 3.51- 4.49 "Agree" (5) 4.50- 5.00 "Strongly Agree"

Figure 4

Research Question 2: Relationship of creation beliefs and moral view. In this research question, a null hypothesis was tested stating that "there is no significant relationship between creation beliefs and moral views." Using Pearson Correlation, the result shows that there is a significant correlation between creation beliefs and moral views ($r = 0.465$, $p = 0.000$). As shown in Figure 5, the data shows that as beliefs tend towards biblical creation, the moral views also tend to be positive.

The influence of creation beliefs to moral view was also determined. Using multiple regressions it was found that the creation beliefs ($r^2 = .221$, $p = .000$) can account or explain 22% of the variance. This indicates that there are 88% of the variables that outside from the realm of this study that creation beliefs can not account.

Variables		Creation Beliefs	Moral View
Creation Beliefs	Pearson Correlation	1.000	.465**
	Sig. (2-tailed)		.000
	N	395.000	395.00
Moral View	Pearson Correlation	.465**	1.000
	Sig. (2-tailed)	.000	
	N	395.000	395.00

**Correlation is significant at the 0.001 level (2 tailed)

Figure 5

As shown in Figure 6, the beta shows that the relationship between the significant predictor of moral view was positive. It implies that the more the beliefs tend to biblical creation the more the moral view becomes positive. On the basis of the medium effect size the null hypothesis was rejected.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.042	.087		12.007	.000
Creation Beliefs	.442	.042	.465	10.408	.000

a. Dependent variable: Moral View F=108.328 Sig. .000 R² =0.221

Figure 6

Research Question 3: Relationship of creation beliefs and satisfaction with life. To answer this research question a null hypothesis was tested stating that "there is no significant relationship between creation beliefs and satisfaction with life." Using Pearson Correlation as the statistical test, the test shows as reflected in Figure 7 that there is a significant relationship between creation beliefs and satisfaction with life $r=0.146, p=0.012$). The data shows that as beliefs tend towards creation, satisfaction with life also increases.

Variables		Creation Beliefs	Moral View
Creation Beliefs	Pearson Correlation	1.000	.146*
	Sig. (2-tailed)		.012
	N	395.000	395.00
Moral View	Pearson Correlation	.146*	1.000
	Sig. (2-tailed)	.012	
	N	395.000	395.00

**Correlation is significant at the 0.05 level (2 tailed)

Figure 7

Looking at the influence of creation beliefs on satisfaction with life the coefficient of determination was taken. It was found that creation beliefs ($r^2=0.021$, $p=0.012$) can explain 0.021% of the variance. The beta as indicated in Figure 8 reveals that creation beliefs are positively related to satisfaction with life which implies that as creation beliefs increase an indication of a more satisfied life is evident.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.825	.374		7.549	.000
Creation Beliefs	.244	.097	.146	2.521	.012

a. Dependent variable: Life Satisfaction F 6.354 Sig. .012 R² 0.021

Figure 8

On the basis of the result of the statistical test, the null hypothesis was rejected though the effect size is relatively small.

Research Question 4: Relationship of Moral views and Life Satisfaction. To answer this research question, a null hypothesis was tested stating that "there is no significant relationship between moral views and satisfaction with life." Using Pearson-Moment Correlation, the result shows in Figure 9 that there is no significant relationship between moral views and satisfaction with life ($r=0.019$, $p=0.746$). Looking at the contribution of moral views on satisfaction with life ($r^2 =0.003$, $p= 0.254$), it shows that moral views do not influence satisfaction with life.

Variables		Creation Beliefs	Moral View
Creation Beliefs	Pearson Correlation	1.000	.019
	Sig. (2-tailed)		.746
	N	395.000	395.00
Moral View	Pearson Correlation	.019	1.000
	Sig. (2-tailed)	.746	
	N	395.000	395.00

Figure 9

On the basis of the of the effect size, the null hypothesis was accepted. Moral view factor was not able to account for the projected relationship on the factor of satisfaction with life.

Research Question 5: In terms of creation beliefs and moral views, results show that there is a trend of the respondents' view on the stages of moral acceptability of holding hands, kissing, heavy petting, and sexual intercourse for two people who love each other but are not married. To answer this research question, the mean of the creation beliefs and moral views were correlated with factors of holding hands, kissing, heavy petting, and sexual intercourse.

a. Creation beliefs, holding hands, kissing, heavy petting and sexual intercourse: Using Pearson-Moment correlation in testing the four sub-null hypotheses, the following results are indicated: Creation beliefs are not related with holding hands ($r=-0.091$, $p=0.072$) and kissing ($r=0.004$, $p=0.936$). The null sub-hypothesis on these variables are accepted. However, for heavy petting ($r=0.134$, $p=0.008$), and sexual intercourse ($r=0.246$, $p=0.000$) a positive relationship was found. Creation beliefs relationship to heavy petting, and sexual intercourse indicates that as respondents' beliefs tend to be more in creation, heavy petting and sexual intercourse are more viewed as morally unacceptable. The two null-sub hypotheses were rejected on these variables.

b. Moral view, holding hands, kissing, heavy petting, and sexual intercourse. Pearson Product -Moment correlation was used to determine the relationship of the variables (moral view with holding hands, kissing, heavy petting, and sexual intercourse) being tested. Four sub-null hypotheses were tested to determine the relationship. Of all the four variables tested, only one variable (holding hand) was not statistically related to moral view ($r= -.53$, $p=.290$). The sub-null hypothesis is accepted on this variable. The three variables that were found statistically significant were kissing ($r =.101$, $p=.044$), heavy petting ($r= .203$, $p=.000$), and sexual intercourse ($r=.225$, $p=.000$) as positively related to moral view.

The data appears that as moral view of the respondents tends to be more positive, the more the respondents considered those acts of kissing, heavy petting, and sexual intercourse as morally unacceptable. Thus, based on the effect size, the three sub null hypotheses were rejected.

8. Discussion of The Findings

8.1 Creation Beliefs and Moral View

The extent of the creation beliefs of Adventist college students is marginally low and some responses are inclined to evolution concepts. This is surprising for respondents who are reared in Christian homes and are educated in Christian schools. However, based on this present study, there are internal factors that may explain these marginal and uncertain responses. In this study, about 50% of the respondents indicated that they studied in public and private non-SDA schools in both elementary (51.2%) and high school (48.8%). In the Philippine context, some of the textbooks used in the schools were adapted from some science textbooks coming from the western countries where the concepts of evolution are freely integrated. Besides, not all teachers in the Philippines in both public and non-SDA private schools have a clear and basic understanding about the concept of evolution and creation.

In this study the respondents have also indicated (67%) that the major source of their understanding about creation is through their parents. In this aspect, it is possible that some parents were limited in conveying the authentic creation teaching. The parents may also have limited understanding about the issues of creation and evolution that it affected the learning of their children. The above reasons may explain why they have marginal orientation towards Biblical creation beliefs. It may also explain why a number of the respondents expressed uncertainty in their responses to the creation and evolution issues. Thus, their foundational education in the home and the school may have contributed to their understanding and distinguishing between creation and evolution.

The case of college student's moral view may be attributed to the same factors that affected creation beliefs. However, there are two important factors in this study that might have further contributed to the marginal and apparent confusion in regards to the respondents' moral responses. One is the genesis where they learn what is right and wrong. In this study, the respondents indicated that they learn the evils of stealing, lying, and other moral virtues from their parents (41%), from the church (21%), from the school (25%), and from others (13%). It is possible that these sources of moral learning and skills might have failed to teach the

right implication of morality to the respondents. The other factor is probably external in nature. Respondents were asked the number of hours they invested in internet use and television viewing. Fifty one percent (51.6%) indicated that they spend 2-3 hours a day using the internet and TV viewing compared to 10-15 minutes prayer (75.7%) and Bible reading (75.5%). The influence of internet issues and media advertisement contrary to the Bible might have eclipsed the moral standard taught to them by their parents and their church.

8.2 Relationship of Creation Beliefs and Moral View

The relationship of creation beliefs and moral view of college students is positive ($r = 0.471$). This means that as the trend is toward creation beliefs, the moral views of the respondents tend to be positive. Though the data was taken from a different age group in a different context, Overman had similar result showing a high positive relationship between the origin beliefs and moral view of teachers.³¹ Although the coefficient of correlation ($r^2 = 0.223$, $p=0.000$) is not so high, yet creation beliefs can reliably account 22% of the variance of the relationship. This means that creation beliefs influence the positive moral view of the respondents ($F = 7.62$, $p=0.000$).

The influence of creation beliefs may be explained by the study of Barna as cited by Slick. Barna in his study reported that "about half of all adults (54%) claim that they make their moral choices on the basis of specific principles or standards on which they believe. Other common means of making moral choices include doing what feels right or comfortable (24%), doing whatever makes most people happy or causes the least conflict (9%), and pursuing whatever produces the most positive outcomes for the person (7%)."³² Slick further pointed out that Christian worldview such as existence of an absolute Creator God, man's nature, the fall, Jesus Christ, redemption of sin, the Bible as the authentic word of God have impact on a human being's choice and behavior.³³ Rasi also pointed out that the home, the church, and the school with their multiple

³¹ R. Overman, "Comparing Origins Beliefs and Moral Views,"

³² G. Barna, "A Biblical Worldview Has a Radical Effect on Person's Life," from <http://www.barna.org/barna-update/article/5-barna-update/131-a-biblical-worldview-has-a-radical-effect-on-a-persons-life> (October 10, 2011).

³³ Slick, "What are some Christian Worldview Essentials?"

personal interactions provide the most powerful influences in developing and nurturing a Christian worldview in children and youth.³⁴

This finding is grounded Biblically. Referring to the importance of cognitive belief system, Solomon said, "For as he thinketh so he is" (Prov 23:7). The verse indicates that man's life is influenced by what is in his mind. The mind is the center where man processes knowledge and beliefs about God. Paul elucidated this point when he admonished the Christians in Philippi to have the "mind of Jesus" (Phil 2:5). He further encourages them that "whatsoever is true, honest, just, love and of good report should always be considered in their hearts and minds through Jesus Christ" (Phil 4:7-8). Positive moral behavior depends upon a transformed belief system. Paul referred this to the "renewing of the minds" (Rom 12:2) which will result in good, acceptable, perfect, and reasonable service to God (Rom 12:1-2).

8.3 Relationship of Creation Beliefs and Satisfaction With life

The effect size of the positive relationship between creation beliefs and satisfaction with life is small. The relationship may be attributed to chance and may be considered statistically unreliable. Although the relationship is small, it is supported with the findings of Koenig in their meta analysis of over 100 studies.³⁵ Kozaryn in his recent findings provides an interesting explanation. He found religious beliefs in relation to social capital as a predictive factor to satisfaction with life but religious beliefs devoid of social capital does not relate to satisfaction with life.³⁶

However, it is worthy to note in this study that when the respondents were asked: "What are the effects of creation beliefs in their life?" they indicated that it gives meaning and satisfaction in their life (53%). They further mentioned that it provides hope of their future (40%). Only 4.8% indicated that it does not make any difference. This indicates that creation beliefs as perceived by the respondents, is a potential variable for promoting satisfaction with life.

This finding appeared to have support from the word of God if happiness is understood as the same with satisfaction with life. In this issue, Kozaryn mentions that happiness can be equated to satisfaction

³⁴ Humberto M. Rasi, "Worldviews, Contemporary Culture and Adventist Thought," from http://fae.adventist.org/essays/26Bcc_001-015.htm; and Christ in the Classroom www.aiaas.edu/ict/vol_26B/26Bcc_001-015.

³⁵ Koenig et. al, *Handbook of Religion and Health*.

³⁶ Kozaryn, "Religious Life and Satisfaction Across Nations."

with life on the basis that feelings serve as a fundamental ground for the specific act of satisfaction.³⁷ Happiness to him is the state, and satisfaction is the specific act. In line of this understanding, David (Ps 144:1-15) mentions that happiness is to believe in God's creative acts and in Him as the Creator God, who can provide protection, peace, and salvation to His people. And to those people who believe on the Lord, he declared "happy is that people whose God is the Lord" (Psalm 144:15). This belief and faith commitment has to be specifically expressed by believing His word and His commandments for "he that keepeth the law, happy is he" (Prov. 29:18). Here, happiness is equated to keeping the will of God expressed in one's personal belief and advocacy. Probably the respondents' responses were influenced more by the idea of believing and keeping the law as the expressed will of God necessary to salvation. This is foundational to man's satisfaction or happiness, for nothing else matters except doing the will of God.

8.4 Relationship of Moral View and Satisfaction With life

The result of the moral worldview as having no relationship with life satisfaction indicates that the respondents' view of happiness or satisfaction is not influenced by moral views. While morality in the sense of doing good to the highest good of others in the context of the Word of God is considered as an investment in the bank of happiness, its mere moral view does not influence happiness or satisfaction. Happiness in essence is not only a product of moral knowing, it must transcend to transforming belief, spiritual commitment and moral doing. This is made clear by King Solomon when he said "he that keepeth the law happy is he" (Prov 29:18).

8.5 Creation Beliefs and Moral View on Kissing, Holding Hands, Heavy Petting, and Sexual Intercourse

The significant relationship of creation beliefs with heavy petting and sexual intercourse indicates that as the respondents adhere more to creation beliefs, the more they view the acts of petting and sexual intercourse as immoral acts. This finding is concurred by the study conducted by Barna.³⁸ He found that a biblical worldview makes a difference in that it influences the way human beings think and behave.

³⁷ Kozaryn, "Religious Life and Satisfaction Across Nations."

³⁸ Barna, "A Biblical Worldview Has a Radical Effect on Person's Life."

He further found that those with a biblical worldview possess radically different views on morality, held divergent religious beliefs, and demonstrated different levels of choices. Barna further said,

People's views on morally acceptable behavior are deeply impacted by their worldview. Upon comparing the perspectives of those who have a biblical worldview with those who do not, the former group were 31 times less likely to accept cohabitation (2% versus 62%, respectively); 18 times less likely to endorse drunkenness (2% versus 36%); 15 times less likely to condone gay sex (2% versus 31%); 12 times less likely to accept profanity 3% versus 37%); and 11 times less likely to describe adultery as morally acceptable (4% versus 44%).³⁹

While biblical worldviews have impact on morality, evolution also has an impact on morality. Catchpoole cited a survey conducted by the Australian National University.⁴⁰ The survey showed that people who believed in evolution were more likely to be in favor of premarital sex than those who rejected Darwin's theory. Another issue which was highlighted was that Darwinians were reported to be 'especially tolerant' of abortion.

8.6 Moral View on Holding Hands, Kissing, Heavy Petting, and Sexual Intercourse

Although the finding of Overman seemed to be different with the present finding considering that only few of his respondents viewed holding hands and kissing as morally unacceptable, the present findings reveal that more than half of the respondents viewed kissing and holding hands as morally unacceptable.⁴¹ This conflicting finding could probably be explained on the basis of the context of the respondents. The survey was taken from a school where the emphasis of morality was heavily founded on the Bible. Most of the respondents were coming from a conservative Christian environment where holding hands and kissing is viewed as morally unacceptable.

The relationship of moral view to holding hands, kissing, heavy petting and sexual intercourse indicates that moral knowing is important. Right moral view will result into desirable moral choices. Lickona concurred with the theory of Kolberg and Fowlers stating that moral

³⁹ Ibid.

⁴⁰ D. Catchpoole, "Morals Decline Linked to Belief in Evolution," from <http://creation.com/morals-decline-linked-to-belief-in-evolution> (October 10, 2011)

⁴¹ Overman, "Comparing Origins Beliefs and Moral Views."

development involves moral knowing.⁴² To him moral character consists of knowing what is good, desiring the good, and doing the good. This indicates that a person needs to have a basic knowledge of what is morally appropriate to convict and to guide him/her of his/her moral choices. Moral views that are biblically grounded have more impact on moral practices.

9. Conclusions

On the basis of the findings of the study, the following conclusions are presented:

1. The extent of creation beliefs and moral views of the respondents were marginally low with some items manifesting "uncertainty" of responses. Educational orientation, parental teaching, and internet/media entertainments as indicated by the respondents are hinted to be among the significant contributing factors. Furthermore, the extent of satisfaction with life is marginally low.
2. A significant relationship between creation beliefs and moral view was found with reliable effect size. This study confirms previous theories that creation worldview affects the moral behavior, attitude, and beliefs of people.
3. A significant relationship of creation beliefs and satisfaction with life was found with small effect size which can be attributed to chance. However, the respondents confirmed such a relationship when they indicated that creation beliefs give them meaning, satisfaction, and hope for the future.
4. Moral view and satisfaction with life were not statistically related. Other factors outside the realm of the study may have contributed to the failure of making such a significant relationship.
5. Creation beliefs are related to the respondents' moral view on the ethical acts of heavy petting, and sexual intercourse on the scenario of a couple who love each other but is not married. Although holding hands and kissing were not statistically related, the trend shows that creation beliefs have the strong tendency to influence moral decisions and actions.
6. Moral view is related to moral act of kissing, heavy petting, and sexual intercourse. It indicates that moral knowledge influences moral decision and actions.

⁴² T. Lickona, *Educating for Character: How Our School Can Teach Respect and Responsibility* (New York: Bantam Books, 1991).

7. The study achieves the conceptual framework that there is a significant relationship with creation beliefs and moral worldview; and creation beliefs with satisfaction with life. It was able also to hypothesize that creation beliefs and moral view influence the moral perception of the respondents in relation to moral issues they face in life.

10. Recommendations of the Study

The following recommendations are generated from the findings of the study to encourage researchers, religious practitioners, and other sectors of the academic community to verify and confirm the present findings to ensure better and improved research outputs.

To researchers:

1. That a more valid and reliable instrument be developed to ensure better and reliable research outputs.
2. That a more randomized sampling procedure be employed to ensure more and wider representation from the population.
3. That replication of the study be conducted in a different context to verify the consistency of the findings.

To religious practitioners:

1. Pastors and church leaders should employ mechanisms on how to comprehensively teach the creation doctrine to church members especially to parents who are considered as a major source of learning.
2. Pastors and church leaders should integrate creation worldview in youth retreats or seminars considering that creation beliefs shape moral view and influence ethical decisions regarding moral issues.

To the academic community:

1. Curriculum designers should integrate the course on creation science from elementary to college to ensure deep and comprehensive understanding about the concept of creation.
2. Educators and school leaders should not only demonstrate moral competence in teaching morality but it should be manifested through the profession of their lives through modeling.
3. The school should initiate in developing textbooks or syllabi that incorporate biblical creationism.

WHY SERVANT LEADERSHIP? ITS UNIQUENESS AND PRINCIPLES IN THE LIFE OF JESUS

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Servant leadership is one of the major topics in Christian leadership education and training programs. Servant leadership is not a matter of knowledge and cognition, or of skills, traits, and theories, but of practice and action. The life of Jesus epitomizes the true and perfect example of servant leadership. In the Christian community, all effective leaders must strive to emulate the attitude of Jesus, whose great love motivated Him to unselfishly give up everything to serve human beings. This article holds to the premise that if the principles of servant leadership demonstrated in the life of Jesus are practiced in the life of human leaders, the church will be positively changed and effectively achieves its mission of saving souls.

Key Words: Attitude, Humility, Leadership, Love, Obedience, Relationship, Servant Leadership

1. Overview

What is leadership? This is an enigmatic question. While leadership is considered a popular topic in many organizations, its role and function in the organization is not fully understood. Strange to say, numerous articles, surveys, and books have been published, but still, the ambiguity of leadership exists and no agreement on its definition has been reached. James McGregor Burns states, "Leadership is one of the most observed and least understood phenomena on earth."¹

The definition of leadership in church organizations as well as its types is even more difficult and complex. Thus, this study will first give a description of the importance of leadership, and then attempts to provide a definition with special regard to the church. The study will suggest the

¹ James MacGregor Burns, *Leadership* (New York, NY: Harper & Row, 1978), 2.

best possible form of church leadership drawn from the example of Jesus Christ. Finally, the characteristics of servant leadership are described.

2. Importance of Leadership

Leadership is a common theme seriously considered in every organization. This phenomenon is also recognized in the church. Numerous theories, principles, and services regarding leadership have emerged and faded away, but the investigation of true leadership is ongoing. There are libraries full of books and articles on leadership, but true leaders are succinctly scarce. Marshall Loeb reports in the *Fortune* magazine, "What worried them the most was not production or profits or competition, but this: Where have all the leaders gone?"² Aubrey Malphurs and William Mancini quoted James Bolt, the founder of the Executive Development Associates: "The dearth of leadership is apparent throughout society. No matter where we turn, we see the severe lack of faith in the leadership of our schools, religious organizations, and governments."³

George Barna, with 15 years of diligent investigation, concludes that there is indeed a lack of leadership. He admits, "I have reached several conclusions regarding the future of the Christian Church in America. The central conclusion is that the American church is dying due to a lack of strong leadership. In this time of unprecedented opportunity and plentiful resources, the church is actually losing influence. The primary reason is the lack of leadership. Nothing is more important than leadership." Therefore "unless we can develop effective leadership within the church, we are not doing all we have been called by God to do to effectively and obediently serve Him."⁴

John Maxwell points out the importance of leadership: "The strength of any organization is a direct result of the strength of its leaders. Weak leaders equal weak organizations. Strong leaders equal strong organizations. Everything rises and falls on leadership."⁵

² Marshall Loeb, "Where Leaders Come From," *Fortune* 12 (Sept. 1994): 24.

³ Aubrey Malphurs and William F. Mancini, *Building Leaders: Blueprints for Developing Leadership at Every Level of Your Church* (Grand Rapids, MI: Baker Books, 2004), 37.

⁴ George Barna, *Leaders on Leadership* (Ventura, CA: Regal, 1997), 18.

⁵ John C. Maxwell, *Developing the Leaders Around You: How to Help Others Reach Their Full Potential* (Nashville, TN: Thomas Nelson, 1995), 6.

2.1 Definitions and Its Basic Concept

Leadership, generally speaking, suggests movement and progress and can be described by words such as change, influence, movement, growth, or journey. This paper introduces two definitions of leadership. First, Peter Northhouse defines leadership as “a process whereby an individual influences a group of individuals to achieve a common goal.”⁶ The determination of leadership as a process is to achieve the goal of the organization. Northhouse envisions the symbiotic relationship between the leader and his followers or subordinates. Consequently it is the interactive event that occurs in the group through mutual reactions to one another.

Second, from the Christian viewpoint, Malphurs and Mancini define a leader as “a servant who uses his or her credibility and capabilities to influence people in a particular context to pursue their God-given direction.”⁷ This definition emphasizes the driving force of the leader that has a tremendous impact on the people who are under his influence. In other words, the accomplishment of the goal of the organization largely depends on the ability of the leader.

In addition to these basic definitions, there are some concepts to consider about true leadership in the Christian society. Skip Bell provides a list of three common misunderstandings on leadership: first, leadership is not position. Bell advocates that it is a mistake to talk of leadership in terms of a certain office. Second, leadership is not administration. He intimates that administration is the handling of, caring for, and arranging and organizing present affairs. Third, leadership is not statesmanship. An ambassador represents his nation in official or ceremonial functions. He does not influence the policy or practice of the government. He represents what the nation’s leaders have determined as policy, but he never leads.⁸

3. Why Servant Leadership?

Most leadership theories and types focus on the nature or level of maturity of human beings (employees) who are under a leader’s control and the situations they are placed in. For example, Douglas McGregor felt that most human beings dislike work and avoid it whenever possible. He

⁶ Peter G. Northhouse, *Leadership: Theory and Practice* (4th ed.; Thousand Oaks, CA: SAGE Publications, 2007), 3.

⁷ Malphurs and Mancini, *Building Leaders*, 20.

⁸ Skip Bell, *A Time to Serve: Church Leadership for the 21st Century* (Lincoln, NE: Advent Source, 2003), 3-7.

calls it Theory X. Its assumptions commit managers to a pessimistic view of human nature, so the managers tend to be autocratic, control-oriented, and distrustful. McGregor identified a second perspective, Theory Y, which reverses these assumptions by holding that human beings are generally responsible, want to do meaningful work, and are capable of self-direction; hence, managers have optimistic views and their approaches are based on conciliatory behavior.⁹

Another example is Hersey Blanchard's Situational Approach theory. The premise of this theory is that different situations demand different kinds of leadership. That is, leaders should change their leadership style or adopt different leadership styles to direct or support the needs of followers.¹⁰

These leadership theories identify what kind of leadership style the leaders in any organization may use. That is, the leaders' style and type of leadership are related to the situations they are facing and the employees they work with. Leaders pursue the most effective and efficient method to lead and control the people in order to accomplish the goal or objective of the organization. The basic concept of these general leadership theories is, 'I have to rule over the people (including situations) and control them.'

However, servant leadership is completely different from this concept. Rather than focusing on a situation or the people as the object of control and manipulation a servant-leader pays attention to his own mindset toward others. In other words, a servant-leader focuses not on the nature of the people who are under his control, but on his (the leader's) attitude in serving others. A servant-leader puts himself in the place of a servant and puts the people in the seat of the master and thinks about how to serve them.

Leadership in the church must be different from the world, because the church is not a company or a business organization that is established for gaining profit. The concept of servant leadership prevailed in the Bible throughout the history of God's people. Great characters in the Old Testament such as Abraham, Moses, Daniel, David refer to themselves as servants. In the New Testament, Peter, James, and Paul called themselves "a servant of God," and "a servant of Jesus Christ" (James 1:1; 2 Peter 1:1; Titus 1:1).

Why servant leadership? Because the core value of it is love—love to human beings! It was shown in the life of Jesus when He lived in this world. Because of love, God sent His only begotten son, Jesus, into this

⁹ Douglas McGregor, *The Human Side of Enterprise* (New York, NY: McGraw Hill, 1960), 33-34.

¹⁰ Northouse, *Leadership: Theory and Practice*, 91-92.

sinful world (John 3:16). This love is the starting point of history in the salvation of sinners. Because of His love toward His people, He came to this earth and practiced sacrificial love in the form of a servant. Servant leadership is the embodiment of God's love (John 15:12), of biblical teaching (Matt 20:28), and the attitude of the believer (Rom 15:25).

There are advantages in servant leadership. Stephen Prosser who got the inspirational evidence on servant leadership from other authors such as Peter Senge, Warren Bennis, Ken Blanchard, and Stephen Covey speaks of the merits of servant leadership: (1) the principles of servant leadership work and directly influence even in the business area; (2) the moral principle of servant leadership is an imperative part of leadership practices; and (3) servant leadership can transform organizations successfully, and people are able to recognize the changes and accept the leadership.¹¹

Here is a similar question, "Why servant leadership is needed? Is it essential to our task?"¹² Denis Tarr and James Kouzes provided the following answers to these questions: First, it works; the recommendations made by Thomas J. Peters and Robert H. Waterman related well to its concept: "Excellent companies really are close to their customers—attempting to satisfy their needs and anticipate their wants."¹³ Second, it reinforces the nature of one's profession and calls upon its more noble instincts; we often forget that our primary function is in the role of a servant, to bring people together, to collaborate, to cosponsor, to break down walls—real and imagined—to assist in the learning process. Third, it is action-oriented; servant-leaders will never run out of things to do. They have to do with being in the right place at the right time. Actions have to do with the larger agenda of the organization, the community, the region, and the nation. They have to do with the whole learning system in our society.¹⁴ And finally, commitment to the celebration of people and their potential; people who believed foremost in the concept of service, who were servant-leaders, were successful leaders. It is their belief in serving others that enables these executives to provide leadership and makes others follow willingly.¹⁵

¹¹ Stephen Prosser, *To Be a Servant-Leader* (Mahwah, NJ: Paulist Press, 2007), 64-70.

¹² Larry C. Spears, ed., *Reflections on Leadership: How Robert K. Greenleaf's Theory of Servant-Leadership Influenced Today's Top Management Thinkers* (New York: John Wiley & Sons, 1995), ix.

¹³ Dennies Tarr, "The Strategic Toughness of Servant-Leadership," in *Reflections on Leadership*, 82-83.

¹⁴ *Ibid.*

¹⁵ James M. Kouzes and Barry Z. Posner, *Credibility: How Leaders Gain and Lose it, Why People Demand It* (San Francisco, CA: Jossey-Bass, 1993), 185.

Henri Nouwen responded on the necessity on why servant leadership is needed in the Christian community by pointing out the crucial factor of servant leadership: "power is constantly abandoned in favor of love, it is true [servant] leadership."¹⁶

4. Principles of Servant Leadership in the Life of Jesus

Following, I will describe the principles of servant leadership in Jesus' teachings and examples. Larry Spears studied Greenleaf's writings and essays and identified ten characteristics of the servant leader such as awareness, building community, commitment to the growth of people, conceptualization, empathy, foresight, healing, listening, persuasion, and stewardship.¹⁷ Although not universally agreed upon these characteristics will explain the uniqueness of servant leadership.

Jesus opted for an unpopular, non-existent model of leadership during His earthly ministry—servant leadership. In the Bible, the teaching and example of Jesus on leadership were quite different from the trend of His day. In his book, *Spiritual Leadership*, Oswald J. Sanders evaluates the teaching of Jesus on leadership by asserting that "many of His teachings were startling and revolutionary, and none more so than those on leadership."¹⁸ The Gospel writers saw the importance of His teaching on leadership and each of them records His central concept of service (Matt 20:25-28; Mark 10:42-45; Luke 22:24-27).

Theodore W. Engstrom summarized this concept: "Jesus teaches all leaders for all time that greatness is not found in rank or position but in service. He makes it clear that true leadership is grounded in love which must issue in service."¹⁹ The following characteristics are the principles of leadership shown in the life of Jesus, the model for servant leadership.

¹⁶ Henri J. M. Nouwen, *In the Name of Jesus: Reflections on Christian Leadership* (New York, NY: The Crossroad, 1989), 63.

¹⁷ Spears, *Reflections on Leadership*, 4-7. The alphabetical listing of these characteristics is rearranged by the writer.

¹⁸ Oswald J. Sanders, *Spiritual Leadership* (Chicago, IL: Moody Press, 1967), 23-24.

¹⁹ Theodore W. Engstrom, *The Making of a Christian Leader* (Grand Rapids, MI: Zondervan, 1976), 37.

4.1 Humility

Gene Wilkes provides important insights on humility. In his book, *Jesus on Leadership*, he says, "Servant leaders humble themselves and wait for God to exalt them."²⁰ Jesus says that "for everyone who exalts himself will be humbled, and he who humbles himself will be exalted" (Luke 14:11). God humbles and God exalts. Peter, the Apostle, points out this truth, "Humble ourselves, therefore, under the mighty hand of God, that He may exalt you at the proper time" (1 Pet 5:6). In other words, when one exalts oneself, it constitutes a worldly nature. Self-exaltation is nothing but pride, which goes before destruction. Voluntary humility before God—allowing Him to work in a person's life and seeing one's true self before God and God's call on one's life—results in God's exaltation of that person. Charles Manz comments on humility:

Don't seek honor. Rather, let it seek you in its own way and when the time is right. Don't even think about it. Go about your business pursuing constructive work and focus on honoring and recognizing the contributions of others rather than your own. If you do this sincerely, your efforts will often receive the recognition they deserve, and more, as you don't seek and expect it.²¹

Paul writes to the Philippian church about Jesus' humility. Jesus became a servant, and was obedient unto death (Phil 2:5-8). Jesus humbled Himself before the Father and before humankind for the sake of the redemption of humanity. His exaltation was realized when He was resurrected from the dead, ascended back to heaven, and was seated at the right hand of the Father (Acts 5:30-31).

Humility is the greatest characteristic of Jesus' life and the principle that all His followers need to adopt. Robert D. Kennedy writes, "Christ showed that the way up was down. He showed that the 'Hall of Fame' and the 'Who's Who' are not necessary for the kingdom, thus calling every disciple to let Him be the center and the circumference of their lives."²² Based on this notion, he explains humility as "self is put in the background and Christ and others are in the foreground."²³ The words of

²⁰ Gene C. Wilkes, *Jesus on Leadership* (Wheaton, IL: Tyndale, 1998), 25.

²¹ Charles C. Manz, *The Leadership Wisdom of Jesus: Practical Lessons for Today* (San Francisco, CA: Berrett-Koehler, 1999), 24.

²² Robert D. Kennedy, *The Politics of the Basin: A Perspective on the Church as Community* (Lanham, MD: University Press of America, 1995), 25.

²³ *Ibid.*, 26.

Kennedy, noting that leadership of servanthood is not a privilege but responsibility is indeed true.²⁴

4.2 Obedience to God

Jesus obeyed the will of the Father. "Jesus conceived of His mission as one of obedience to the Father's will."²⁵ He both led as a servant and obeyed as a servant. As Jesus asked His disciples to obey God's word to receive salvation, He showed His obedience to the will of God: "For I have come down from heaven not to do my will but to do the will of Him who sent me" (John 6:39).

Morris Venden notes that, "He [Jesus] is our greatest single example of genuine obedience."²⁶ In her famous book, *The Desire of Ages*, Ellen G. White states that Jesus, "as the son of man, . . . gave us an example of obedience."²⁷ Jesus' example of obedience is the biblical principle for the servant-leader to keep in mind. Wilkes cites Calvin Miller's statement: "Servant-leadership is nurtured in the Spirit by following Jesus. Servant leaders generally are created not in commanding others but in obeying their commander."²⁸

David Benner gives a deeper meaning to obedience. He says, "Obedience is closely related to authority. To obey is to submit to the authority of someone. . . . If we obey the law of God, we submit to the authority of God." He continues on this topic and says, "This is the core of the biblical understanding of obedience."²⁹ To Jesus, obedience is submission to God's authority. Kennedy agreed to this concept of obedience, and explained, "To be obedient is to accept 'submission' to 'the will of God' as Jesus submitted His will to His Father's will."³⁰ It indicates that true obedience means not only behavioral compliance, but also inner surrender. This is the phrase the Apostle Paul uses in describing the goal of spirituality, namely to have "obedience from the heart" (Rom 6:17 NASB).

²⁴ Kennedy, *Politics of the Basin*, 44.

²⁵ Raoul Dederen, "Christ: His Person and Work," in *Handbook of Seventh-day Adventist Theology* (ed. Raoul Dederen; Hagerstown, MD: Review & Herald, 2000), 170.

²⁶ Morris Venden, *Obedience of Faith* (Hagerstown, MD: Review & Herald, 1983), 89.

²⁷ Ellen G. White, *The Desire of Ages* (Mountain View, CA: Pacific Press, 1964), 24.

²⁸ Wilkes, *Jesus on Leadership*, 80.

²⁹ David G. Benner, *Surrender to Love: Discovering the Heart of Christian Spirituality* (Downers Grove, IL: InterVarsity Press, 2003), 56-57

³⁰ Kennedy, *Politics of the Basin*, 31.

4.3 Build Teams

Jesus built teams beginning with twelve different disciples and in three and a half years, trained them to take on the world after His earthly mission ended. Jesus trained them with power from on high during His life on earth. David McKenna, in his book *Power to Follow, Grace to Lead*, discusses how Jesus built an "Incarnational Team Model" by leading His twelve companions through the stages of forming, norming, storming, and performing.³¹

Jesus' Forming Stage considered selecting ordinary people and organizing them into teams. McKenna says, "An Incarnational leader is a person who builds disciples."³² Jesus' Norming Stage was continuous, and He set "high, clear, and consistent" levels of expectations for His followers. The expectations Jesus kept before His disciples were in preaching and teaching, His "redemptive vision," and the "principle of the kingdom of God."³³

Jesus' Storming Stage understood the inevitability of conflict in the context of change. McKenna specifically pointed out the attitude of Jesus on the topic of conflict:

First, Jesus accepted conflict as another opportunity for developing His disciples. Second, He confronted the conflicting parties immediately. Third, He diagnosed the root of the problem in human nature. Fourth, He moved the conflict to common ground where the protagonists agree. Fifth, He found a common symbol with which the parties could affirmatively identify. Sixth, He used the occasion to refocus His vision and reinforce His mission in the minds of the 'storming' disciples. Seventh, and finally, He patiently and positively dealt with conflict even when the problem surfaced repeatedly in different guises.³⁴

Douglass Lewis recognized conflict as a "normal, natural, and healthy part of life in the world" and "conflict does not have to be destructive or debilitating. It can provide opportunities for growth and creativity that might not emerge otherwise."³⁵ He added, "[c]ertainly Jesus continually created conflict for his disciples, himself, the people to whom he ministered, and the institutions of his day. In each case, conflict was part

³¹ David L. McKenna, *Power to Follow, Grace to Lead* (Dallas, TX: Word, 1989), 123.

³² *Ibid.*, 124.

³³ *Ibid.*, 130–131.

³⁴ *Ibid.*, 136.

³⁵ Douglass G. Lewis, *Meeting the Moment: Leadership and Well-Being in Ministry* (Nashville, TN: Abingdon Press, 1997), 88.

of the setting in which revelation occurred. New alternatives were opened, new choices demanded, and new occasions for growth toward wholeness emerged."³⁶

Jesus' Performing Stage, quantitatively and qualitatively, is the leader's goal in developing the incarnation team. Jesus soon sent His disciples into the field two by two. Jesus told them what to wear, what to take with them, to whom to talk, and when to leave (Mark 6:8-10). And also, Jesus empowered His followers to experience the joys and challenges of preaching, teaching, and healing. As a servant-leader, Jesus "understood the importance of the team and exerts great effort in building the team,"³⁷ and "he wasted no time in forming a team."³⁸

4.4 Relationship: Among, Not Over

Jesus is a person who is among, not over those whom He leads. He values the relationship between Himself and the disciples in order to be closer to each other. The *over* relationship means that communication is normally done through one-way channels. That is, the one *over* normally communicates directive-type data *down*; the one *under* normally communicates response-type data *up*.³⁹

On the other hand, an *among* relationship places persons on the same level. When we see another person on our level, we normally perceive him/her as like us, which allows to share ideas, feelings, thoughts, attitudes. An *among* relationship freely shares in the give-and-take of self-revelation and mutual ministry.⁴⁰ An *among* relationship treats others as equals. Jesus declared Himself to be related to God yet mingled with prostitutes, thieves, and tax collectors. Jesus, representing God, treated everyone as His equal, His brother and sister (Matt 12:49-50), and He showed respect by meeting people where they were and accepting them for who they were (Matt 8:9; Luke 19:5; John 4:7-26). In the light of this acceptance, people wanted to be better, try harder, and do the good and right thing. His respect empowered them.

³⁶ Lewis, *Meeting the Moment: Leadership and Well-Being in Ministry*, 93.

³⁷ Lewis H. Weems Jr., *Church Leadership: Vision, Team, Culture and Integrity* (Nashville, TN: Abingdon Press, 1993), 70.

³⁸ Laurie Jones, *Jesus CEO: Using Ancient Wisdom for Visionary Leadership* (New York, NY: Hyperion, 1995), 90.

³⁹ Lawrence O. Richards, *A Theology of Christian Education* (Grand Rapids, MI: Zondervan, 1975), 133.

⁴⁰ Richards, *A Theology of Christian Education*, 133.

In another way, an *among* relationship represents a leader being with the people. Jesus promised His disciples His continued presence, "Surely I am with you always, to the very end of the age" (Matt 28:20). Lewis Weems says, "It is extremely difficult, perhaps impossible, to be a leader without generous presence, time, and attention with the people who look to you as the leader. That presence will take many shapes, forms, and expressions."⁴¹ To be among others emphasizes equality and identity between persons. This relationship has communication that flows between the parties.

5. Conclusion

Servant leadership emerges from having a close relationship with God. It is knowing God, His call, and His purpose in Christ. Jesus molded love by serving others. He told His disciples that the way to greatness was found in being a servant to others (Mark 10:43). Jesus willingly surrendered His position of power to humbly and sacrificially serve humanity through His death on the cross.

Jesus is the embodiment of servant leadership based on love. He became a human being in order to build a relationship with humanity. Through His death on the cross Jesus gave the example of how leaders must emulate His self-sacrifice and give of themselves to lead others to Him.

To be a servant leader following the example of Jesus is neither easy nor natural. It requires hard training and continuous exercise. It is not a matter of skills or capability but a matter of the heart and perception. It is contrary to the self-centered tendencies of humankind. Consequently, servant-leaders should seek to emulate Jesus; serving others is the example that Jesus left for His followers. He abandoned all that He had before He came to this earth: glory, adoration, power, authority, comfort, and even creatorship. Humility and sacrifice marked the path that Jesus took, which in turn placed Him to the right hand of God. Love made it all possible! This same route will lead servant-leaders to greatness in the kingdom of God.

The church is engaged in a continuing mission to reach the world for Jesus. This challenge in an entirely relativistic environment calls for a fresh look at servant leadership in order to face the problems that are looming ahead. The need for humility in leadership training is *sine qua non*. Young people should be encouraged to wear the garb of humility as they take on the mantle of leadership from the older generation. To have a

⁴¹ Weems, *Church Leadership*, 83–84.

humble opinion is the attitude they need to learn. The ability to follow instructions and obey principles must be made clear. This is the only way of ensuring that the leaders of tomorrow are well equipped to lead.

Servant leadership encapsulates the essential qualities of humility, obedience, and simplicity of Jesus. Learning these abiding principles from Jesus is the way out of the problems that leadership faces in the postmodern church.

THE "SPRINGS OF WATER" IN REVELATION 14:7

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"Fear God and give glory to Him, because the hour of judgment has come; and worship him who made heaven and earth, the sea and springs of water" (Rev 14:7). The Bible presents God as the one who is in charge and in full control of all creation including the waters. In the book of Revelation the "sea," "water," and "springs of water" are highly concentrated theological concepts referring to fundamental ideas such as creation and judgment.

Key Words: Water, Fountains, Judgment, Creation, Flood, Eschatology

1. Introduction

In Rev 14:7, John alludes to the fourth commandment of the Decalogue through a series of direct verbal, thematic, and structural parallels: "For in six days the Lord made the heavens and the earth, the sea, and all that is in them, but he rested on the seventh day. Therefore the Lord blessed the Sabbath day and made it holy" (Exod 20:11).¹ However, John chooses to add to this list of created items the "springs of water." Is there any theological significance in this addition? Does it change or alter the meaning of the alluded text? How does this addition fit into the context of Rev 14, and what message does this addition convey? In order to answer these questions, it is helpful to discuss selected Old Testament and New Testament passages related to the "springs of water" or "fountains of water."

¹ Jon Paulien, "Revisiting the Sabbath in the Book of Revelation," *Journal of the Adventist Theological Society* 9/1-2 (1998): 179-186.

2. Biblical Usage and Semantic Categories of the "Springs of Water"

While there are numerous water-related expressions in the Bible, the phrase "springs of water" or "fountains of water" carries a special significance. John's emphasis on God as the Creator and Sustainer of heaven, earth, and water is manifested in his use of the water-related concepts as acts of God.

2.1 Previous Studies

Perhaps the only article that deals directly with the subject of this study is the one written by John T. Baldwin.² In the section about the meaning of the phrase "fountains of waters" Baldwin proposes that the significance of this phrase is related to divine judgment. After examining the semantic correspondence between the Greek word for "springs" or "fountain" used in Revelation and the Hebrew term used in Genesis, Baldwin suggests:

This usage of the term "fountains" in the original biblical languages permits the reader to grasp a possible connection between "fountains of waters" (Revelation 14:7c) and the "fountains of the deep" (Gen 7:11), and hence to the time when the "fountains of the deep" were broken up at the time of God's divine aquatic judgment against human sin. Thus, the reference to "fountains of waters" in Revelation 14:7c may be a divinely intended suggestion to another time and form of divine judgment, namely, to God's flood which was a divine judgment in response to human iniquity.³

Another notable study on Rev 14:7 is done by Jon Paulien, who finds a direct verbal parallel between the words of v. 7c, "made the heavens, and the earth, and the sea," and the words of Exod 20:11, "made the heavens

² John T. Baldwin, ed., "Revelation 14:7: An Angel's Worldview," in *Creation, Catastrophe and Calvary* (Hagerstown, MD: Review & Herald, 2000), 19–39. In his article, Baldwin turns the reader's attention to the fact that Rev 14:7 unexpectedly uses the phrase "the fountains of water" instead of the expected "the sea" of Exodus. This reference, says Baldwin, "could well signal something of importance." Baldwin proposes that the context of judgement, in which this text appears, explains the divine intentionality of putting "the fountains of water" into the structure of this chapter. He connects the divine judgment at the time of the flood with the coming judgment.

³ *Ibid.*, 27.

and the earth, the sea."⁴ The present study relies on Paulien's exegetical conclusion

The concept of water, as used by John in the New Testament, is studied by Judith Alice Kowalski in her dissertation entitled "Of Water and Spirit: Narrative Structure and Theological Development in the Gospel of John."⁵ However, Kowalski deals only with the Gospel of John. Wai-Yee Ng, in her doctoral dissertation, studied the water symbolism and its eschatological significance. While she focused on John 4, she also studied the water related passages in the book of Revelation classifying them into passages related to calamities, to God's promise of salvation, and to consummation.⁶ Gerhard Hasel devoted one of his scholarly articles to the phrase "all the fountains of the great deep." He analysed the role of the fountains in the mechanism of the flood and showed the universal character of this event.⁷

2.2 Water-Related Biblical Concepts

Both the Old Testament and the New Testament often use the terms for a spring or a fountain of water in various figurative senses: "A righteous man falling down before the wicked is as a troubled fountain, and a corrupt spring" (Prov 25:26). "Israel then shall dwell in safety alone: the fountain of Jacob shall be upon a land of corn and wine; also his heavens shall drop down dew" (Deut 33:28). "The fountain of water" could also

4 Paulien, "Revisiting the Sabbath in the Book of Revelation."

5 Judith Alice Kowalski, "Of Water and Spirit: Narrative Structure and Theological Development in the Gospel of John" (Th.D. diss.; Marquette University, 1987), 55. This dissertation analyses the structure of John's Gospel by noting a variety of linguistic characteristics, temporal indicators and narrative modes within the received text. Kowalski observes that the dynamics of the water motif evolve and change throughout the gospel narrative. They do not offer a single paradigm for salvation. One unifying element among the episodes that mention water is that functions regularly ascribed to water such as birth, purification, baptism, drinking, and healing are ascribed to the action of the Word. According to Kowalski the water seems to communicate the comparison between physical timing and spiritual timing.

6 Wai-Yee Ng, "Johannine Water Symbolism and Its Eschatological Significance: With Special Reference to John 4" (Ph.D. diss.; Westminster Theological Seminary, 1997), 17.

7 Gerhard F. Hasel, "The Fountains of the Great Deep," *Origins* 1 (1974): 67-72; See also his other related articles: "The Biblical View of the Extent of the Flood" and "Some Issues Regarding the Nature and Universality of the Genesis Flood Narrative," *Origins* 5 (1978): 83-98.

signify a catastrophic event and God's wrath.⁸ Whylan Owens notes that "to the Biblical writer, water both pleased and frightened at the same time."⁹

2.3 Semantic Correspondence

There are several words that the Old Testament uses for "fountain" and "spring." The most common words are: מַיִן (1 Sam 29:1), מְקוֹר (Prov 5:18), and מַבְרֵיץ (Eccl 12:6). The term מְקוֹר is used in a variety of ways: It is used for a woman's menstrual discharge (Lev 20:18); for a source of life (Pss 36:9; 68:26), as an allusion to a sexual intercourse (Prov 5:18), and in a figurative speech (Jer 9:1). Usually, the OT's usages of "water," in general and of "springs of water," in particular, have literal meanings.¹⁰

The Septuagint uses the Greek word πηγῆ, "spring," in Gen 7:11, Prov 5:18 and Rev 14:7. It is possible that the author of Revelation uses the word πηγῆ to indicate the dependence of Rev 14:7 on Gen 7:11. Jon Paulien notes:

Indeed, it would seem that John's exile on Patmos makes most likely the possibility that he was working from memory in alluding to the Old Testament. This could account for the tremendous breadth in his allusions to the Old Testament, including his use of various traditions that might have been available to him in the course of his ministry, while allowing, as well, for verbal and even conceptual changes.¹¹

John allows conceptual changes in referring to Exod 20. However, he is not departing from the interpretative techniques used in Judaism.¹² As it is reflected in the Midrash, the post-exilic rabbis recognized that Scripture has many meanings and applications. Jesus seemed to use the same approach as He commented on the bread that the people ate in the

⁸ Gen 7:11; 8:2.

⁹ Whylan B. Owens, "The Theological Significance of 'MAYIM' in the Old Testament" (PhD diss.; New Orleans Baptist Theological Seminary, 1992), 70.

¹⁰ "And they came to Elim, where were twelve springs of water, and three score and ten palm-trees: and they encamped there by the waters" (Exod 15:27). "And they journeyed from Marah, and came unto Elim: and in Elim were twelve springs of water, and three score and ten palm trees; and they encamped there" (Num 33:9).

¹¹ Jon Paulien, *Decoding Revelation's Trumpets: Allusions and the Interpretation of Rev 8:7-12* (Berrien Springs, MI: Andrews University Press, 1988), 299.

¹² Craig A. Evans, "The Old Testament in the New," in *The Face of New Testament Studies* (ed. Scot McKnight and Grant Osborne; Grand Rapids, MI: Baker Academic, 2004), 130.

wilderness (John 6:25-59; Exod 16). John the apostle applied a similar method in his writings. While there are no formal Old Testament quotations in the book of Revelation, according to *Baker's Evangelical Dictionary of Biblical Theology* there are no fewer than 620 Old Testament allusions.¹³

John's use of "fountains of water" does not deprive his allusion to Exod 20 of its original meaning. Yet, John places a new emphasis upon the Decalogue text. In order to perceive this emphasis, one should refer to the most common Old Testament usage of the expression "fountains of water."

3. Significance of the "Fountains of Water" in the Bible

The Old Testament refers to "fountains of water" in different ways: (1) with the plain meaning of sources of water; (2) with a positive, beneficial connotation; and (3) with the meaning of judgment. The following section will explore the latter connotations of benefit and judgment.

3.1 "Fountains of Water" as Benefit

McKenzie observes that "water is often in the Bible identified with life; in the new Israel the new life comes from the temple where Yahweh dwells among his people."¹⁴ The acts of God that could be considered as beneficial were those in which God intervened in the history of the world in a beneficial way for humankind. Such beneficial acts include creation of water and causing water to flow from the rock in the wilderness.¹⁵ Holladay notes that the "fountain of life" is a standard phrase in Psalms and Proverbs to convey the idea of the "source of life," as a reference to one of the attributes or names of Yahweh.¹⁶

¹³ *Baker's Evangelical Dictionary of Biblical Theology*, Biblestudytools.com, s.v. "Old Testament in the New Testament," <http://www.biblestudytools.com/dictionaries/bakers-evangelical-dictionary/the-old-testament-in-the-new-testament.html> (2 April 2012).

¹⁴ John L. McKenzie, *A Theology of the Old Testament* (Garden City, NY: Doubleday, 1974), 291.

¹⁵ Gen 1:2, 6, 7, 9-10, 20-22; Exod 8:2; Isa 48:21.

¹⁶ William L. Holladay, *Jeremiah: A Commentary on the Book of the Prophet Jeremiah* (Hermeneia; ed. Paul D. Hanson, Frank Moore Cross, Jr.; Philadelphia: Fortress Press, 1986-1989), 1:92.

3.1.1 "Fountains of Water" and Creation Act

God's regulation of the waters begins with the creation event. From the outset of the creation narrative, water served as the fount of creation, the foundation of the world. Dry land appeared only on the third day of creation. The waters under the firmament were gathered into one common bed as the lands under them sank. In other parts, the lands rose and a great continent or continents appeared (Gen 1:9, 10). "When there were no depths, I was brought forth, when there were no fountains abounding with water" (Prov 8:24). "When he established the clouds above, When He strengthened the fountains of the deep" (Prov 8:28). "The essence of the teaching about water found in the biblical creation narrative was the power of God over the waters. God had ultimate control over not only the placement of the waters, but over their maintenance as well."¹⁷

3.1.2 Gushing Water from the Rock

In Isa 48:21, the prophet reflects on the event in the wilderness: "And they did not thirst when He led them through the deserts; He caused the waters to flow from the rock for them; He also split the rock, and the waters gushed out." John Watts describes it as "an ecstatic hymn which rejoices in the miracle of grace."¹⁸

Westermann suggested that by referring to the miracle in the desert, Isaiah alludes to the future miraculous deliverance of the people from exile.¹⁹ God's miracle in the desert had become nearly proverbial or metaphorical of his saving power.²⁰ God had demonstrated his power to bless his people under every circumstance. Durham observed, "The whole point of and reason for this narrative is Yahweh's miraculous provision for his people, by supplying water where there was none from the unlikeliest of all spots, a rock."²¹ Thus, the spring of water was associated with God's deliverance and his miraculous blessings. Delitzsch called the water in Isa 12:3 "water of salvation." Just as God had miraculously provided water for the Israelites in the wilderness, so He

¹⁷ Owens, 22.

¹⁸ John D. W. Watts, *Isaiah* (WBC 2; Waco, TX: Word Books, 1987), 179.

¹⁹ Claus Westermann, *Isaiah 40-66: A Commentary* (OTL; eds. G. Ernest Wright et al; trans. David M. G. Stalker; Philadelphia, PA: The Westminster Press, 1969), 205.

²⁰ James Muilenburg, "The Book of Isaiah, Chapters 40-66: Introduction and Exegesis," in *The Interpreter's Bible* (New York: Abingdon Press, 1956), 5:563.

²¹ John I. Durham, *Exodus* (WBC 3; Waco, TX: Word Books, 1987), 231.

had become the source of salvation "from which ye may draw with and according to your heart's delight."²² Young observed:

From the rock in Sinai water gushed forth; from the springs of salvation also men will draw waters. Waters! It is an intensive plural, for it indicates the fullness and all-sufficiency of the blessings which come from these springs. Water is a beautiful figure of salvation and its attendant blessings. How refreshing and reviving to a wanderer in a thirsty and dry land. How fit an emblem for salvation!²³

God describes himself as the "fountain of living water" in the prophecy of Jer 2:13. God's blessed intervention in water-related matters is emphasized in Ps 78:14, 16.

The expressions "fountains" and "springs of water" are used in positive ways in the apocalyptic vision of the restored created order. In this respect, Isa 41:18 declares: "I will open rivers in desolate heights, and fountains in the midst of the valleys; I will make the wilderness a pool of water, and the dry land springs of water."²⁴ J. R. Price observed: "In eschatological visions a fountain is given as a sign of the Lord's favor, while dry fountains are described as a sign of His disapproval."²⁵ A source of true cleansing will become available in the final days.²⁶

3.2 The Flood as God's Judgment

One of the most significant ways in which God executed His judgment was by the flood as a radical response to the sinful, destructive actions of mankind on Earth. By no means was God's judgment arbitrary. It was a legitimate reaction to the transgression of known boundaries.²⁷

²² Franz Delitzsch, *Biblical Commentary on the Prophecies of Isaiah* (Grand Rapids, MI: Eerdmans, 1949), 1:293.

²³ Edward J. Young, *The Book of Isaiah* (NICOT 1; ed. Edward J. Young; Grand Rapids, MI: Eerdmans, 1965–1972), 404–405.

²⁴ See also Joel 3:18.

²⁵ J. R. Price, "Fountain," *The International Standard Bible Encyclopedia* (ed. Geoffrey W. Bromiley; Grand Rapids, MI: Eerdmans, 1995), 2:356.

²⁶ Zech 13:1. Although it is not explicitly clear as to which Old Testament passage Jesus referred to in John 7: 37–39, it is certain that He used the metaphor of running water as a positive image.

²⁷ Walther Eichrodt, *Theology of the Old Testament* (Philadelphia, PA: Westminster, 1961, 1967), 1:259–260, as quoted by Owens, 29.

3.2.1. God's Ultimate Control of the Waters

God's judgements reveal His complete power and control over the created order. He can turn a fruitful land into barrenness.²⁸ He gives drink to the thirsty and makes fat the bones of those caught in a drought.²⁹ He causes rivers to run clean and smooth.³⁰ The wrath of God was just as sure and destruction came swiftly, reducing the mighty nation of Babylon to lowly pools of water.³¹ God demonstrated his power over water in its ultimate sense with the destruction of the world. As the Creator and the Owner of the world He had the right to exercise His power. J. R. Price noticed that the flood "served as the original undoing of creation."³²

Although God is sovereign, He is not capricious in exercising His will. The act of bringing about the flood was an act of judgment upon the world, which had become exceedingly wicked.³³ The Scriptures assert that the purpose of the flood was to wipe out a sinful and degenerate humanity; and this purpose could not have been accomplished by destroying only a portion of the race. Nahum M. Sarna observed: "The Bible leaves no doubt as to God's motives. The choice of Noah is inspired solely by his righteousness; caprice nor partiality play no role in divine resolution."³⁴

3.2.2 The Theological Significance of the Flood

By exercising control over water God demonstrates His relationship to mankind. Divine mastery over water is demonstrated in the flood event (Gen 7), the Red Sea deliverance (Ex 15:1-18), the crossing of the Jordan River (Josh 3:16; 4:18), and in Elijah's crossing of the Jordan (2 King 2:8).

Jesus made special reference to Noah and the flood: "And as it was in the days of Noah, so it will be also in the days of the Son of Man: They ate, they drank, they married wives, they were given in marriage, until the day that Noah entered the ark, and the flood came, and destroyed them all. Likewise as it was also in the days of Lot: they ate, they drank,

²⁸ Ps 107:33-35; Isa 43:20.

²⁹ Isa 58:11; cf. 44:3.

³⁰ Ezek 32:14.

³¹ Isa 14:23.

³² Price, "Fountain," 356.

³³ Gen 6:5-7, 11-13; 7:1; Derek Kidner, *Genesis: An Introduction and Commentary* (TOTC 1; ed. D. J. Wiseman; Leicester, England: Inter-Varsity Press, 1962), 86.

³⁴ Nahum M. Sarna, *Understanding Genesis: The World of the Bible in the Light of History* (New York: Schocken, 1970), 51.

they bought, they sold, they planted, they built; but in the day that Lot went out from Sodom it rained fire and brimstone from heaven, and destroyed them all. Even so will it be in the day when the Son of man is revealed" (Luke 17:26-30; cf. Matt 24:39).

It is important to observe the context into which Jesus places the flood destruction, namely alongside the destruction of Sodom and the destruction of the ungodly at the time of Christ's Second Coming. In Jewish apocalyptic writings the flood was interpreted as a "typos of God's visitation at the end of time."³⁵ Thus, from an eschatological perspective, the expression "fountains of water" has an articulated judgmental meaning.

4. "Fountains of Water" as Blessing and Curse

The biblical writers used water related expressions as metaphors of various theological concepts. "The range of the metaphorical use of water in the scriptures was virtually endless. Water stood for life and death, prosperity and desolation, and power and weakness."³⁶

4.1 Double Implication of the "Fountains of Water"

One of the remarkable Old Testament hymns of creation refers to the fountains abounding with water (Prov 8:24, 28). Summarizing the account of creation (vss. 32-33), the author, speaking on behalf of wisdom, concludes in vss. 35-36: "For whoever finds me finds life and obtains favour from the Lord. But he who sins against me wrongs his own soul; All those who hate me love death." Here we find a double implication of divine judgment, a judgment based on the authority and wisdom of the Creator. Owens observes: "God entered his creation through both the beneficent control of nature on behalf of mankind and the destruction by nature through which he chastened his people."³⁷

It is remarkable that the term "fountains of the deep" conveys both the idea of blessing and destruction. Kowalsky writes about some peculiarities of water related expressions employed by John:

The reader becomes increasingly aware that the many diverse occasions where water appears in this gospel seem to be positively

³⁵ Lars Hartman, *Prophecy Interpreted* (transl. Neil Tomkinson; Coniectanea Biblica; New Testament Series, No. 1; Uppsala: Almqvist and Wiksells, 1966), 32. As quoted by Jon Paulien, *Decoding Revelation's Trumpets*, 230.

³⁶ Owens, 163.

³⁷ *Ibid.*, 162.

connected with Jesus (primarily), with the disciples (secondarily), and with receptive, interested characters and believers (occasionally); but water is connected with the Jews and sceptical others only neutrally or negatively.³⁸

This is, especially true with those occasions where water appears in the form of fountains, since they are used both for benefit and destruction. "Fountains of water" produce entirely different effects on different people. At the time of the flood, the "fountains of water" did not harm Noah and his family; on the other hand, all the evil doers were destroyed. The righteous should not be afraid of the "springs of water," but should expect blessings, as the Scriptures seem to indicate.³⁹ At the same time the unrighteous should be terrified by the "fountains of water."

Richard M. Davidson refers to the flood as the saving/judging act of God.⁴⁰ Jesus declared in Matt 24:37-39 that the last events on this earth will be similar to those which took place in the days of Noah. "For as in the days before the flood, they were eating and drinking, marrying and giving in marriage, until the day that Noah entered the ark" (v. 38). "On that day all the fountains of the great deep were broken up" (Gen 7:11).

4.2 Judgment as Undoing of Creation

Revelation 14:7, contains the call to worship God and give glory to Him as the God of creation in the context of God's judgment.⁴¹ John presents God as the one "who made the heavens and earth, the sea," which is the message of Exod 20:11, and then adds, "and springs of water."

In her commentary on Revelation, J. Massyngberde Ford writes:

The reference to God as creator is understandable in the light of the reference to heaven, earth, and the water under the earth in Exod 20:4. Further the reference to the hour of judgment (vs. 7) bears affinity to Exod 20:5, God's declaration of jealousy and vengeance on those who hate Him.⁴²

God exercises His judgment because He, as Creator, has the right and the responsibility to do it. Brown indicated that, "God's sovereignty over

³⁸ Kowalski, 55.

³⁹ Josh 15:19; Judg 1:15; Isa 35:7; 41:18; 49:10.

⁴⁰ Richard M. Davidson, *Typology in Scripture: A Study of Hermeneutical "B" Structures* (Berrien Springs, MI: Andrews University Press, 1981), 326-327.

⁴¹ In the context of worshiping and obeying the God of creation, the parallel between this text and Exod 20:11 seems absolutely relevant.

⁴² J. Massyngberde Ford, *Revelation* (AB; Garden City, NY: Doubleday, 1975), 248.

creation is translated in terms of power *over* and *against* creation."⁴³ It is possible that by adding the phrase "fountains of water" John integrates the idea of judgment with the very act of creation.

In fact, the concept of judgment is often presented in the Bible as contrasting creation, as an undoing of the created order. John demonstrates loyalty to this approach by integrating the term "springs of water" with the message of the coming judgment. As the Creator of the earth, God reserves to Himself the right to judge the earth. Moreover, John indicates that the instrument of this judgment is implanted in the very act of creation. It is "the springs of water" that will be later employed to destroy the wicked. Richard M. Davidson observed that, "the Noahic flood is nothing less than the cosmic undoing or reversal of creation."⁴⁴ In a similar way Nahum Sarna stated, "the Flood is a cosmic catastrophe that is actually the undoing of creation."⁴⁵

The events brought about by the flood are presented in an order opposite to the order of creation:

Creation:

1. Creation ends with the emerging of human beings (Gen 1:26).
2. Before the creation of man, animals were brought to being (v. 24).
3. Earlier, "the waters brought forth . . . the moving creatures" (v. 20).
4. The gathering of the water under the sky (v. 9) preceded the creation of the life.
5. Separation between "water under the expanse from the water above it" (v. 6).
6. The very first creative act of God on the earth presented as the Spirit (or simply wind) "hovering over the waters" (v. 2).

Flood:

1. The Flood starts with Noah and his relatives entering the ark (Gen 7:13).
2. The next verse of the flood story tells us about the animals gathered into the ark (v. 14).
3. The rising water takes away the lives of all creatures (v. 21).

⁴³ Brown, 236.

⁴⁴ Richard M. Davidson, "Biblical Evidence for the Universality of the Genesis Flood," in *Creation, Catastrophe and Calvary* (ed. J. T. Baldwin; Hagerstown, MD: Review & Herald, 2000), 121.

⁴⁵ Nahum M. Sarna, *Genesis* (The JPS Torah Commentary; Philadelphia/New York/Yerusalem: Jewish Publication Society, 1989), 48.

4. The life is destroyed by water rushing on the earth from above and from below (v. 23).
5. Separation of the two waters is canceled by the act of flood.
6. The beginning of the flood's end was characterized by the "wind over the earth" (8:1) that "receded waters."

The closing of the "springs of the deep" (8:2) marks the end of the flood. The judgment of God in the form of an undoing of creation was accomplished. This judgment is understood as a righteous act because God used His rights over His creation and destroyed the wicked.

It should be noted that God's judgments have two important aspects: vindication of the righteous and condemnation and destruction of the wrongdoers. John Skinner calls the flood "a partial undoing of the work of creation."⁴⁶ Partial, because it only affected the wicked ones and vindicated the righteous. While referring to the flood as "the original, cosmic undoing of creation,"⁴⁷ Tikva Frymer-Kensky compares it to the judgment described by the prophet Jeremiah (4:27) and notices that the prophet states that "the destruction will not be final."⁴⁸ Frymer-Kensky sees the flood not only as an act of punishment, but first of all, as a purifying activity of God by means of His judgment.⁴⁹

4.3 Eschatological Perspective

Water related concepts in the Bible express the idea of a two-fold eschatological judgment. For example, while Hosea compares God's wrath to rushing waves of water,⁵⁰ Ecclesiastes refers to water as a demonstration of God's manifested grace.⁵¹ Mays asserts that when God

⁴⁶ John Skinner, "A Critical and Exegetical Commentary on Genesis," in *The International Critical Commentary on the Holy Scriptures of the Old and New Testaments* (2nd ed.; Edinburgh: T & T Clark, 1930, 1956), 164.

⁴⁷ Tikva Frymer-Kensky, "Pollution, Purification, and Purgation in Biblical Israel," in *The Word of the Lord Shall Go Forth: Essays in Honor of David Noel Freedman in Celebration of His Sixtieth Birthday* (ed. Carol L. Meyers and M. O'Connor; Winona Lake, IN: Eisenbrauns, 1983), 410.

⁴⁸ *Ibid.* Whether the passage of Jer 4: 27 refers to an apocalyptic vision, or as Tikva Frymer-Kensky suggests, to the "imminent destruction of Israel," it is clear that its message concerns not just destruction, but also introduces hope for the remnant.

⁴⁹ In another parallel between the flood and the exodus, Frymer-Kensky declares: "Just as mankind was saved from permanent destruction by Noah's survival, so too God will not exterminate the people, but will rescue a remnant to begin again."

⁵⁰ Hos 5:10. The full force of God's wrath would be "poured out" upon the captains of Judah (cf. Zeph 1:14-18).

⁵¹ Eccl 2:6.

took water from the heavenly reservoir and poured it down as a blessing of rain upon the earth, he demonstrated his power and majesty.⁵² Stuart disagrees, holding that "more likely the point is that Yahweh can cause storms, tides, floods, etc."⁵³ Both may be correct because Yahweh could produce a double effect by the same act. With regard to Rev 14:7 Wai-Yee Ng classifies this text as a calamity passage, but also states that it deals with the promise of salvation:

The created world described in the creation accounts of Genesis is here depicted in the Apocalypse as the catastrophic universe. The message of this is: "Fear God and give him glory, because the hour of his judgment has come. Worship him who made the heavens, the earth, the sea and the springs of water" (14:7). Thus, for those who worship God, i.e., those "who have come out of the great tribulation," there are promises of salvation issued from the throne, i.e., from the heavenly worship scene described in Rev 4-5.⁵⁴

John chose to link the idea of the final judgment with the "fountains of water," a concept that carries not only the idea of destruction, but also a rich theological and historical background for prosperity, reward, and blessings. While the judgment will bring destruction upon the wicked it will bring reward and blessings to the righteous. This does not mean that at the final judgment God will use the same mechanism as He did at the time of the flood, for God promised that the flood will be no more. In Rev 14 John is only given a promise of the judgment and the two-fold effect of this judgment.

5. Conclusions

In the account of the flood the expression "fountains of water" carries the meaning of a destructive power directed by God. However, it is also true that the same "fountains of water" symbolise the abundant springs of blessings for the faithful. Those who have responded to God as the sole Creator, Sustainer, and Redeemer of all that exists have no reason to fear God's judgment. There is a special emphasis in Rev 14:7 on keeping the Sabbath commandment, for God chose to use the words of the Sabbath commandment to communicate the message of the final judgment. Both the Sabbath commandment and the first angel's message rely on the fact

⁵² James Luther Mays, *Amos: A Commentary* (OTL; ed. G. Ernest Wright, John Bright, James Barr, and Peter Ackroyd; Philadelphia, PA: The Westminster Press, 1969), 155.

⁵³ Douglas Stuart, *Hosea, Jonah* (WBC 31; Waco, TX: Word Books, 1987), 393.

⁵⁴ *Ibid.*, 255.

of creation. The inclusion of the term “fountains of water” into the context of creation seems to be very appropriate.

As shown in this study, the expression the “fountains of water” brings together the idea of creation and judgment. As Exod 20:11 speaks of the completion of the creation week, John organizes the message of Rev 14:7 in agreement with this event. Just as there was a creative activity of God at the beginning, there will be an act of divine intervention in the event of the final judgment.

THESIS AND DISSERTATION ABSTRACTS

Theological Seminary, Adventist International Institute of Advanced Studies

"Developing a Worship Paradigm For First, Second, and Third Generation Samoan Seventh-Day Adventists in Melbourne, Australia: A Contextualized Approach"

Researcher: Vailele Afoa, D.Min., 2012

Advisor: James H. Park, Ph.D.

The multi-generational Samoan Seventh-day Adventist Churches in Melbourne, Australia, have been challenged with issues revolving around traditional and contemporary worship which has stirred controversy within, and aroused tense personal emotions about the way the congregations are worshipping. The conflict between the 2 polarized opposing camps of traditional versus contemporary forms of worship relate to a division in attitude of how people conduct the primary service. Adding to the argument is the influence of diverse cultures experienced by the first, second, and third generation of Samoan worshippers which consequently has become a distraction from the real meaning of unity and worship.

The purpose of the study is to provide a regular nurturing environment for the 4 Samoan multi-generational churches in Melbourne, in order to facilitate various forms of worship leaders to address cultural issues such as language, family and corporate worship in areas of concern such as reverence, music, and unity. This has been based on personal observation, survey questionnaires and interviews, and documentary research.

In examining the biblical and cultural ways of worship, a feasible nurturing model is developed as follows: (1) nurturer, pastor and first generation; (2) mentor, second generation; and (3) trainees, third generation. The study concludes with a combined 4 day camp for the 4 Samoan churches designed for the nurturer, mentor, and the trainees to implement the recommended nurturing strategies: (1) participate as an assembly in a cultural ceremony and biblical ritual. As representations of worship, it was envisioned that contextualization of the 2 formal

procedures elicit an awareness of worship and cultural sacredness, honour, and respect; (2) 6 workshops based on family and corporate worship; and (3) 3 seminars on aspects of Samoan culture. Other relevant resources such as a contextualized Passover, seminars and workshop materials, and a camp evaluation sheet are sited in the appendixes. The camp endeavours not only to contribute to increasing the effectiveness of the worship unity amongst the Samoan Seventh-day Adventist Churches in Melbourne, Australia, but also towards the ongoing nurturing processes of worship leaders to perpetuate biblical worship and appropriate cultural forms within the churches.

"An Exegetical-Theological Study of the OU MH Passages in the Fourth Gospel"

Researcher: Hector Obed Martin Fuentes, Ph.D., 2012

Advisor: Richard Apelles Sabuin, Ph.D.

Although grammarians have noted the phenomenon of the emphatic denial *ouj mh*; (ED) in the Fourth Gospel, a survey of the standard critical commentaries on the Gospel of John reveals that there is scanty work about its theological function. The review also shows that there is a lack of treatment about the implications of the ED in the Fourth Gospel, in particular in the soteriological sayings of Jesus and other negative statements.

The subject of the theological function and the implications of the ED in the Fourth Gospel deserve attention because first, a soteriological theme is frequently associated with the construction; and second, at present, the few works that deal with the subject have done it in a general way. Therefore, a more systematic and comprehensive treatment is needed.

The exegesis of the 16 passages in the Fourth Gospel (John 4:14, 48; 6:35, 37; 8:12, 51, 52; 10:5, 28; 11:26; 13:8, 38; 18:11) reveals first, that the ED in the soteriological sayings of Jesus points to Him as the fulfillment of OT messianic expectations, His divine status, and the nature of His messiahship. The ED highlights the mission of Jesus as one of spiritual character. Second, in the soteriological sayings of Jesus it points to an emphasis on a present inaugurated eschatology in His person. In Jesus, the eschatological future is now present. He, in His ministry, inaugurates eternal life. Third, in the context of other negative statements, the ED would indicate the author's intention to highlight that humanity is in

need. The elements of obstinacy in accepting Jesus' status, false expectation regarding Him, the lack of understanding about His mission-service even at the point of death, and the human tendency to trust in a faith based on the perceptible rather than in God's Word, are parts of human nature. The human being is in need of spiritual discernment to appreciate heavenly perspectives. Fourth, the ED contributes to the overall purpose of the Fourth Gospel as stated in John 20:30, 31. The ED, used as a literary device in combination with other literary conventions, adds prominence to the authoritative pronouncements of Jesus, and calls the attention of the reader/hearer to the significance of Jesus' statements. In this sense, this is very much in keeping with John's purpose for writing his gospel as reflected in John 20:31.

"Miracles and Testimony in Relation to Faith in the Gospel of John:
A Study in the Text and its Contexts"

Researcher: Anton Petrishchev, Ph.D., 2012

Advisor: Richard Apelles Sabuin, Ph.D.

It is not easy to describe the relationships between miracles and faith in the Gospel of John. On the one hand, the Gospel emphasizes the extraordinary nature of miraculous signs and their importance for believing in Jesus; on the other, it seems that in some passages faith based on miracles is disparaged and faith based on testimony is favored. Scholarly opinion on the matter varies from some admitting the existence of inconsistencies and explaining them by the usage of a separate source—or sources—which John loosely incorporated into his Gospel to others rejecting any tension at all and arguing for a consistent optimistic view of miracle-based faith in the Fourth Gospel.

The purpose of the dissertation is to find out how John presents miracles and testimony in relation to faith in his Gospel and to explain, if possible, the origins of his view. In order to reach these objectives, it studies both the text of the Gospel and its contexts—theological and historical. In the text section, it analyzes all passages of the Fourth Gospel in which miracles and/or testimony are related to faith. In the context part, it surveys literature sources which might serve as background for the Gospel of John in its historical situation; these include the Old Testament, selected Second Temple literature, Greco-Roman literature, and rabbinic traditions.

The study concludes that John does not belittle the value of faith that comes from seeing miracles; neither does he state that miracles are indispensable for believing. The Gospel shows both miracles and testimony as a means (although not always effective) to produce and strengthen faith, with the former being a content as well as a substantiation for the latter. However, John does not justify the absence of faith by the absence of miracles; instead, he claims the necessity of faith grounded only in testimony, faith without seeing, in the situation of the second and third generations where those are scarce. Such a view is not an invention of the author of the Fourth Gospel; it can be found in some Jewish sources, and even more so in the Exodus narrative of the Old Testament.

CRITICAL BOOK REVIEWS

Ott, Craig and Gene Wilson. <i>Global Church Planting</i> (James H. Park)	189-190
Messer, Neil. <i>Selfish Genes and Christian Ethics: Theological and Ethical Reflections on Evolutionary Biology</i> (Gheorghe Razmerita)	191-198

Global Church Planting, by Craig Ott and Gene Wilson. Baker Academic, 2011. 449 pages. ISBN 978-0-8010-3580-7. Softcover. US\$29.99.

Craig Ott (PhD, Trinity Divinity School) is associate professor of mission and intercultural studies at Trinity Divinity School where he is the chair of ReachGlobal Missions. He served for twenty-one years in Germany as a church planter, trainer and church-planting consultant throughout Central Europe. Gene Wilson (DMin, Westminster Theological Seminary) is church planting director of ReachGlobal, the Evangelical Free Church of America's international mission. In the past he worked for eighteen years as church planter in Quebec, Canada and ten years as a church-planting coach in Latin America.

In the preface the authors state that their primary goal is to "combine sound biblical principles with the best practices from around the world to provide a practical guide for church planters working in a wide variety of cultural contexts" (p. x). To this end, the book is divided into four parts: Biblical Foundations, Strategic Considerations, Development Phases and Critical Factors.

The first part dealing with Biblical Foundations for Church Planting is divided into three chapters of just under sixty pages. The authors state that while entire books have been written on the nature of the church, the first chapter "maps in summary fashion a theological blueprint for the practical work of church planting" (p. 3). While this section might have received more in-depth analysis, it goes beyond most books which deal with the subject and includes two excellent tables which outline the churches Paul planted and New Testament Principles of Church Planting.

The next four chapters deal with Strategic Considerations in about ninety pages. In chapter four the authors "emphasize the need to plant churches that have multiplication potential in their DNA" (p. 65). To this end it is clearly stated that indigenous churches must not be overly dependent on expensive church buildings which can not be reproduced

by the local people. Chapter five carries on this theme by discussing three types of church planters and their specific role: 1) Pastoral Church Planter, 2) Catalytic Church Planter and 3) Apostolic Church Planter. Several case studies, tables and figures help the reader to understand and implement the right leadership for a given context.

Chapter 6 entitled "The Shape of the Church," and was written to "help church planters select a basic church shape and work with the local believers to contextualize church structures and ministries" (p. 107). The last chapter in this excellent and important section deals with both pioneer church plants where there are few Christians and the various strategies that can be used by an existing church to start a new congregation. The information given is comprehensive without being dogmatic and is one of the key strengths of the book.

Part III deals with the Developmental Phases of church planting and is the longest section of the book comprising seven chapters and almost 150 pages. In this very detailed section the authors spend a chapter each on the Overview, Targeting and Commissioning, Understanding and Strategizing, Launching, Establishing, Structuring and finally Reproducing. The pages are filled with many helpful diagrams, tables and case studies which greatly add to the understanding of the concepts being discussed. Indigenous and contextual issues are always highlighted and will be greatly appreciated by those working in a non-Western context.

The last section entitled "Critical Factors" comprises five chapters and just over 100 pages. In this part the authors in a sensitive and knowledgeable way spend a whole chapter dealing with the Personal Life of Church Planters, Church-Planting Teams, Developing Leadership, Partnerships and Resources and finally Planting Churches with a Kingdom Impact. The book concludes with an excellent bibliography and an index.

Personally I found the book very instructive as I am currently involved in planting an indigenous church in the Philippines. The two authors years of experience shine through on every page and strikes an very good balance between the theory and the "how to." I feel the book would be of even greater service if the index was expanded and a list of the many excellent figures and tables would be listed in the front of the book.

However, these very minor points aside, because *Global Church Planting* is currently the most up-to-date, comprehensive and contextualized book on the subject, it could well serve as *the* textbook in seminary courses around the world for years to come.

James H. Park

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Selfish Genes and Christian Ethics: Theological and Ethical Reflections on Evolutionary Biology, by Neil Messer. London: SCM, 2007. Pp. viii + 280. ISBN: 978-0-334-02996-0. Paperback. £19.99.

Very soon in the introduction of his book, Neil Messer, Senior Lecturer in Christian Theology at the University of Wales, Lampeter, acknowledges the essentiality of issue of ethics to evolution. On page 2, he highlights that ever since Darwin's time, both the insiders and the outsiders of the evolutionary theory produced a plethora of literature and debate on the topic. However, Messer is quick to "call into question the terms of the debate as they are commonly set out in the literature" (p. 2). The problem, the author explains, is that evolutionary biology is thought to be in conflict and indeed to be a threat to Christianity. Messer's purpose in his *Selfish Genes and Christian Ethics* is to show that this should not be the case and that Christian ethics and evolutionary biology are able to stay together and that "Christian theology is well able to engage critically and constructively with discussions of evolution and ethics, and to assimilate insights from biology into a Christian moral vision...." (p. 2).

Chapter 1, "Introduction" has three components. Before anything else, Messer acquaints the reader with his methodology, source, tradition, and approach. It does not take long before the reader realizes he or she is going to witness to the struggles of a theistic evolutionist ethicist, though Messer does not use these terms. Following the theistic evolutionist approach, Messer rejects the reductionism of atheist evolutionists such as Richard Dawkins and Daniel Dennett as well as creationism and even Intelligent Design (p. 3), although it appears he rejects the latter group based on their critics and not on his own study (p. 3-4; see also pp. 47-51). He also expresses his "dissatisfaction with styles of Christian engagement that, preoccupied with demonstrating the credibility of Christianity in the face of modern science, accept more than they ought of the terms on which secular Darwinist attacks on Christian belief are set up." Instead, he calls upon his theological tradition (Reformed Protestant) "not [to] be content to accept the terms of those debates as they are standardly set up, but [to] ... be ready to reframe the questions and make creative responses that can appropriate insights from evolutionary biology without being subsumed to the latter" (p. 3). Thus, facing the difficulty of reaching a consensus in any area of this discussion, Messer "chooses an approach influenced by Karl Barth, in which Christian doctrine sets the terms of the encounter and insights from biology are critically appropriated" (pp. 4-5, see also p. 48).

After briefly introducing the three parts of the book (pp. 4-6), Messer presents a succinct history of evolutionism. He highlights and describes clearly and meaningfully such generally known aspects of the history of

evolution as Charles Darwin's theory of natural selection, Gregor Mendel's theory of "discrete units of inheritance" (genes), the "modern synthesis" between Darwin's and Mendel's theories, the discovery of molecular genetics and the "neutral theory," the debates on the level of the operation of natural selection, the origin of humanity. But Messer's real interest in this historical summary is the development of sociobiology and evolutionary psychology, the locus of his discussion on ethics. Thus, Messer ends each discussion by briefly highlighting the controversies in each area of debate, but, naturally, he takes three pages to present five major pieces of criticism addressed to sociobiology and evolutionary psychology. Nevertheless, these controversies and criticisms do not help Messer cast a doubt on the theory of evolution as such; instead, he uses them to "redraw the map" of evolution and ethics to fit his theistic evolutionism.

The rest of the nine chapters of the book are divided into three major parts. In Part 1, "Mapping the Territory," comprising chapters 2 and 3, Messer follows the issues raised by Thomas H. Huxley's 1893 Romanes Lecture "Evolution and Ethics," which Messer thinks to be up to the task, to "map" the territory of the twenty-first century discussion of evolutionary biology and ethics. In the first part of Chapter 2, Messer places Huxley's lecture in its historical context by highlighting a major difference in ethical approaches of the time. On the one hand, evolutionists like Alfred R. Wallace with his concept of the superiority of the white human race and Herbert Spencer with his concept of "survival of the fittest" supported a brutal capitalistic sociology and ethics, which later translated into rude eugenics programs. Though agreeing in principle with these concepts, both Darwin and Huxley promoted a "sympathetic" attitude toward the weaklings of society, hoping to make them fit by means of education. Darwin promoted this sympathy in order to preserve "one of the most valuable parts of our evolutionary inheritance." Thus, discarding the Buddhist withdrawal from the "evolutionary process" and the Stoic call to follow nature, Huxley calls for the moral humans to combat nature (pp. 28-31). This explains why Huxley distinguished between the "ethical" and "natural" (p. 26), that is, humanity has to renounce drawing moral values and requirements from the study of nature.

Messer continues the chapter by highlighting 6 issues explicitly or implicitly raised by Huxley's "Evolution and Ethics." (1) "Can an evolutionary explanation be given for the existence and the particular characteristics of human morality?" Messer noted that more recent philosophers rejected reductionist answers such as those of E. O. Wilson or R. Dawkins. (2) "Is it possible to construct an 'ethic of evolution' – that is, to draw normative moral conclusions from putative facts about

evolutions?" Messer identifies three contradictory answers given by various evolutionists, the most prominent of which stipulating that "biology can *explain* the phenomenon of morality, but denies that there can be any objective *justification* of moral claims" (p. 34). (3) "What implications, if any, does evolutionary biology have for the content of normative ethics? Messer finds evolutionists disagreed on the answer, from J. Rachel's "*moral individualism*" to E. O. Wilson's tolerance and respect for universal human rights. (4) "In our efforts to live as we know (or believe) we ought, does our evolutionary inheritance help us or hinder us, or is it simply irrelevant?" Despite the variety of answers, Messer's description shows the writers agreeing more on the affirmative answer: humans still have to deal with the nature of "the ape and the tiger" (Huxley), nature (selfish genes) whose "designs we have to upset" (Dawkins). (5) "What moral assessment, if any, should we make of the evolutionary history of the earth?" This question has brought more agreement from evolutionists: nature is either non-moral (Huxley) or immoral (George Williams), discarding any perception of a designer in nature. (6) "If, as Huxley thought, the 'ethical progress of society' depends on combating the 'cosmic process', what means may legitimately be used in that combat?" To this question, Messer found a large array of answers, from eugenics (social intervention) to technological developments.

Having resolved that Huxley's conclusions were biased and thus unsatisfactory, in chapter 3, Messer proposes to redraw the map of the evolution and ethics by appealing to a theological component. At the beginning of the chapter (p. 44), he correctly identified the key problem of evolutionary ethics: what can be the "ought" derived from in the absence of any divine origin? But the methodology Messer employed is at least questionable. Together with Alisdair McIntyre, Messer points out that the "'Enlightenment' in ethics is an attempt to justify moral language and conclusions by means of a form of reasoning detached from the older and richer tradition which gave rise to that language and within which it makes sense" (p. 46). However, Messer continues, "[i]t is not at all clear that the new anthropology and the old moral concepts can be made to cohere. It may be that, if a reductionist view is right, it will require a radical revision of our moral language and concepts" (47). Notwithstanding these challenges to ethics by evolutionism, Messer "suggest[s] that it is a mistake to believe that evolutionary biology entails a reductionist account opposed to Christianity." Instead, he affirms that it is "possible to articulate an account of that tradition that can incorporate whatever is well-founded in the evolutionary accounts on which reductionists draw, that will give grounds for thinking that ... Darwinism does not imply a preference for reductionism. If it turns out that there are issues and evidence that reductionist accounts have trouble handling convincingly, but that this Christian account is better able to handle, that

will give grounds for thinking that the latter is *preferable* to reductionist accounts" (47).

On the next page, Messer says that "[t]he most obvious way to show that such an account can be developed is to develop it" (48). The way to achieve this is not by a "knock-down argument against reductionism or in favour of Christian ethics," but by building "a cumulative case that this Christian moral tradition has more to offer than reductionism in response to the ethical questions raised by evolutionary" (p. 48). Two pages on, Messer writes: "Since the purpose of this book is to explore the possibility of an *alternative* to reductionism, the option offered by Dennett hardly seems promising. I suggested earlier that if it proves possible to articulate a richer account that meets the conditions I proposed, that will in itself be a reason for rejecting the reductionist view" (p. 50). However, from the perspective of this reviewer, this argument or method is not convincing, especially in the context of Messer defeating Dennett's weak arguments of the same: that the reductionist evolutionism is superior to Christianity (p. 52-53). On the one hand, Christian ethics could offer even more satisfying answers to the problems of the world without accepting at all the framework of the evolutionism. It is true that Christian ethics could offer answers to the problems raised by evolutionism, but this is not by accepting the so called "well-established" evidence for evolutionism. On the other hand, truth is not measured by a "richer" account provided by a system of thought; truth should be marked by more objective characteristics, and not by the concept of "richness."

Another aspect of Messer's approach is his reduced interest in creationism, one of the five "typologies" of science-religion interaction: (1) evolutionary reductionism, (2) science-directed dialogue, (2) equal-status dialogue, (3) religion-directed dialogue, (4) creationism. While choosing the third typology for himself, Messer rejects most of the others more or less successfully. However, in my view, Messer's least successful argument was the one brought against creationism. First, for Messer, creationism is represented by Henry M. Morris, a young-earth creationist, and thus identifying creationists with a heavy, rather negative rhetoric against science (although I do not claim Henry Morris was a negativist). Second, in order to give justice to his own typology (Christian doctrines determines the dialogue and critically examines the proposals of science), he misrepresented creationism by describing it as "[o]nly the contribution of Christian doctrine is admitted, the scientific contribution being denied or dismissed" (p. 50). Messer himself realized the unfairness of his description of creationism in acknowledging the existence of "creation science," although he is quick to label it "scientific in a fairly unconventional way" (p. 54). Third, Messer dismissed creationism out rightly, giving it the least space (one paragraph) in his study and

description from all the other science-religion relation theories. The only creationist work he refers to is Henry M. Morris' 1974 *Scientific Creationism*, and even then only to the latter's preface. Elsewhere (p. 4), Messer seems to base his conclusions on books about creationists and Intelligent Design rather than on his own study. In any case, this displays either Messer's ignorance of creationism or his lack of willingness to study it adequately. Either of these two options is unacceptable for an objective approach to truth. Fourth, Messer then accuses creationism of rejecting the conclusions of biological science on "human life and the world" "on the ground of a particular reading of Christian doctrine." Just few pages earlier, however, describing his methodology, Messer was convinced that his "one long argument" will work "by articulating one particular account of a Christian tradition ... Reformed Protestantism" in relation to evolution-ethics interaction (p. 48). Is not the whole of Messer's approach based "on the ground of a particular reading of Christian doctrine?" Was not it *a priori*? Later on, Messer would affirm that his own typology should set the agenda for science-religion dialogue (p. 60). However, the question arises: how and why is it more adequate than Morris's position?

Chapter 4 of the book presents several substantial sections. In the first, Messer presents a fascinating history of "evolution of ethics," with ample analysis and able critique. The story reveals the struggle of key scientists over the genesis of altruism. Among them are William Hamilton and his "kin selection" model, Robert Trivers' "reciprocal altruism," Helena Cronin's manipulation model, Loren Haarsma's "adaptation and genetic basis" model. Messer concludes that these theories cannot explain satisfactorily the origin of altruism, thus the need of the Christian doctrine of Creation, which is supposed to "redraw the map" of evolution and ethics.

In Messer's view, three major concepts of the doctrine of creation are crucial for this discussion (pp. 74-78): (1) creation is a creedal affirmation; (2) creation *ex nihilo* is a foundational Christian concept; and (3) creation is a "loving" act of the triune God and therefore it is contingent and inherently good. While these concepts are indeed essential to the Christian doctrine of creation, Messer's problem here is that he finds them not primarily on biblical study, but builds them upon the controversial views of two theologians. On the one hand, Messer puts forward Barth's concept of the a-historical nature of creation and eschaton, whereby the biblical account of creation is made merely a saga, not communicating factual knowledge and thus being "different" from the "scientific discourse" (pp. 76-77). On the other hand, Messer relies upon Irinaeus' concept of an "[un]finished" creation to be "perfected" in the eschaton (pp. 74-75), although Messer does not explain how does he

reconcile this last idea with the concept of the goodness of creation (pp. 75, 77-78). However, Barth's and Irinaeus' concepts constitute Messer's "particular reading of Christian doctrine," to use Messer's accusation against the creationists, to which I would add a "controversial" reading. In this context, Messer's rejection and dismissal of creationists is not only unconvincing, but also counterproductive to his own methodology and eventually to his stance.

Messer's discussion continues to mingle insightful aspects of Christian theology with inappropriate conclusions, biased by his self-imposed purpose of the book. Thus, in discussing human creatures (pp. 79-83), Messer concludes that, generally, Christian accounts of humans as *imago Dei* risk "to become to a greater or lesser extent disembodied" (p. 81) and that "biology," critically appropriated into Christian doctrine of creation, can "remind us to give due weight to the fact that human personhood in the image of God is physically embodied existence in a material world" (p. 82). While this is a valuable observation, Messer does not show how biblical creationism and anthropology (that is, the monist one) fail to serve as such reminders. Another problem, with Messer's approach is that he seems to use the terms "biology" and "evolutionary biology" (same paragraph, p. 83) interchangeably. This is misleading, for the creationists, for instance, distinguish between the two terms: while accepting the contribution of the former, they dismiss the second as philosophical-historical hypothesis.

In his discussion of the doctrine of creation, Messer identifies four points: (1) "The Christian doctrine of creation includes an *evaluative comment on the material world*" (p. 84); (2) "The Christian anthropology ... suggests an *account of the formation of personal identity that might lend itself to an understanding of moral formation*" (p. 88); (3) "This Christian anthropology ... suggests a *structure of call and response* in the human moral life lived before God" (p. 89); (4) "The Christian doctrine of creation and theological anthropology ... suggest an *account of human relationships with non-human creation*" (p. 90); (5) The doctrine of creation also point "towards the Christian doctrines of *salvation and sin*." It is obvious that various Christian traditions will have more or less a different content to these points. However, Messer failed to show how his approach is better than another Christian tradition, for instance, from the creationist model, which he rejected as non-operational in the science-faith interaction. He also failed to show how only a TE ethics could be operational, and not the other options, say creationists, who accept micro-evolution and the role of natural selection in it.

In chapter 5, Messer discusses the "is-ought" relation from both evolutionary and theological perspectives, that is, could one derive the "ought" from what is in nature, especially using scientific research.

Messer rightly concludes that the right "can never simply be read off our scientific understandings of the world" and that "our knowledge about the ways of being and acting in the world ... must be rooted in the biblical witness to the creative activity of God and the Christian tradition's reflection on that biblical witness" (p. 106). Notwithstanding the truism of this affirmation, Messer does not show why one should be a theistic evolutionist and theistic evolutionist ethicist to reach such conclusions. Of course, as it becomes clear from the rest of the chapter, Messer took the route of theistic evolutionary ethics because he followed an interpretation of his own tradition (Barth). However, this tradition does make theistic evolution ethics more biblical than creationism. For instance, Barth's concept of ethics as "the command of God the Creator" (p. 106) is not foreign at all to special creationism, thus there is no need to introduce concepts such as creation as a "'theatre' where God's reconciling work takes place" (p. 122). This concept does not transpire from the Bible, but comes from a theistic evolutionary perspective, presenting God as reconciling Himself to a world in evolution.

Part three of the book consists of four chapters discussing crucial issues to Christian anthropology and ethics. In chapter 6, Messer raises the issue of limitations and determinism in relation to human nature. He surveys the discussions among evolutionary, theological and philosophical circles. Although coming from a Calvinistic background himself, Messer inclines to combine some aspects of natural determinism of the human nature (the determinism of genes) with our moral freedom and responsibility. He pictures a "human agency in which we have choices and act for reasons that we can call our own, but in which our thinking, feeling and acting are influenced, perhaps sometimes radically constrained, by factors out of our control; among those factors may be aspects of our evolutionary inheritance" (p. 159).

Chapters 7 and 8 study the doctrines of salvation and sin, emphasizing the original sin and salvation in Christ. After Messer defines sin with the help of concepts of several theologians (Peter T. Forsyth's concept of sin as rebellion against God's holiness and Karl Barth's concept of sin as pride, slothfulness in accepting God's salvation), he follows the usual theistic evolutionist explanations of sin as humanity's failure to submit to God's plan in the process of evolution and as transmitted genetically to posterity. Messer also inclines to dismiss the biblical study of creation and of the historical Adam, as well as demons and Satan, as mythological in nature. Salvation is seen as God's continued work to bring humanity through the process of evolution to the level of consciousness presented in the person of Jesus Christ.

The last chapter received the suggestive title "Working Out Our Own Salvation?" Here, Messer addresses issues such as medical and biological

technologies. He concludes that humanity needs to participate in God's creation by improving the level of life, the plight of the poor and morality.

It is interesting to note that Messer delves into a scientific and theological narratives and then loosely connects these accounts with the theory of evolution. Quite often he acknowledges that these are pure speculations. But he continues to do this throughout the book.

The book is highly interesting for readers interested in the science-religion interaction. But it proposes a model with a highly speculative, non-objective nature. The book is informative and thoughtful. I recommend this book for those who study religion and science, but also Christian ethics.

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