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The Impact on Life of Estero de San Miguel

Noel D. Santander

College of Arts and Sciences, Theology Department
San Beda University, Manila, Philippines
bernardonef@yahoo.com.ph

Josephine C. Dango

College of Arts and Sciences, Theology Department
San Beda University, Manila, Philippines
josiedango@gmail.com

Ma. Emperatriz C. Gabatbat

College of Arts and Sciences, Theology Department
San Beda University, Manila, Philippines
marie_gabatbat@yahoo.com

Abstract

This research responded to the challenge of Pope Francis to do research that provides better understanding of how different creatures relate to one another in the ecosystem. Through semiotic analysis applied on the life sharing of the local people and some images, this research yielded a deeper appreciation of the impact on life of Estero de San Miguel. Accordingly, the estero is an abiotic component of the local ecosystem within the district of San Miguel, Manila. It had freely offered greater provisioning, regulating, cultural, and supporting services before to local communities and other life forms within its immediate ecosystem than today, when it had been relegated only to serve as a tributary of Pasig River and sewer of human waste. The present status of the estero shows lesser impact on life within its local ecosystem. While there is still time to finally halt this local ecological catastrophe, people must actively contribute in creating a serious awareness of, respect, and love for the estero and the environment at large. A serious awareness that focuses more on their intrinsic value, apart from their services being offered. The compounded lingual and visual semiotic reflections provided several principles that served as underlying ideological reference for a new inspiration and commitment to value creation, like the estero, and practice responsible stewardship.

Keywords: Estero, Ecosystem, Laudato Si, Semiotic Reflection, Stewardship

Introduction

Pope Francis, in his encyclical *Laudato si*, began with a question, “What is happening to our common home?” This is a very timely question, as we experience alarming changes in our climate, and the corresponding effect in our common home, our planet Earth. Although there may have been a lot of discussions already on the environmental concerns in the world today, Pope Francis recognizes that there is an increasing sensitivity to what is happening in our common home. He said we need to look at these problems before we can consider how our faith can bring new incentives and requirements towards a more responsible stewardship of God’s creation. Among the problems today concerning our environment that was mentioned in the encyclical was the issue of water.

The Philippines is rich in natural resources like water. They provide the essentials of life to millions of Filipinos, yet the people are now witnessing how these are being destroyed gradually. And so, the country accepted the challenge to mitigate this environmental problem, which affects people and the ecosystems at large, most especially the polluted inlet bodies of water, the esteros. In Manila alone, this is an acute environmental problem. Basically, Manila is surrounded by water, and is composed of several esteros, which flows to the main artery of Pasig River that meets Manila Bay. Accordingly, there are about thirty-five esteros flowing through Pasig River and Manila Bay, one of which is Estero de San Miguel. It is a major inlet body of water flowing through the north-central portion of Manila, right around the city’s San Miguel district, where one can find several great institutions, like the country’s seat of governance (Malacanang Palace), parishes and shrine (St. Jude and San Miguel), educational institutions (V. Mapa Elementary School, St. Jude College, College of the Holy Spirit, La Consolación College, Centro Escolar University, and San Beda University). Esteros like Estero de San Miguel have been very important to Manila. They are essential because they serve as sewers of dirty waters and human wastes, as well as flood drains. This may be a major reason why the government, non-governmental organizations, and private individuals have embraced the big challenge of rehabilitating these bodies of water which have been highly polluted and became stagnant for some reasons in the past decades.

The proponents of this research had thought of their being much greater purposes for the esteros than just serving as flood drains, dirty water and human wastes sewers. They firmly believed that the Estero de San Miguel and the rest of esteros in Manila are considered a vital element within its local ecosystem, especially for the residing

communities and existing other life forms in earlier days. This is something interesting to rediscover. For upon rediscovering the glorious state of the esteros, especially Estero de San Miguel, local communities and institutions may gain new inspiration and commitment to pursue seriously responsible stewardship of the esteros. Thus, the proponents of this research would like to answer the relevant question, what is the pivotal role played by the Estero de San Miguel within its local ecosystem? This research has the following specific objectives: Explore the essential relationship of the Estero de San Miguel with the local communities and other life forms within its local ecosystem; analyze semiotically these essential roles played by the estero within its local ecosystem through old and new pictures, and life sharing of local people; and contribute in instilling among locals the value of responsible stewardship as per instruction of *Laudato Si* to all people, in order to renew, if not restore the vital role played by the Estero de San Miguel within the scope of its ecosystem.

This gesture in a way is following the advice of Pope Francis to all people who are into environment-related issues research endeavor, that one must yield better understanding of an ecosystem. He said, “*Ongoing research should also give us a better understanding of how different creatures relate to one another in making up the larger units which today we term “ecosystems”*” (Pope Francis, #140).

Quite a number of literatures have been published already on the issue of creation, environment, or ecology. Towards the end part of the 20th century, there was a noticeable burgeoning of literatures on the said issue, and especially after the global escalation in 2006 of the “*An Inconvenient Truth*,” an American documentary film that raised international public awareness of global warming and reenergized the environmental movement. The succeeding paragraphs are salient points raised by some of the literatures that were published during this time frame:

On the Existence of Creation

In *The Universe Story* of Swimme and Berry, they elaborated the extent of our awareness to the existence of other beings and non-beings around us. They said, we can begin to understand that the story of the earth is also the story of the human, as well as the story of every being of the Earth. Their narration of the story of the universe also hopes that this reality can bring about finding expression in it, not only in this narrative, but in poetry, music, and ritual throughout the entire range of modern culture, on a universal scale. Such expressions will sensitize people to the

story that every river, and every star, and every animal, is telling (1994, p.3).

Laudato Si pronounced that the creation account in the book of Genesis contain, in their own symbolic and narrative language, profound teachings about human existence and its historical reality. They suggest that human life is grounded on three fundamental and closely intertwined relationships: with God, with our neighbor, and with the earth itself (Pope Francis, p. 44). The Earth was here before us, and it has been given to us (p. 45), and the entire material universe speaks of God's love, his boundless affection for us. Soil, water, mountains: everything is, as it were, a caress of God (p. 56).

The universe, as a whole, in all its manifold relationships, shows forth the inexhaustible riches of God. We understand better the importance and meaning of each creature, if we contemplate it within the entirety of God's plan. As the catechism teaches: "God wills the interdependence of creatures. The sun and the moon, the cedar and the little flower, the eagle and the sparrow: the spectacle of their countless diversities and inequalities, tells us that no creature is self-sufficient. Creatures exist only in dependence on each other, to complete each other, in the service of each other." (CCC, p. 340) (Pope Francis, p. 58)

We have been exposed to many stories of how the world had evolved, and according to Dr. Paul DeJillias in *Our Cosmic Origins*, these stories of our creation help us to understand who we are, what our role and mission on Planet Earth is, and what our destiny will be (p. 63).

On the Human's Response to Creation

According to Swimme and Berry, with all our scientific insights, we have not attained a meaningful approach to the universe, and thus we have at the present time, a distorted mode of human presence upon Earth. We are somehow failing in the fundamental role that we should be fulfilling – the role of enabling the Earth and the entire universe to reflect on and to celebrate themselves, and the deep mysteries they bear within them, in a special mode of conscious self-awareness (p.1). Swimme and Berry also put it that the human has taken over such extensive control of the life systems of the Earth that the future will be dependent on human decision to an extent never dreamed of in previous times. We are deciding what species will live or perish, we are determining the chemical structure of the soil and the air and the water, we are mapping out the areas of wilderness that will be allowed to function in their own natural modalities (p. 4).

Pope Francis states in *Laudato Si* that the human environment and the natural environment deteriorate together; we cannot adequately combat environmental degradation unless we attend to causes related to human and social degradation. In fact, the deterioration of the environment and of society affects the most vulnerable people on the planet, the poor (p. 31).

Our present condition now of ecological crises bring about pressure on our end. Matthew Fox states that we are becoming more and more aware that humanity had not been a good guest on this Earth of late. We have some severe disciplining to undergo if we are to recover the art of savoring, which is what guesting (receiving gratefully) is about. And we must let go of much that is humanly chauvinist if we are to recover the truth of hosting all beings. Cosmic hospitality requires a deeper and deeper reverence for all that is and all that might be (p. 116). If we are truly serious in this effort to life preservation, Matthew Fox says that we need true holiness and genuine hospitality because they lead to gratitude. In our gratitude, we would be able to appreciate the reverent mystery that it is. We would not need to control but being still with the gift. Savoring. Thanking. Our thanks at the pleasure that the blessings of creation are about is itself our return of blessing for blessing (Fox, p. 115) for we have been bestowed with this original blessing of the goodness of creation.

The Pontifical Council for Justice and Peace focuses on how man, who is created in God's image, "received a mandate to subject to himself the Earth and all that it contains, and to govern the world with justice and holiness, a mandate to relate himself and the totality of things to him who was to be acknowledged as the Lord and Creator of all" (p. 282). For the council, the Church is not opposed to technological advancement for "science and technology are a wonderful product of a God-given human creativity, since they have provided us with wonderful possibilities, and we all gratefully benefit from them." For this reason, as people who believe in God, who saw that nature which he had created was 'good', we rejoice in the technological and economic progress which people, using their intelligence, have managed to make (p. 283).

Adrin M. Peñamora, in the journal *Why, O God?*, stated that only by relearning how to be truly a "kapwa" to others that we can regard the Earth as Kapwa, to regard creation as we regard ourselves (p. 135), for to be human is to be "earth" before the Creator (p.133).

Glorina P. Orozco and Macrina T. Zafaralla, in their research *Socio-Economic Study of Two Major Metro Manila Esteros (Estero de San Miguel and Estero de Quiapo)*, revealed that attitude and actions of stakeholders to their esteros were influenced primarily by their economic status, educational and cultural background. Institutional initiatives, such

as environmental education and community-based programs, were looked into as possible key for the effective rehabilitation and attainment of sustainability of Manila esteros (June 2011, pp. 52-59).

The City of Manila Waterways, in July 11, 2014, posted an article entitled *Estero de San Miguel Reborn* in the website The Urban Roamer owned by Karl Aguilar. In the said article, government agencies local and national (Pasig River Rehabilitation Commission (PRRC), Metro Manila Development Authority (MMDA), and partner organizations were given recognition on their efforts exerted to rehabilitate and clean up the major waterway in the district of San Miguel, which is still ongoing up to this day. A related message was reiterated by Carlo Jacob Molina in his contribution to Inquirer.net, *Look: 'Cleaner', 'more alive' Estero de San Miguel in Manila*. In the article, with accompanying pictures, he manifested the results of the efforts done by the Pasig River Rehabilitation Commission (PRRC), with P52 million spent in 2014 just to restore the estero.

Literatures about ecology, ecological problems, and guiding principles in approaching ecological problems abound in quad media. But only few literatures are found focusing on a body of water like an estero, much more concerning the esteros in Manila. And if there are literatures dealing with esteros in Manila, the emphasis were mostly how human attitude and behavior affected the esteros and what should be done in order to rehabilitate what was formerly pristine esteros like Estero de San Miguel. Not a singular literature was found paying attention to the glorious state of any estero in Manila, and explore the essential role played by the estero within its local ecosystem. Borrowing from Pope Francis' understanding of what is an ecosystem, it is the harmonious ensemble of organisms existing in a defined space and functioning as a system. It is in this context that this research is being undertaken by the proponents of this study.

Conceptual Model and Operational Framework

One may infer that creation has been a hot topic nowadays because of the evident ecological crisis the world is now facing. It is quite saddening because the world got interested to discuss matters about creation due to this increasing and inevitable cosmic decay, and not because of her intrinsic goodness and beauty. What most people are unaware of is that creation has been a hot issue being addressed a long time ago within the Christian tradition alone. This has been deliberated in various literatures and by personalities of different places and time, in

the language that is not political, scientific, and economic, but of faith, religious, or spiritual.

In the Judaeo-Christian tradition, from the book of Genesis, written within the period of Babylonian captivity, the priestly and Jahwist writers poetically blurted out how God created the entire cosmic world and everything within it including human beings with God's full satisfaction at the end. It was said, "God saw all that he had made, and it was very good" (Genesis 1:31). The noble intention was primarily to insinuate that God wants a good and just world (Charpentier, 1997, p. 72). Elevating the dignity of humanity, God bestowed upon man and woman all these creations as graces for their own good, as mentioned in Genesis 1:29-30. A more elating revelation on humanity's part were the pronouncements made by God saying, "Let them rule over the fish of the sea, over the birds of the air, over the cattle, over the wild animals, and over all creeping things that crawl along the ground"(Genesis 1:26), and "there was no man to till the earth" (Genesis 2:5). These were pronouncements of God about what human beings should do in life in relation to all the graces God gave them. This concern about human beings' responsible stewardship over all of God's creation is purposely given for their good. It is a non-tyrannical or domineering act endangering their human existence (Christian Community Bible, 2004, pp. 6-7).

Creation was generously given praise by the Psalmists and prophet Isaiah in the sacred writings because, for them, they were expressions of God's glory, "*The heavens declare the glory of God; the firmament proclaims the works of his hands*" (Psalm 19:2), his incomparable wisdom, "*How varied are your works, Lord! In wisdom you have made them all; the Earth is full of your creatures*" (Psalm 104:24), power, "*Lift up your eyes on high and see who created these: He leads out their army and numbers them, calling them all by name. By his great might and the strength of his power, not one of them is missing!*" (Isaiah 40:24), and they praised him, "*Praise the Lord from the earth, you sea monsters and all the deeps of the sea; lightning and hail, snow and thick clouds, storm wind that fulfills his command; mountains and all hills, fruit trees and all cedars; animals wild and tame, creatures that crawl and birds that fly*" (Psalm 148:7-11). That is why God Himself was so pleased with them (Piper, 1987).

The quest in giving recognition on the venerability of creation persisted and is expressed in various forms. In the 6th century holy rule of St Benedict, it was emphasized among monks to be frugal (Rule of Benedict 39:9-10), an approach proper in taking care of the environment. It entails taking only what is needed, and not willfully exploiting

resources until there is nothing left for future generations, or until the land is stripped of its capacity to support life (Saint Meinrad Seminary & School of Theology 2018). Furthermore, the patron saint of Europe prescribed to all his monks about reverence of all things. He said, “*treat all goods as if they were vessels of the altar*” (RB 31.10). This in turn captures the Benedictine concept of ecological stewardship that becomes a virtue of exceptional value in Benedictine monasteries.

St. Francis of Assisi, whom St. Pope John Paul II named as the patron saint "of those who promote ecology" in 1979, in 13th century, passionately and romantically expressed his vision for all the creative world as brothers and sisters through his “*Canticle of the Creatures or Canticle of Creation*”. Keith Warner, OFM, insinuated that being intimately related to creation itself, just like what St. Francis did, will help people grow more fully into the mystery of God, especially nowadays because people are so alienated from the Earth and from one another. What is needed is not only learning something about the material relationship of the Earth and humanity, but also understanding this relationship more broadly as a spiritual community. There is a need for a sense of enchantment in understanding the modern world (Warner, September 2012).

At present, the second encyclical of Pope Francis “*On Care for Our Common Home*” (*Laudato Si'*), made an appeal to the Church and the world to acknowledge the urgency of current environmental challenges, to dialogue about how we are shaping the future of our planet. Among the key ideas the Holy Father presented in this encyclical is that of “integral ecology”, i.e. that people and planet are part of one family, where the Earth is our common home. It invites people to protect God’s creation for future generations, to embrace a lifestyle change for their own good, and to take care of people who are poor and more vulnerable.

The Culture of ecological appreciation and reverence, of affirming the intrinsic beauty and goodness of every created thing within an ecosystem should be revived and reinforced. It’s about time to bring back mysticism and enchantment on human perspective of nature, environment, or cosmic world to renew inspiration and develop within oneself a heart of a committed steward of God’s creation.

The proponents of this research is resolved to participate in this renewed challenge towards care of mother earth. This research, in particular, will explore more on the natural beauty and goodness of the Estero de San Miguel (EDSM) before it became polluted and continuously being rehabilitated. This will be made possible by applying Semiotic analysis on the gathered data about the said estero in the form of shared life experiences of the local residents and pictures.

The entire research endeavor will be guided by the operational framework presented below:

Operational Framework

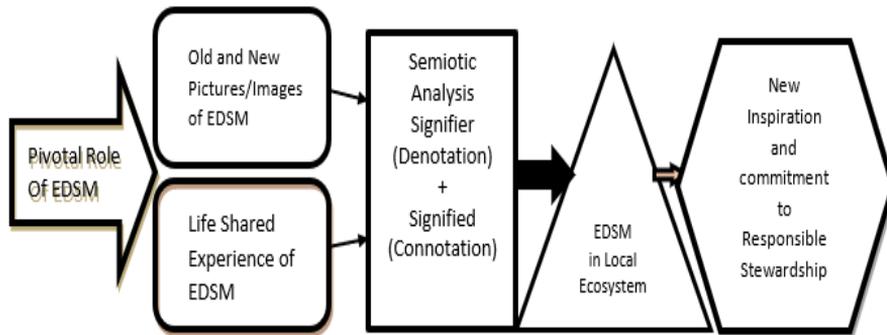


Figure 1: *Operational Framework of the Study*

Methodology

This research was descriptive and exploratory in nature with the help of simple semiotic analysis applied on the data in the form of pictures and oral narratives of the life sharing of the people residing within the scope of the ecosystem where Estero de San Miguel is to be found. In securing the data necessary for this research the proponents used dual approaches: survey - interview and archival. The respondents for this research were individual (for their sharing about the Estero de San Miguel), and organizational (for archival gathering of old and new images of the said estero). The researchers used purposive sampling to secure the necessary data needed for their analysis. The criteria observed in the selection of the 10 individuals were at least 60 years old and above, male or female, and can share his or her vivid memories about the estero. While the 3 organizations needed for picture-sourcing of the estero were reputable organizations and known for possible keeping and producing of old and new pictures of the said estero.

The researchers conducted an ocular visit to the estero and the local communities and institutions nearby. They sought the help of the community officials to identify possible respondents on the study. Upon identifying the prospective respondents for this research, they were subjected to individual personal recorded interview. For some data shared

that were unclear, the researchers validated these by asking clarificatory remarks. Then the recorded data were translated into lucid written form which were used for analysis. In gathering data through pictures, several organizations or institutions were sought. Through letters, they were asked to allow the researchers to search for old images of Estero de San Miguel that will be used for semiotic analysis. New pictures of the estero were provided by the researchers themselves by taking pictures of the estero.

For the analysis, the semiotic analysis framework was used. Semiotics (or semiology) was the field of study that was concerned with signs and/or signification. The two dominant models of what constitutes a sign were those of the linguist Ferdinand de Saussure and the philosopher Charles Sanders Peirce. The fundamental question in semiotics was how meanings were formed. Semiotic research approached signs as existing in various forms: pictures, words, letters, objects, natural objects, gestures, phenomena, and actions. Saussure offered a 'dyadic' or two-part model of the sign. He defined a sign as being composed of: a 'signifier' (signifiant) - the form which the sign takes; and the 'signified' (signifié) - the concept it represents. The shared life experiences of the locals near Estero de San Miguel were all subjected to the "Signifier-Signified" system of semiotic analysis. In the case of the images, they were treated with Roland Barthes' identification of the "denotative – connotative" levels of meaning. All these signs were analyzed critically and semiotically to ensure the intended results will be achieved.

Results and Discussion

All the transcribed individual interviews of the respondents and several images with direct and indirect relations to Estero de San Miguel that were obtained from the different archives, virtual or non-virtual, were gathered together and subjected to semiotic analysis that was influenced by Ferdinand de Saussure, Charles Peirce, and Roland Barthes.

Lingual Signs

In presenting the semiosis of the transcribed narratives of the respondents about their personal or transferred knowledge and actual or current experiences of the Estero de San Miguel, the proponents of this research decided to use as themes the fundamental services of an ecosystem in order to qualify the pivotal role played or impact on life of the estero within its local ecosystem. The acknowledged services offered by the ecosystem are provisioning, regulating, cultural, and supporting services (Biodiversity Information System for Europe, 2019). After the lingual semiosis, a cohesive lingual reflection is presented.

Provisioning Services. These are the products obtained from ecosystems, such as food, fresh water, wood, fiber, and the like.

Table 1.

Semiosis of the provisioning services of Estero de San Miguel

Signifier	Signified
<i>Isda, Biya, Dalag, Hito, Hapon, Tulya, Maliliit na Talangka, Gurami</i>	The estuary was a rich body of water that produces a variety of aquatic animals such as fishes, crabs, and shrimps that may be eaten by people to help sustain their living.
<i>Malinis na tubig, Sobrang linaw ng tubig</i>	The estero then flows with clean and clear water that was used by human communities for drinking, bathing, and washing purposes.
<i>Napakarumi na, maamoy na tubig, may gasolina, oily at polluted ang tubig, maduming tubig, malamok</i>	The condition of the Estero de San Miguel had changed badly. The quality of water degraded to the level of being detrimental to the health of the human communities. It can cause diseases like dengue.

The Table 1 presents the semiosis of the provisioning services of Estero de San Miguel from the narratives of the participants.

Regulating Services. These are the benefits obtained from the regulation of ecosystem processes, such as climate regulation, natural hazard regulation, water purification, waste management, and others.

Table 2.

Semiosis of the regulating services of Estero de San Miguel

Signifier	Signified
<i>Malinis pa ang Pasig river kaya malinis ang tubig sa estero, Ito po yung pinakadulo ng San Miguel area papunta na sa Pasig River</i>	The estero was described as a tributary of a bigger body of water that was the Pasig River
<i>Pag malakas ang ulan, malalim ang tubig, pag habagat tumataas ang tubig, baha</i>	The estero helped regulate local area flooding caused by habagat and typhoon
<i>Tributary to ocean and seas</i>	The estero served as tidal water regulator. Though it starts and ends with Pasig River, it is located near another great body of water, the Manila Bay
<i>Gagawa ng poso negro, saan padadaanin? Derecho sa ilog</i>	The estero has become a sewer of human waste
<i>Nagdudumi ang Pasig River dahil nanggagaling dito sa maliliit na estero</i>	The estero helped in draining the water as it flows towards Pasig River

Table 2 presents the semiosis of the regulating services of Estero de San Miguel from the narratives of the participants.

Cultural Services. These include non-material benefits that people obtain from ecosystems, such as spiritual enrichment, intellectual development, recreation, and aesthetic values.

Table 3.

Semiosis of the cultural services of Estero de San Miguel

Signifier	Signified
<i>May bahay na matanda ni Dr. Jose; may mga bahay dyan, panahon pa ng mga kastila</i>	The place where the estero was located might have been a beautiful place that enticed people to come and build houses beside the estero since the Spanish colonial era
<i>Walang naglalaba, walang naliligo at nagtatapon, malinis ang tubig, walang amoy, sobrang linis walang nagdudumi Nakakapaglaro sa gilid. Nanghuhuli ng isda, nakakalusong kami, tampisaw pa kami dyan, nagkukuwentuhan lang sila dyan, naliligo kami, sa tabi ng ilog nagbabaybay</i>	People then showed respect, care and discipline towards the estero The estero provided a place for people to spend leisure, relaxation, and fun for children
<i>Napakagandang lugar, maganda noon maaliwalas at walang amoy May mga kababalaghan pang kwento dyan, katulad ng pari na naglalakad na wang ulo, may lumulutang na babae, yung nanay ko at ibang tao sa community nakakakita sila ng madreng nagdadasal ng hating gabi, pugot ang ulo</i>	The estero brought beauty and inspiration in the local area The estero has become a source of superstitious beliefs and folklore
<i>Yung lugar naming yun may garrison ng hapon Uso ang tanan gamit ang estero</i>	The estero has historical value or insinuation The estero was used for elopement by couples
<i>Malayo ang itsura nito noon, dumumi ng 95%, mabaho, maitim na tubig, naging itim, naging burak ang ilog, mabaho lalo na kung summer</i>	The condition of the Estero deteriorated badly. This evoked the feeling of dismay among people living near the estero. It expresses the lack of discipline of the people
<i>Nilinis pero burak pa rin</i>	The human intervention of rehabilitating the estero seemed partially successful
<i>Nagkakasundo mga tao dito, nagkukuwentuhan, may naghahakot ng basura, hindi na ngayon bumabaha</i>	The sudden positive changes that happened to the estero brought a sense of joy to people, a sense of home, and respect towards it

Table 3 presents the semiosis of the cultural services of Estero de San Miguel from the narratives of the participants.

Supporting Services. These highlight the importance of ecosystems to provide habitat for various living species and to maintain the viability of life.

Table 4.

Semiosis of the supporting services of Estero de San Miguel

Signifier	Signified
<i>May mga isda at hipon, may mga tulya at water lily, may mga isdang gurami, halamang wild, maliliit na talangka, may nakukuhang biya, may mga hito at dalag, may mga damo, talahiban, mga puno</i>	The estero provided a natural habitat for some aquatic plants and animals
<i>Palayan, magkabilang gilid ng estero may factory ng karton</i>	The place of the estero was recognized as viable for agricultural growth and some business establishments

Table 4 presents the semiosis of the supporting services of Estero de San Miguel from the narratives of the participants.

Lingual Semiotic Reflection:

Considering the narratives of the respondents on their personal or transferred knowledge and experiences of the Estero de San Miguel being treated with semiotic analysis expressed through the “signifier – signified” system of analyzing them, the proponents had conceived that the estero had more positive impact on life within the local ecosystem of San Miguel District of Manila. This positive impact is qualified through various services brought about by the estero as an abiotic component of the local ecosystem. Based from the narratives, in the early years of the estero, as a tributary of a bigger body of water that is the Pasig river, it enjoys the condition of being a fresh, clear, and clean body of water. It served as a natural and viable habitat for some water animals and plants that somehow contributed in sustaining the healthy lives of human communities residing near the estero. As a tributary, it helped regulate and drain the water that flows from the Pasig River coming from both ends of the estero. More than these, the estero was imbued with socio-cultural and even economic significance that made life within the local ecosystem natural and yet vibrant. The migration and convergence of human communities in the area of San Miguel district contributed slowly in the deterioration of the healthy and natural condition of the estero. This

sad fate of the estero can point to the lack of discipline, disrespect of the people towards the estero (and the Pasig River), that eventually led to loss of estero's homey and mystical value. The miserable condition of the estero had drawn the attention of people to commit some interventions to rehabilitate it. The rehabilitation done to the estero brought mixed feelings among the people. Most of them were satisfied with the good changes they saw in the situation of the estero. Some were a bit dismayed because of the quality of the water had remained filthy with foul odor. Although water quality had a little improvement, aesthetically, the estero became pleasant to see because of added greeneries placed on the sides, which are expected, not just to beautify the estero, but at the same time eliminate the foul odor emitting from the estero, and somehow help purify the water from its pollutants. The impact on life now of the Estero de San Miguel within the local ecosystem may have been less and less in quality in terms of the services being offered. It has remained as it is, a body of water waiting to be recognized again for its intrinsic goodness as a nonliving component of the local ecosystem in San Miguel district of Manila.

Visual Signs

The images to be presented were from different periods in time. They were linked in one way or another to Estero de San Miguel. By applying the semiotic method and processes on the images inspired by Barthes, of citing the explicit and hidden meanings, the proponents tried to qualify the impact on life of the estero within its immediate local ecosystem, primarily within the San Miguel district of Manila. After the visual semiosis, a cohesive visual reflection is presented.



Image 1. *Old picture of a view in San Miguel, Manila showing native houses along the Pasig River bank*

Denotation – Old picture of a view in San Miguel, Manila showing native houses along the Pasig River bank and alleged confluence of its tributary Estero de San Miguel, with lots of trees and a river boat floating. The image was taken circa 1870 and owned by Biblioteca Nacional De Espana.

Connotation - Human communities that thrived along the Pasig River and one of its tributaries, Estero de San Miguel, were provided with clear and fresh water. Both bodies of water provided a habitat that supports not only human communities but of plants and animals as well.



Image 2. *A late 1920's picture of San Beda College.*

Denotation – A late 1920's picture of San Beda College (now a university) and its vast vacant lot along Mendiola Street, with some of its early structures that includes a portion of the present abbey. On the other side of the street was Centro Escolar de Señoritas (Centro Escolar University). Also seen was the Estero de San Miguel at the back and side of San Beda College. Lining along both sides of the Estero were trees, big houses, and some factory-like structures, the Mendiola bridge with small boats underneath, some caratelas traversing the street. The image was from San Diego Air and Space Museum by J. Tewell.

Connotation - The Estero de San Miguel, with its clean and clear water, separated the San Beda College from structures of human communities, as well as factories and business establishments. The Estero was being used as a mode of transportation with the use of small bancas. The existence of vegetation and human communities suggested the idea that the Estero served as a viable life support to living organisms within the local ecosystem.

Nice home along the Pasig River, San Miguel, Manila, Philippines, 1870 or before
 Credits: Thomas Lukis Mansell, LIFE © John Tewell



Image 3. *An earlier or 1870 image of a nice home along the Pasig River, San Miguel, Manila.*

Denotation – An earlier or 1870 image of a nice home along the Pasig River, San Miguel, Manila. Seen also were other gated big houses with plants, and the reflection of the nice houses on the waters of Pasig River. Image was credited to Thomas Lukis Mansell by John Tewell.

Connotation - The nice home along Pasig River within the San Miguel district implies the beauty and the serenity of the place preferred by some affluent members of the society then as represented by the big structures of houses. As “nice homes” were built along a great river in San Miguel, Manila, where the Estero de San Miguel is also to be found as a tributary, implies the area was very conducive for human settlement. The reflection of the nice houses on the waters of Pasig River implies the healthy condition of the river, which is a condition possibly shared by the Estero de San Miguel being its tributary.

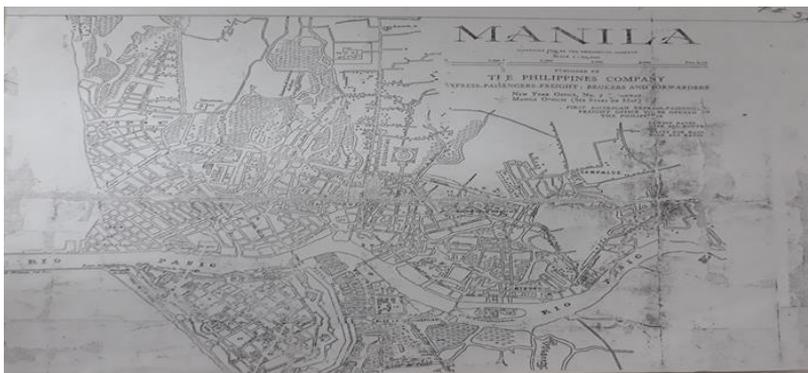


Image 4. *A late 1800's old map of Manila.*

Denotation – A late 1800's old map of Manila published by The Philippines Company, express - passengers, freight, brokers, and

forwarders, the first American express-passengers, freight office to be opened in the Philippines. It included streets and bodies of water including Estero de San Miguel.

Connotation - Estero de San Miguel was recognized and considered as an important tributary of Pasig River (Rio Pasig then) as depicted in the map along with other tributaries and streets that may be used in transporting something as mentioned literally by the American Express Company, ‘There are many canals or esteros emptying into this [Pasig] river,’ and “[t]he strange and brilliantly colored “cascos” and the long and narrow “bancas” move slowly up and down the canals.’

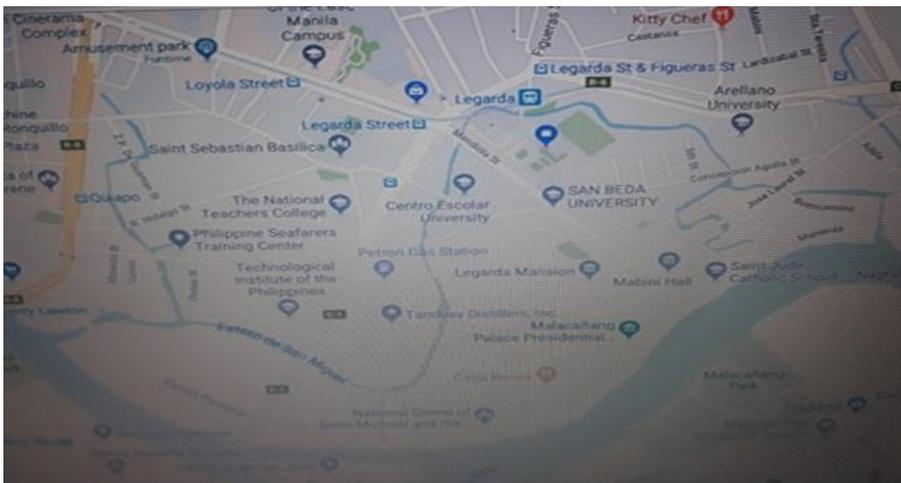


Image 5. A current Google map of San Miguel district showing the Estero de San Miguel and the existing institutions on both sides of the estero.

Denotation – A current Google map of San Miguel district showing the Estero de San Miguel and the existing institutions on both sides of the estero. It also shows both ends of the Estero as confluents at Pasig River.

Connotation - The Estero de San Miguel had served as a tributary of the Pasig River. At the same time it served as a natural demarcation that separated the large part of the San Miguel district from other districts of Manila. The estero and the great Pasig River secured some significant historical, political, economic and religious values. Within it are found significant and historical institutions like the Malacanang Palace, the seat of governance and the Mabini Hall. It is home to some educational institutions like the San Beda University, Centro Escolar University, La Consolacion College, College of the Holy Spirit, St. Jude Catholic School, and Victorino Mapa High School. Some business establishments

were located in the area like the San Miguel Brewery during the Spanish colonial era, but later demolished and became part of the the Malacanang Palace Complex and Casa Roses. Among the religious institutions present in the area are the Abbey of the Our lady of Monserrat, St. Jude Parish, and the National Shrine of St. Michael Archangel. Other significant establishments found outside the San Miguel district, but along the Estero the San Miguel, are the Technological Institute of the Philippines, Arellano University, and Tanduay Distillers. Inc.

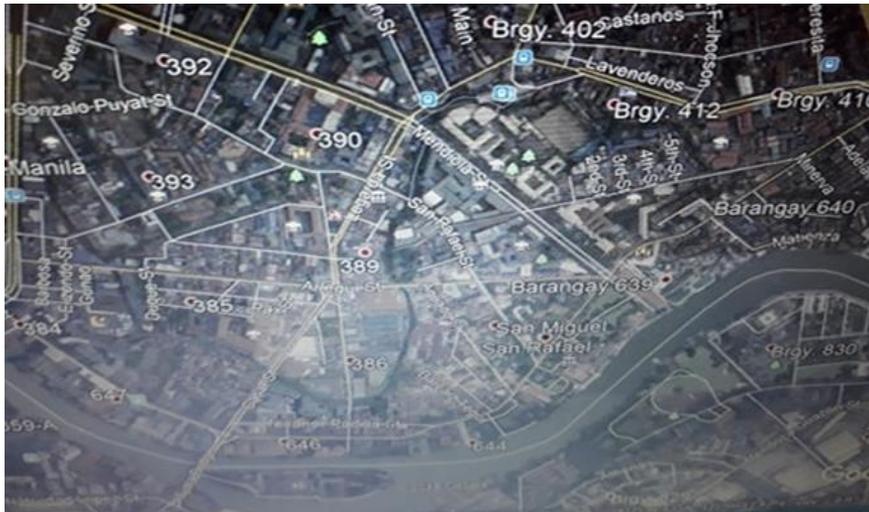


Image 6. *Current google map of Estero de San Miguel showing existing barangays or human communities residing on both sides of the estero.*

Denotation - Current google map of Estero de San Miguel showing existing barangays or human communities residing on both sides of the estero.

Connotation - The Estero de San Miguel is a concrete expression of a sociological principle that says, where a body of water is, human communities are to be found. The waters of Estero de San Miguel had served different purposes to different barangays inside and outside the San Miguel district of Manila. For the most part, the estero served as a sewer, carrying off drainage water and waste matter of all these human communities and existing business establishments.



Image 7. *Comparative shots of Estero de San Miguel somewhere on P. Casal.*

Denotation – Comparative shots of Estero de San Miguel somewhere on P. Casal. The upper image, taken in 2010, shows a dirty polluted part of the estero with informal settlers on one side. While the lower image, taken in 2012, shows a cleaner part of the estero with more vegetation and a man sailing on a raft.

Connotation – The entire image sends a message that some changes had happened in the condition of the Estero de San Miguel through human interventions. Although there were some artificial changes done, those did not fully reinstate the estero to its ideal condition because the water had remained polluted.



Image 8. *Shots of the same portion of Estero de San Miguel, Concepcion Aguila area*

Denotation – Shots of the same portion of Estero de San Miguel, Concepcion Aguila area, taken in different periods, 2010 and 2012. The comparative shot displayed the presence of the informal settlers and polluted water on the upper part, and a cleaner area on the lower part of the image.

Connotation – The image depicted the human intervention done to the area of Estero de San Miguel. It caused the demolition of structures of the informal settlers built alongside the estero. The water, though cleaner, still appears polluted.



Image 9. *Another portion of the Estero de San Miguel, near San Beda University, Mendiola.*

Denotation – The image bears another portion of the Estero de San Miguel, near San Beda University, Mendiola. The upper part shows the polluted water of the estero with garbage on the side and very minimal greenery on one side. The lower part of the image shows the same place but with more vegetation on both sides and less garbage floating on still polluted waters.

Connotation – The image implies a partial human intervention was done on this portion of estero de San Miguel. This proved that any human action when put together, guided with the right intention will always have a good result.



Image 9. *A recent shot of the Estero de San Miguel, from P. Casal Bridge facing the direction towards the Muslim community, Quiapo, Manila.*

Denotation – a recent shot of the Estero de San Miguel, from P. Casal Bridge facing the direction towards the Muslim community, Quiapo, Manila. Some garbage were floating at the estero.

Connotation – The intervention done to rehabilitate the Estero de San Miguel that started several years ago will become futile, if the program will not be continued, arresting and correcting some human inappropriate actions that continue to pollute the estero.

Visual Semiotic Reflection:

Visually reading the images presented by getting into the denotative and connotative levels of their meanings, the impact on life of the Estero de San Miguel in its local ecosystem had regressed badly over the years. What used to be a natural tributary of Pasig River, filled with clear and clean water, evoking various feelings of joy, awe, respect, peace, and security, had become a dirty, mucky, and foul smelling tributary of Pasig River. Factors that may have contributed to this seemingly irreplaceable changes were the burgeoning settlers along and near the estero, residential or commercial establishments, public and private institutions that were served by the estero as sewer of their various wastes. The lack of discipline among the settlers in managing their wastes and the inadequate understanding on the services offered by the estero to human communities and the ecosystem at large may have resulted to the unjust disrespect and feeling of apathy towards the estero. The sudden rush of developments in almost all areas of human life caught humans by surprise, and confused them further about the things they have to prefer and value more in life. This scenario led to the sacrifice even more of experiencing the beauty and goodness of the nonliving components of the ecosystem, like in the case of Estero de San Miguel. The rapid developments in life, accompanied with value laden rationality and

appropriate planning, coupled with the insatiable will to act, and correct ecological considerations, must find concrete expressions in the ordinariness of life of the people. This is what exactly is happening recently in the rehabilitation of the Estero de San Miguel. Though it is still only partially rehabilitated, the fact is, it is being rehabilitated. In this case, consistency must be brought to the table, and the love for nature is nurtured personally as well, so that there will be a resurgence of greater impact on life the estero within its local ecosystem.

Compounded Lingual and Visual Reflection

Based on the lingual and visual semiotic reflections, the researchers purposely present a compounded lingual and visual reflection through some reflected principles as underlying ideological references for a new inspiration and commitment to value creation and practice of responsible stewardship. These principles are presented also in the light of the papal encyclical *Laudato Si*.

The Book of Wisdom 15:5 says, “for from the greatness and beauty of created things, comes a corresponding perception of their creator.” The ecosystem, with everything that constitutes it, reflects the sanctity of the Creator. For this reason, the estero, which is a nonliving component of its local ecosystem in the San Miguel district of Manila, must be regarded as a sacred vessel. This same idea is something well-emphasized by St. Benedict in his holy rule 31.10, in trying to counsel his fellow monks on the value of responsible stewardship in relation to the use of their resources. For him, they are being used as modes of experiencing the presence of God.

In recognizing that God is the source of all beings, including the estero, all creatures, therefore, are brother and sister to one another who deserve love and respect. This idea is something that is indispensable. This attitude somewhat guarantees our continued evolution and preservation of each member’s unique existence in this cosmic world.

The same importance and respect must be rendered to the estero, just like the kind of importance and respect that is given to any biotic or living components of a local ecosystem. For the estero, just like any components of the ecosystem, offers a lot of services for the goodness of all. And all of these services are given freely, not even expecting anything in return from all that is being served by the estero. Therefore, due importance and respect must be generously rendered to everything that is in the ecosystem, like the estero.

Subscribing to the cosmic principle about seamless reality, the estero is a reflection and extension of every component of the ecosystem, especially of the human beings. This is an allusion of interconnectedness,

that the estero's condition and of all other created things are reflections and extensions of the inner disposition of humanity. And so, if humanity is in the state of grace, the estero is preserved and sustained. If humanity is in the state of sin, the estero is abused and destroyed.

Considering the principles presented, the researchers would like to end this section with a challenging question from the Book of Genesis 4:9, and a wise principle that instigates one commit oneself to be a responsible steward of God's creations, and that is, "Am I my brother's (creations – Estero de San Miguel) keeper?" The humble response of everyone to this question should be a resounding, yes! With what is now being done by the people, the Estero de San Miguel still has the future of returning to its original condition. If not, the estero can at least become something that everyone will truly be proud of and say, "I am its keeper!" Be hopeful that it will happen, as Pope Francis said in his message to an international congress on care for our common home in the context of large cities, "placing on each one the little that corresponds to him in his responsibility, much will be achieved" (Brockhaus, 2017).

Conclusions

This research endeavored to see the impact on life of Estero de San Miguel. It explored the essential relationship of the estero with the local communities and other life forms within its immediate ecosystem. Also, this research intended to contribute in instilling among the locals the value of responsible stewardship, as per instruction of *Laudato Si*, in order to renew, if not restore, the vital role played by the estero within the scope of its ecosystem. Through deeper semiotic reflection derived from the narratives of the people and some images of Estero de San Miguel, the researchers arrived at the following conclusive and reflective statements.

The estero is an abiotic component of the local ecosystem within the district of San Miguel, Manila that had freely offered greater provisioning, regulating, cultural, and supporting services in earlier times to local communities and other life forms within its immediate ecosystem than today, when it only serves as a tributary of Pasig River and sewer of human waste.

Any bodies of water is indispensable for life, that's what Pope Francis implied in his encyclical *Laudato Si*. Just like other elements of the ecosystem, a clean and fresh estero points to God's love of his creatures. In itself, there is an innate goodness that humanity most especially must recognize and care for, aside from its free services being offered to all that is within its local ecosystem in the San Miguel district of Manila. If its goodness, beauty, and importance will continuously be ignored, it will eventually lose its beauty and importance within its local

ecosystem. It will no longer have its essential impact. It will pose a danger to local human communities and to other elements of the immediate ecosystem. At present, the Estero de San Miguel has lesser or is slowly losing its natural impact on life. While there is still time to finally halt this natural local catastrophe, everyone must commit to be responsible stewards of the estero. Aside from literally cleaning the estero, getting rid of its pollutants, beautifying the surroundings, and justly dealing with the man-made causes of the pollution, everyone must seriously participate and purposely create an awareness of respect and love for our entire environment. This will be a great blessing to the present humanity and the future generations. The researchers are hopeful that one day, humanity will be able to sing in one voice, what St. Francis of Assisi had sang hundreds of years ago, "Praised be my Lord, for the sister of water, which is very useful and humble and precious and chaste."

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