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The Pope, the Poor, and the Planet: Overcoming Insularity via an Integral Ecology - 2016

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SANTA CLARA UNIVERSITY

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2016 Santa Clara Lecture
The Pope, the Poor, and the Planet:
Overcoming Insularity via an Integral Ecology
Jose Ramon T. Villarin, S.J., Ateneo de Manila University
Santa Clara University, April 2016

Given the ecological risks that face us and the uneven distribution of responsibilities, how can we overcome a sense of fragmentation and insularity?

Reflecting on how Pope Francis' call for an integral ecology resonates with those of us who live in more vulnerable parts of the world, we can discern pathways of hope, inspiring us all to care for our common home.

Outline

1. The complexity of the crisis: a climate and physical view
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 - Solutions: mitigation and adaptation
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 2. Roots of the crisis
 - Technocracy
 - Misguided anthropocentrism
 3. Our response and some pathways of hope
 - An integral way of looking
 - Leadership of the commons
 - Educating persons and cultures
 - An ecological spirituality
 4. Ten simple steps
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1. The complexity of the crisis: a climate and physical view

1.1. The exponential

The exponential
(Compounding growth/decay)

$$dX/dt = r \cdot X$$

$$X(t) = X(t_0)e^{(r \cdot t)}$$

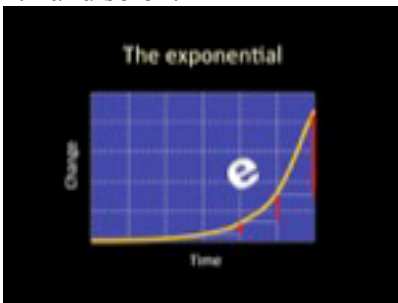
In English:

In growing, things grow slowly at the start
and grow more rapidly later.

(In decaying, things decay rapidly at the start
and decay more slowly later.)

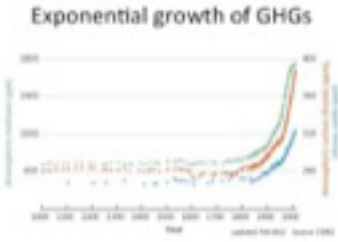
The number e is a fascinating

number. It describes the runaway trend we see in some instances in our lives. Mathematicians come across the number when they solve a differential equation: $dx/dt = kx$. In English, this means that the change of some thing in time depends on how much of that thing you have right now. That is, the more you have of some thing now, the greater the change of that thing later. You see this in things that grow in nonlinear fashion—for example, the speed of chemical reactions, cancer cells, your savings account (hopefully), or things like information or gossip that go viral. This trend happens when input is not so independent of output when things get connected; that is, when output gets fed back to input it then yields an output that again gets cycled back to input, and so forth and so on.



The solution of this simple equation is: $x(t) = x(t_0)e^{(r \cdot t)}$. In English, this means that in growing, things grow slowly at the start (e.g., stage

1), and then grow more rapidly later (e.g., stage 4). An exponential function can be visualized as a line that starts out virtually flat then proceeds to curve steeply upward later. Conversely, in decaying, things crash or plunge more rapidly at the start and decay more slowly “as time goes by.”



With climate change, our concern has been the compounded way carbon levels have been increasing in the atmosphere. The accelerating trend began with our industrialization in the mid-19th century and has been quite relentless in recent decades. All this would have been harmless had we not detected a connection (at first tenuous) between carbon and our planet’s surface temperature. Our records show that temperatures have already risen by about a degree (Celsius) since pre-industrial times. There is greater consensus today in the scientific community that this connection is one of causality and not mere correlation, that rising carbon in the atmosphere is not a consequence but a cause of temperatures rising. The added global worry here is that carbon levels are now at an “all-time” high (about 400 ppm), where “all-time” means at least the last 400,000 years. (The span of time can actually be greater.)

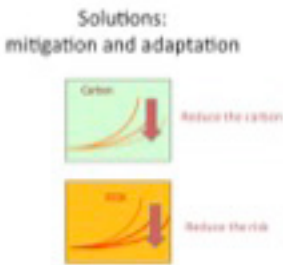
1.2. Schematic of the crisis



A simple schematic of the crisis can be shown in four simple boxes that connect. Rising economic growth has led to rising carbon mainly because this growth has been fueled mainly by carbon. Rising carbon in turn has led to temperatures rising, which in turn has led to risk increasing over time. This risk threatens to come full circle now, imperiling economic growth.

Many risks are possible in a globally warmer world. Just to illustrate, in our part of the Western Pacific, one concern is the risk of sea level rise, where sea levels are rising the fastest (at about 10mm/year). Rising sea levels are dangerous because of the possibility of saltwater intruding into our freshwater aquifers, the destruction of our mangrove and coral habitats that sustain our fish, and stronger storm surges. The prognosis is a global average of about one meter of sea level rise in this century. We have yet to know what that global average will mean for us living in the Western Pacific.

1.3. Solutions: mitigation and adaptation



The solutions to this problem are

directed toward reducing the carbon (mitigation) and the risk (adaptation). The sources of carbon are found in the sectors of energy (including transport), industry, agriculture, forestry and other land use, and waste. Since carbon is strongly linked to economic growth, the dominant share of carbon in the atmosphere is taken by economies that have been growing over the years. A proxy indicator of the geographic distribution of carbon emissions is a composite picture of the globe in the evening.



Adaptation seeks to reduce risk, which can be quite complex given that climate impacts (such as sea level rise) extend beyond the merely geophysical to the social as well. For instance, as mentioned above, sea level rise (which is a physical impact of rising temperature) poses the risk of contaminated water supply, diminished marine biodiversity, and more typhoon-vulnerable coastal communities. The task of adaptation is to minimize the exposure of people and ecosystems to the hazards of climate change and to reduce the vulnerability of those affected by these hazards.



It is worth noting here that mitigation and adaptation need not be mutually exclusive solutions. Some carbon

mitigation measures such as reforestation and urban waste reduction also reduce climate risk. Some adaptation measures such as coastal front rehabilitation and water conservation have the potential to reduce carbon consumption as well.

1.4. Ethical concerns



Ethical concerns arise from the differentiation of responsibilities in stabilizing carbon levels in the atmosphere. We all have a common or shared responsibility to address the sources and impacts of climate change, yet there is differentiation in both carbon and risk pathways, one that plays out among countries and within countries. Thus, those who have been growing faster have had the larger carbon footprints in the atmosphere. Collectively this has led to a rise in global temperatures which, in turn, has led to larger risk being borne by those who are more vulnerable, whose economies have not been as large. This ethical concern of equity—climate justice—has been a complicating factor in crafting an effective global response to climate change, particularly because of the differentiated financial commitments and economic costs that have to be borne by the parties to climate conventions.

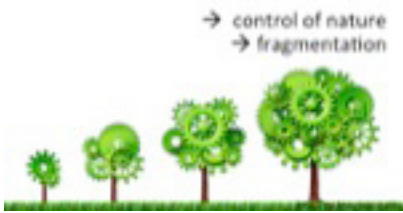
2. Roots of the crisis

While the technical or material aspects of the environmental crises we face are readily apparent, if complex, we know that the roots of these

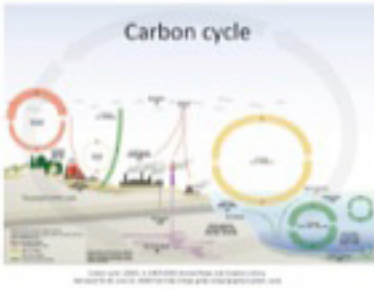
crises are ultimately more than just technical or scientific. Pope Francis, in his encyclical *Laudato Si'*, has indicated to us two principal forces at work that give rise to these problems. These are technocracy and a misguided anthropocentrism.

2.1. Technocracy

Technocracy



Technocracy is the lordship or domination of technology over all dimensions of life. Its effects on us are twofold: namely, a distorted sense of control and a fragmented approach to reality. The former is manifested in the increasing dominance by human beings over what they perceive to be external to them. In a technocracy, that outside reality is seen as an extraneous object that is “formless, completely open to manipulation” (106). Technocracy happens when our intervention in nature and social life is no longer constrained by our “being in tune with and respecting the possibilities offered by the things themselves” (106). The relationship between the human and the material degrades into something “confrontational,” leading us to the delusion of unlimited growth, the notion that resources can be extracted and renewed easily, and the mistaken belief that extraction’s negative effects can be readily absorbed.



In the climate crisis, for instance, we have regarded inert carbon as fuel for our relentless growth without respect for the usual and ancient pace of the carbon cycle that determines the rate of depletion and replenishment of this resource in the many reservoirs of the earth system. What is critical here is not only the supply of the resource. There can be carbon reserves for decades to come. What matters also is the cycling rate of the resource and the relative equilibrium that is thus maintained. The amount of pre-industrial carbon in the atmosphere is connected with these ancient cycles and responsible in part for the stability of the climate system in this inter-glacial period. Our anthropogenic intervention in the last 150 years has been marked by the relentless mining of carbon from the earth, thus speeding up one arc of the cycle. The disequilibrium that now threatens the stability of our climate is due to this technocratic dissonance with the rhythms and “possibilities offered by the things themselves.”

An analog of these rhythms and possibilities in nature can be found in something as ordinary as the simple act of flushing the toilet. There are limits to the frequency with which we can flush the toilet. Those limits are determined by the cycling rates of depletion and replenishment in the water closet. The increased production/consumption in the world today can be likened to the increased frequency of flushing our waste down the drain. The technocratic mindset sees the problem as merely technical—mainly an engineering challenge—and proceeds to increase the pump pressure, widen the pipes, and secure a bigger volume of water supply to match the surge in demand. The eventual disruption in equilibrium happens elsewhere. Management of this negative effect

can be absorbed only to the extent that cycles of resource recharge and depletion are recognized and respected. Seeing all this as a technological matter, the technocratic mind fails to realize and even question the nontechnical forces which accelerated the production-consumption-disposal cycle in the first place.

Technocracy:
fragmentation, separation



The other consequence of technocracy is fragmentation in our approach to reality. Fragmentation arises from a segmented and superficial view of nature and of the human person. Technocracy-induced fragmentation is inherent in technology itself: Specialization and partitioning of knowledge has led to technological success in countless applications. Science and technology idealize reality and look away from the material or empirical, giving them explanatory and predictive power.

An authentic technoscience, however, in contrast to technocracy, has become humbler over the years. It has begun to recognize the relative limits yet far-reaching consequences of its power. Its perversion happens when it is absolutized in all aspects of human life, when its epistemology becomes the only horizon that frames our understanding of human existence. The consequence of this perversion is “a loss of appreciation for the whole, for the relationships between things, and for the broader horizon, which then becomes irrelevant” (110). When such reductionism takes over our understanding and appreciation of reality, we discover that technological products lose their neutrality and become more than just tools; “they create a framework which ends up conditioning lifestyles and shaping social possibilities along the lines dictated by the interests of certain powerful groups” (110).

Such a specialized and segmented framework makes it difficult to address environmental issues that are not just technical or physical but inherently social as well. Here social is taken to include the political, economic, and cultural domains of human interaction. These socio-environmental concerns cannot be compartmentalized in neat self-contained boxes; such concerns arose out of the complex interaction of domains whose boundaries are porous to each other.

Even at the level of the merely physical or material, separation makes it difficult to deal with socio-environmental concerns. We see this in the reality of externalities: the costs of our activities that are assigned or transposed to other places and social groups. Externalities occur when we benefit from consumption while disregarding and thus exporting the production and disposal costs out of our boundaries. A technocratic view of the world is inevitably a segmented one. If our field of vision is segmented, we will not see or want to see that what is external to one is internal to another.

A subtler instance of fragmentation from technocracy arises with the separation that happens at the level of the nonmaterial. At this level, separation or dichotomy is possible between the worlds of matter and spirit, a breach that is not always antagonistic but even polite. Such a dichotomy can lead to matter alienating spirit, and thus to loss of a sense of the sacred in material reality, the erosion of a sense of mystery and the sacramental. And even in those contexts where we can assume the presence of faith, a subtle separation occurs between faith and that collective and cultural expression of faith, which is religion. This only leads to a progressive privatization or discretization of faith (i.e., seen entirely as spirit), which eventually divorces it from social responsibility (i.e., seen entirely as matter).

The indications of this technocratic fragmentation and separation are “environmental degradation, anxiety, loss of the purpose of life and of community living” (110).

2.2. Misguided anthropocentrism

Misguided anthropocentrism

- False superiority (human exceptionalism)
- False inferiority (human mediocrity)



Aside from technocracy, the other root cause of the environmental crisis is misguided anthropocentrism. This manifests itself in two schizophrenic movements that pull us to either overvalue or undervalue the worth of human beings in the universe. The first movement is characterized by human exceptionalism—a false sense of superiority that sees “no intrinsic value in lesser beings.” The tragic consequence of excessively esteeming human capacity is domination and a utilitarian mindset, or the “Promethean vision of mastery over the world” (116). Human exceptionalism has deflected our interpretation of the Genesis mandate of dominion (Gen 1:26) from its true meaning of stewardship to an arrogant sense of domination.

On the other hand, a second polar movement pulls us away from our unique worth and dignity: false mediocrity. Sensing nothing special about us, seeing human beings as “simply one being among others, the product of chance or physical determinism (118)” could arise from a neo-Copernican grasp of the scale of the universe, its general direction, and our apparent inconsequential location in such a vast universe. Or it could come from a narrow or reductionist Darwinian take on the biological evolution of creatures on this planet. A broader vision of reality would evoke humility and wonder. However, a narrower biocentric or cosmocentric view (i.e., one that dislodges the anthropocentric idea) would generate only indifference or an abdication of human responsibility. Once we lose esteem for ourselves and devalue what we are capable of, we lose esteem for others, especially the

vulnerable. When we lose esteem and compassion for human persons, especially those at the margins, it is a short step to losing our esteem for other creatures and the environment.

Both polarities lead to pathological approaches to the environment. Both are reminiscent of the tragic tendencies of practical relativism, where the worth of things and persons becomes relative to one's own needs and interests. The relativizing of the human, whether by utilitarian action or devalued inaction, eventually relativizes nature, and vice versa.

3. Our response and some pathways of hope

Knowing the principal and ultimate roots of the environmental crisis, we discern some responses that can help us overcome the risks of fragmentation and insularity. I suggest for your reflection and discernment four strategic actions in which pathways of hope are embedded: (1) adopting an integral way of looking at things, (2) strengthening leadership of the commons, (3) educating persons and culture, and (4) cultivating an ecological spirituality.

3.1. An integral way of looking

An integral way of looking



An ecology that is integral recognizes the complex yet real connections among the environment, society (its politics, economy, and culture), and the human person. The

ecological crisis is itself caused by frayed connections among these elements. An integral ecology treats environmental problems as social problems, and social problems as environmental ones as well. Solutions are therefore effective only insofar as they are grown from nature and the culture of those affected.

A polluted place is poor, just as a poor place is polluted. Poverty and pollution arise out of the confluence of both social and environmental forces. Rising landfills and carbon levels are not just an engineering challenge but also a social symptom of a “use and throwaway” logic that governs the increasing cycles of production-consumption-disposal. Such a logic privileges the center over the peripheries, thus marginalizing further both the poor and the environment. For all the material wealth that resides in it, a polluted place is still a place of social deprivation. The poor live at the peripheries where air, water, food, energy, land and shelter conditions are dismal, thus compounding their vulnerability and consequent risk for greater pollution and poverty.

What will help us look at things integrally? One way is to look at how fragmented and segmented thinking has brought us to this mess, as we have shown above in our critique of technocracy and misguided anthropocentrism. Another way is to detect and appreciate the interconnectedness that can still be found in some pockets of paradise around us. Seeing how these vital interconnections strengthen the mutual resilience of ecosystems and social systems helps us take an integral approach to reality.

In our own experience in the island of Mindanao, for instance, we know that it is not enough to protect the complex connections among ecosystems (i.e., the ridge-river-reef system). The resilience of an entire system also depends on the quality of the social systems (i.e., people and culture) that affect and are also affected by the environment. In such an integral view, ensuring resilience is both an environmental and social task. Thus, for example, mangrove restoration projects in coastal fishing villages can only go so far unless socio-cultural systems are addressed.

While modern society highlights the proper differentiation of autonomous social spheres, an integral ecology seeks to prevent the degradation of this autonomy into antagonism or indifference. An integral ecology recovers our common ground, the things we have lost when we failed to share in a world of differentiation and autonomy.

Laudato Si' expresses the hope that we likewise adopt this integral approach to across generations. An impoverished sense of the future would be understandable in subsistence cultures, where it is difficult for the poor to plan for anything at all given how fluid and unpredictable the present is and how present needs are hardly attended to. However, in technologically advanced societies, where the future is very much part of the calculus of planning and progress, Pope Francis reminds us that this temporal solidarity can also be lost to “rampant individualism ... connected with today’s self-centered culture of instant gratification.”

When we speak of intergenerational equity and solidarity, we acknowledge the world as something that “also belongs to those who will follow us.” If the world has been given to us, it has been given to us to be shared with others, including those who will come after us. It is this “logic of receptivity” that the Portuguese bishops stress when they tell us that the environment “is on loan to each generation, which must then hand it on to the next” (159).

The individualism that erodes postmodern society is effectively a contraction of our concerns in “space,” that is, within the locality of our own selves and of the present. Yet such individualism also segments our sense of continuity in “time”—that is, across generations.

Another way therefore to help us look at things integrally is to care for children, even those who are not our own. A child has a way of awakening us not only to the future or the things that matter, but also to the things that need to be made whole.

3.2. Leadership of the commons



The second strategic action that will

help us overcome fragmentation and insularity is the development of leaders who are committed to cultivating and caring for the commons. For this to happen, it is important for us to relearn to appreciate and defend the value of the commons—those spaces we need to share and even create to sustain and enrich life. Examples of the commons are streets, parks, electrical power, shorelines, the atmosphere, water reservoirs, and even restrooms.

Often such public spaces are brought under the charge of government. While the public responsibility of government is important, true citizenship entails other social sectors (e.g., the private sector and civil society) assuming responsibilities, albeit differentiated, in caring for the commons. The environmental crisis has shown that governments alone have not been capable of addressing the concerns of the global commons.

Leadership is eventually about gathering and mobilizing people for the common good. Grouping themselves according to some collective good, people agree to be bound by some common ground: shared experiences, values, and spaces (e.g., a home, school, country, or world) that define their identity and purpose. Any leader of the commons has to consider this multiplicity of citizenships or the different senses of belonging that people cultivate. The challenge of leading the commons is to confront this plurality of citizenships and forge a common identity and sense of purpose among people and groups, or in the case of the global

commons, among members of the community of nations.

Even at the international level, what remains problematic has been a lack of political will in which countries give their national interests precedence over the global common good. Meanwhile, we see the weakening of nation states in the face of greater economic and financial clout wielded by transnational actors. Thus Pope Francis cites the need for “stronger and more efficiently organized international institutions” composed of representatives fairly chosen from the nation states and with power to enforce agreements (175).

At the national and local levels, Pope Francis notes the “myopia of power politics” (178).

The limited time horizons of political authorities make it difficult to address socio-environmental issues that are long-term and beyond the local. Continuity can be maintained by applying “pressure from the public and from civic institutions” (181). This ministry of pressure is one important role we in civil society—which includes those in educational institutions—can assume. We can help create and sustain better practices and policies beyond the lifetimes of political authority. One role for us therefore is to lead and sustain the pressure on decision makers, even as we pass on this mandate of collective pressure to the generations. As members of the educational community, we exercise leadership through our continuing articulation of the long-term common good and its attendant values and goals that we believe should underpin the decisions made in the public and private spheres.

In the private sector, especially as it concerns the economy, Pope Francis notes that “politics and the economy tend to blame each other when it comes to poverty and environmental degradation. It is to be hoped that they can acknowledge their own mistakes and find forms of interaction directed to the common good” (198). In the private sector, shared leadership of the commons can mean revisiting the social role of business, the kinds of jobs it generates, its socio-environmental impact, and wider responsibility to society as well. Within the ambit of

the common good, private businesses can widen their accountabilities to include not just their stockholders but those who hold a stake beyond direct equity in the company. More than just corporate social responsibility, the concept of shared value is a powerful way for the private sector to exert its leadership in caring for the commons and for communities. Shared value is about “companies creating measurable business value by identifying and addressing social problems that intersect with their business” (www.sharedvalue.org). The initiative of sustainability reporting—reporting not just on financial returns but on a company’s so-called “triple bottom line” (i.e., people-planet-profit)—is another step aligned in this direction.

Another configuration that we have seen especially in emerging economies with weak public institutions is the partnership between government and the private sector in various development and infrastructure projects. Such public-private partnerships, which harness the efficiency of the private sector and the public resources of government, have the potential of increasing the engagement of the private sector in caring for the commons.

When it comes to leading the commons, the kind of leadership that is most effective is participatory: leadership that listens and actively engages the stakeholders of the shared resource. The primary act of such participatory leadership is dialogue. In fact, dialogue is the common thread that binds the different lines of approach and action that have been drawn up in *Laudato Si'* (Chapter Five). This is not surprising since Pope Francis has always been a strong advocate of the value of encounter.

Thus leadership of the commons is about facilitating and presiding over the dialogue that is essential when dealing with shared resource concerns. We overcome myopia and insularity by engaging each other in dialogue. The quality of dialogue depends on mutual listening, openness, and respect. Dialogue goes beyond the mere exchange of ideas, which does not always bring about action. It enables us to see and

be challenged by other perspectives and values, including the long-term and larger issues critical to caring for the commons. Dialogue does not happen without leadership to mediate and sustain the conversation on the commons.

Leading the commons also demands astute awareness of the tragedy of the commons (described by Garrett Hardin), which is a painful outcome of fragmentation and insularity. Tragedy of the commons means the eventual depletion of a shared resource when users act individually and rationally out of self-interest. The rational calculation is made from an appraisal of the individual benefit that accrues to the user, a benefit that initially outweighs the cost of self-interest since that cost is shared by everyone in the group. A leader of the commons detects this self-destructive tendency, mobilizes correct information, and institutes effective governance to avoid the tragedy.

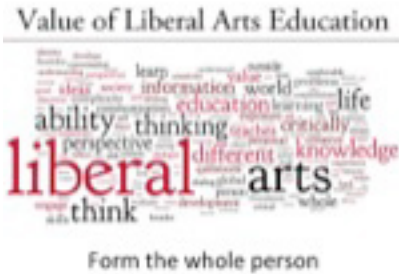
Our experience with the fisherfolk of Lake Palakpakin illustrates this tragedy in action. Our scientists, led by Dr. Greg Tangonan, recently emailed me the following:

Early on [we] told the fisherfolk they only had life supporting oxygen down to 2 meters, while their cages were stocked for 4 to 5 meters. We measured the data and shared it publicly in a get-together. Mang Pando expressed shock; they never knew that the deck was stacked against them. They bought enough fish for a full-size fish cage 4 to 5 meters deep and 10 x 10 sq. meter wide. But the data we showed said they have just barely enough good oxygen to 2 meters. We show it is virtually zero below 2 meters. A good lake would have oxygen down to 10 meters. This lake is fouled with uneaten fish food, fish, and human waste ...

They reduced their stock, started to think about over feeding, and appreciated our data. But [we] will never forget the look of utter defeat in his eyes (email correspondence March 25, 2016).

From this experience, we know that it will take more than just correct scientific data to avoid further tragedy. Leadership of the commons entails sustaining effective social organizations, training decision makers and stakeholders, overseeing dialogue and mediation, in addition to ensuring timely information on the integrity of the commons.

3.3. Educating persons and cultures



Any attempt to uproot the principal causes of the ecological crisis has to include the strategic transformation of mindsets and the culture that arises from and sustains these mindsets. The effective transformation of persons and cultures is the ultimate mandate of our third strategic response, environmental education.

Education's aim is not just to impart information and knowledge but also to cultivate good habits and virtue: certain ways of acting that can bring about real transformation of persons and cultures for the greater good of the environment and society (211).

In *Laudato Si'*, the goals of environmental education are listed thus: "scientific information, consciousness-raising and the prevention of environmental risks ... a critique of the "myths" of a modernity grounded in a utilitarian mindset (individualism, unlimited progress, competition, consumerism, the unregulated market) ... [the restoration of] various levels of ecological equilibrium, establishing harmony within ourselves, with others, with nature and other living creatures,

and with God ... [facilitating] the leap towards the transcendent which gives ecological ethics its deepest meaning” (210).

To that list, I would add the following: 1) whole-person formation, 2) strategic thinking (i.e., including systems thinking and interdisciplinary approaches), and 3) values formation.

In whole-person formation, the goal is to open the person to the multifaceted richness of life. Beyond the honing of professional competence, education’s central task is:

to implant a will and a facility for learning; it should produce not learned but learning people. The truly human society is a learning society, where grandparents, parents, and children are students together. In a time of drastic change it is the learners who inherit the future. The learned usually find themselves equipped to live in a world that no longer exists (Eric Hoffer, *Reflections on the Human Condition*, 1973).

A liberal arts and sciences education provides a sound foundation to whole-person formation through its time-tested educational outcomes, which are critical and creative thinking, ethical reflection, aesthetic appreciation, clarity of communication, and the love of learning. Such a foundation stops the gradual fragmentation of knowledge and information, which “can actually become a form of ignorance, unless they are integrated into a broader vision of reality” (138).

Second, by strategic thinking, I mean the work of understanding how inextricably linked systems produce compounded effects. Such higher-order thinking uncovers the nonlinear ways in which systems and their components interact to create the complex impacts in nature and society we see today. Strategic thinking aims to understand the temporal and spatial interplay of our culture-bound actions in order to transform them for the strategic and common good. It also includes stimulating and adopting interdisciplinary approaches to the multilayered and intractable

concerns of our time. In such networked modes of education, the talents of the disciplines are recognized, gathered and brought to bear on these complex concerns.

How does strategic thinking look in practice? For instance, on an ecological issue such as urban congestion and living, science is mobilized to understand material causality, to model the future, and invent sustainable solutions. These solutions take in social considerations such as the planning and execution inputs of the management and social sciences. The articulation of ecological issues, as well as the communication of solutions, is strengthened through culture, the arts and the humanities, which enable us to recover our sense of beauty, meaning, urgency, and so on. Such an interdisciplinary approach requires educators and learners to be “multilingual”—that is, conversant at least in the basic vocabulary of the other disciplines.

Third, by values formation, I mean the cultivation of the enduring virtues of selflessness and sacrifice through the appreciation of authentic beauty, the worth of the commons, and the dignity of persons and of creation. Values formation eventually widens our embrace from a love that is interpersonal to love that is social (231).



Social love is not always

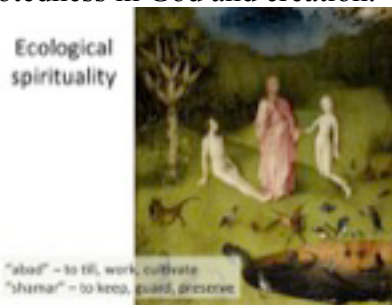
straightforward, because it is extended to persons and groups we have yet to know but with whom we share the table. (It also includes future persons.) Nonetheless, it is real and evident in deeds that “devise larger strategies to halt environmental degradation and to encourage a ‘culture of care’ which permeates all of society” (231). We are capable of such

deeds. Witness our positive experience in some international efforts, such as the Basel Convention on hazardous waste, the Convention on endangered fauna and flora, and the Vienna Convention/Montreal Protocol on the ozone layer (168). More recently, the 2015 climate conference in Paris has given us some hope that the Intended Nationally Determined Contributions of the parties just might go beyond good intentions in the global effort to stabilize our climate.

Values formation is thus more than just cultivation of personal and interpersonal virtue. Educating persons and cultures includes deepening our multiple yet converging citizenships, our sense of belonging and communion, our notion of shared risk and responsibility, and our collective sense of integrity and meaning as human beings.

3.4. An ecological spirituality

Ecological spirituality gives us a vantage point with which to view the entire tapestry of our relationships. It enables us to see that the unraveling of our connection to the transcendent has a way of unraveling as well our connection to our own selves, our neighbor, and to creation. We can overcome fragmentation and insularity by renewing and strengthening an ecological spirituality that helps us recover our rootedness in God and creation.



The gifts we receive from ecological spirituality include a sense of gratitude and gratuitousness, communion with creation, the conviction that every creature is revelatory of God, and the conversion to

simplicity and humility (220-224). These gifts radiate from the central grace of our unique worth and dignity in creation. To the believer, what gives human persons their identity and coherence is the inner conviction of our being created by God in his image and likeness. From this foundational belief, and confirmed in the incarnate likeness of Jesus Christ, the Christian believer sees caring for others and for creation as a privilege and responsibility shared with God.

This fundamental conviction enables us to deepen our understanding of *authentic* anthropocentrism—one that steers clear of the extremes of human exceptionalism and mediocrity. Thus we are able to mean “dominion” over created reality not as domination but as “responsible stewardship” (116). When we see our true place as “cooperator with God in the work of creation” (117), we cannot yield to a false superiority or inferiority in our relationship to the world.

An authentic anthropocentric appreciation of our role and dignity finds cultural expression in the Filipino “*katiwala*,” a word to describe someone who is a steward or trustee, a person entrusted with the care of something. The word itself opens up to a worldview that treats life as something that is not one’s own, as a gift that is also a responsibility.

Our responsibility in all of creation is found in the Eden mandate of Gen 2:15: “The Lord God then took the man and settled him in the garden of Eden, to cultivate and care for it.” The two key verbs here are “*abad*” (which means to cultivate, to till) and “*shamar*” (which means to care, to keep). The former charges us with development—cultivating or working the earth—while the latter charges us with sustainability—preserving, caring for and watching over creation.

This twofold mandate to cultivate and care for creation is also seen in the Ark mandate given to Noah: “Take two of every kind ... to save their lives with yours” (Gen 6:19). Here the act of taking “two of every kind” and moving them out of harm’s way is an active work of cultivation (or of development, if you will), just as saving

“their lives with yours” is an act of preservation and continuity (or of sustainability). The conjunction “with” that connects the lives of creatures with ours also suggests an intimate link between sustainability and solidarity, between keeping or saving creation and being in communion with it.

We hold these two actions of developing and sustaining to be mutually inclusive and not schizophrenic or mutually opposed. We also arrive at a nuanced interpretation of sustainable development, which is not about simply sustaining development but about developing-and-sustaining creation (including ourselves). There is a sense here that we can and ought to develop creation by sustaining it, as well as sustain creation by developing it. There is a recognition here that change has to happen, and it can happen without subverting what needs to remain constant, the rhythms that need to be maintained, without losing our bearings or anchor in our journey of transformation.

Fortunately, ecological spirituality is also found in non-Christian traditions. An ecological spirituality would celebrate those elements in indigenous, non-Christian, and Eastern spiritualities that converge with the Judeo-Christian view of our role and meaning in creation. These common threads are a powerful source for strengthening our sense of solidarity and responsibility in the world today. Pope Francis would urge continuing openness to and dialogue with various sources of wisdom and inspiration that could be brought to bear on the ecological crisis of our time:

Respect must also be shown for the various cultural riches of different peoples, their art and poetry, their interior life and spirituality. If we are truly concerned to develop an ecology capable of remedying the damage we have done, no branch of the sciences and no form of wisdom can be left out, and that includes religion and the language particular to it (63).



Ecological spirituality

From a Christian perspective,

ecological spirituality is able to draw much from a wide spectrum of charisms and spiritualities that continue to enrich Christian faith and tradition. For instance, Pope Francis notes the ethic of “*ora et labora*” in monastic spirituality (126) and the inspiration of simplicity and poverty in Franciscan spirituality (10-12) as Christian elements that inspire our stewardship of creation. Given my familiarity with apostolic or Ignatian spirituality, I can see how ecological spirituality stands to be enriched further by the Ignatian stance of being contemplative-in-action while on mission with Christ to the world.

To be contemplative-in-action is to affirm and engage the world without yielding to the extremes of shallow activism, apathy, or escapism. It does not see the world as irredeemable but privileges it as the locus of God’s presence and revelation, and the locus as well of our continuing redemption. To be contemplative-in-action entails both distance/wonder and engagement/immersion. Ignatian spirituality keeps these two movements from diverging and pulling us apart. They mirror our twofold mandate of tilling and keeping creation, of developing and sustaining the world. To be contemplative-in-action is to place ourselves constantly before something or someone larger than us (in a stance of adoration) and yet be continually engaged in reshaping an incomplete world, including ourselves, according to a shared mission with Christ. The apostolic or Ignatian stance is actually radical in the way it brings these two movements of distance and engagement together.

Lastly, an ecological spirituality leads us to discover our rootedness in God and creation by recovering our sense of sacrament, our sense of the

sacred in nature, which is enriched by the mystery of the incarnation. “The Sacraments are a privileged way in which nature is taken up by God to become a means of mediating supernatural life” (235). The Eucharist occupies eminent place in this sacramental order where our Lord comes to us “to reach our intimate depths through a fragment of matter ... not from above, but from within ... that we might find him in this world of ours” (236). An ecological spirituality is thus able to move us beyond the surface of segmented things into the depths of an incarnate love that heals what is broken and keeps us whole.

4. Top 10 list of simple steps (to till and keep our side of Eden)

I close with some simple steps we can take to cultivate and care for this garden in which God has placed us. These are by no means exhaustive and are only meant to stimulate us to create our own lists, borne from our own experience and desires. It is my hope that many lists can be generated and shared with others. May such an exercise deepen what we are about, how we are to cultivate and care for our common home.

4.1. Say grace before and after meals



Pope Francis himself suggested this simple ritual. “That moment of blessing, however brief, reminds us of our dependence on God for life; it strengthens our feeling of gratitude for the gifts of creation; it acknowledges those who by their labors provide us with these

goods; and it reaffirms our solidarity with those in greatest need” (227). Let us then learn to say thank you. And extend this even to mark the start and end of each day. Cultivate a sense of gift rather than entitlement. Pray for those who are hungry.

4.2. Climb a mountain (or dive the sea)



And when you're there, don't forget to gaze at the stars. The point is to immerse yourself in wonder and get an idea of scale and size. Somehow smallness does evoke a sense of radical dependence and contingency, of things difficult to control. From contingency, we return to a sense of gift and gratuitousness again. Until you find that mountain to climb, you could also go walk with a friend, catch up or reconnect with someone. Better to walk than take a car since a moving car gathers no grace or beauty, the kind you just might catch by the wayside, while walking.

4.3. Unplug and savor the silence



Let go of the wires and even the wireless. Go to a park or any place you can find inner quiet. Visit the grave of someone dear to you. Go to a chapel and learn to pray again. When alone and

quiet, try your best not to wallow or mope. Don't yield to a lot of rewinding and regretting. Just relish and rest and breathe.

4.4. Repair something broken



It can be a coffee mug or your bicycle or something of value to you. Learn the Japanese art of Kintsugi, “of repairing broken pottery with lacquer dusted or mixed with powdered gold, silver, or platinum” (en.wikipedia.org/wiki/Kintsugi). It flows from the philosophy of wabi-sabi, which values the whole history of an object, including its dents and faults and imperfections. Resist the temptation to just buy something to replace what you are repairing.

4.5. Get to know a poor person



You meet them everywhere. You can go to a hospital or waste dump or any place that is peripheral to wealth and power. Poor people become more marginal when they are shunted to the physical and social margins. Know more than their name. Share something with them, yes, but learn to receive from them as well. Go learn the meaning of the words: “Blessed are you who are poor, for the

kingdom of God is yours”(Luke 6:20). There are many causes of social and environmental poverty. Selfishness is the biggest of them all.

4.6. Try fasting



Try this one not just to lose the calories. You might wish to fast on shopping as well or on any of those subtle compulsions of modern life. Feel the hunger; try to understand the drive, the pressure and where it is coming from. If fasting is hard for you, try gluttony. And experience the empty.

4.7. Go read a book to children

4. Go read a book to children.



This one's about intergenerational equity. The point is to reconnect with children and see time as an integral continuum. There are many children and children's books out there. Try the 1942 picture book *The Runaway Bunny* by Margaret Wise Brown. A child has a way of awakening us not only to the future or the things that matter, but also to the things that need to be made whole.

4.8. Care for some space that belongs to everyone

3. Care for some space that belongs to everyone.



No, you don't have to guard the whole forest or become a street sweeper. Join groups that deepen social love through the various ways they protect and beautify some space that belongs to everyone. That space can be as vast as the climate or as near as a corner of a park or a piece of public art. It would be better if it were some shared space that matters to the poor or children or old people.

4.9. If you're Catholic, receive communion



2. If you're catholic, receive communion.

For all your sophistication and education, you might wish to ponder the molecular structure of that piece of carbohydrate. Just remember that even Professor Higgs of boson fame does not really know what the matter is about matter. The point of the wafer is to recover our sense of sacrament, our sense of the sacred in matter. The hope is that we will be fed by our host and brought nearer to wholeness (and holiness).

4.10. Make a box for your valuables

1. Make a box for your valuables



Not as big as those *balikbayan* boxes Filipinos use. A tin box used for candy will do. Place your most treasured items in this box. Money or mementoes you keep. Remembrances not just of what you have gotten but also of what you have given. Since persons are too big to put in that box, a picture of them will do. The point is to keep on knowing what you treasure, what you wish to bring with you to eternity.

* * *

Arigato gozaimasu, Shoichi Kodoh



When the strongest typhoon ever to make landfall hit our shores in November 2013, massive amounts of relief aid were mobilized from all over the world. Among the smallest donors was a little boy from Japan. On November 15 2013, 6-year-old Shoicho Kodoh of Japan broke his piggy bank and gave all his savings to the Filipino victims of Typhoon Yolanda. If children from far away can see what needs to be broken, we may not be so far from hope and redemption; we can be trusted to cultivate and keep this wonderful gift of a garden.