

Spring 2016

explore, Spring 2016, Vol. 19: Our Future on a Shared Planet

Ignatian Center for Jesuit Education

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explore

PUBLISHED BY THE IGNATIAN CENTER AT SANTA CLARA UNIVERSITY

EXPLORING THE
INTEGRATION OF FAITH,
JUSTICE, AND THE
INTELLECTUAL LIFE
IN JESUIT, CATHOLIC
HIGHER EDUCATION

SPRING 2016 VOL. 19



Our Future on a Shared Planet

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SPRING 2016

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JUSTICE, AND THE INTELLECTUAL LIFE
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Mauro Pallotta, "Super Pope," mixed media, 2015.
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ON THE COVER: Emiliano Ponzi, "Pope Francis," illustration, 2015. Used with permission. www.emilianoponzi.com

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The Ignatian Center for Jesuit Education will be recognized throughout Silicon Valley as providing leadership for the integration of faith, justice, and the intellectual life.

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The Ignatian Center for Jesuit Education promotes and enhances the distinctively Jesuit, Catholic tradition of education at Santa Clara University, with a view to serving students, faculty, staff, and through them the larger community, both local and global.

Santa Clara University, a comprehensive Jesuit, Catholic university located 40 miles south of San Francisco in California's Silicon Valley, offers its more than 9,000 students rigorous undergraduate curricula in arts and sciences, business, and engineering; master's degrees in business, education, counseling psychology, pastoral ministry, and theology; and law degrees and engineering Ph.D.s. Distinguished nationally by one of the highest graduation rates among all U.S. master's universities, California's oldest operating higher-education institution demonstrates faith-inspired values of ethics and social justice. For more information, see www.scu.edu.

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Our Future on a Shared Planet

Introduction to Spring 2016 *explore*



Joanne Lee

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ONE YEAR AGO POPE FRANCIS RELEASED THE GROUNDBREAKING ENCYCLICAL *LAUDATO SI'* ON THE ENVIRONMENT AND THE GLOBAL CHALLENGE OF CLIMATE CHANGE, SPURRING MEANINGFUL DIALOGUE ACROSS SCIENTIFIC, TECHNOLOGICAL, RELIGIOUS, POLITICAL, AND BUSINESS SECTORS AROUND ONE OF THE MOST PRESSING ISSUES OF OUR TIME.

What is at stake for the common good in the time of climate change? Santa Clara University (SCU) hosted a dynamic interdisciplinary conference titled “Our Future on a Shared Planet” in November 2015 engaging leaders in Silicon Valley and beyond in conversation with the environmental teachings of Pope Francis. Our current issue of *explore* seeks to further dialogue and action around climate and environmental justice by making available the work of this conference.

Laudato Si' and Silicon Valley

Cardinal Peter Turkson of Ghana, the president of the Pontifical Council for Justice and Peace, opened the conference with a keynote address that leads off our issue of *explore*. In it he calls attention to the ways in which the allure of technical know-how and the promise of profits have become unmoored from ethical foundations. “Here in

Silicon Valley,” the cardinal says, “in the midst of so much creative technological thinking, there is far too little critical thinking about technology.” In the face of the unprecedented challenge of climate change the task is clear: harness the ingenuity of Silicon Valley in service to the common good of a carbon-neutral civilization.

In a response to the cardinal’s address, Thane Kreiner, executive director of SCU’s Miller Center for Social Entrepreneurship, points to the need for thousands of clean energy community enterprises to assist the 1.5 billion poor now living “off the grid.” Kirk Hanson, the executive director of the Markkula Center for Applied Ethics at SCU, argues for linking increased access to technology to concerns about the specifically moral nature of the common good.

Climate Science, Climate Justice

A member of the Pontifical Academy of Sciences, Professor Veerabhadran Ramanathan of University of California, San Diego knows the limits of science in being able to persuade people to address the problem of climate change. In his SCU talk excerpted here, he argues that Catholicism and other religions retain a moral authority and a sense of a sacred, common home in the earth that are indispensable for motivating action in the

face of our current challenge. In her response to Ramanathan, Professor Iris Stewart-Frey, the chair of SCU's Department of Environmental Studies and Sciences, welcomes how the encyclical deftly blends the scientific and the spiritual.

Public Policy for Sustainable Communities

In the summer of 2015, San Jose Mayor Sam Liccardo attended a Vatican meeting focused primarily on cities and climate change. In his SCU talk featured in this issue of *explore*, Liccardo praises *Laudato Si's* emphasis on cities as hubs of innovation in the face of climate change, but criticizes the document's ambivalent assessment of the technologies and policies needed for carbon reduction. Poncho Guevara, executive director of

Laudato Si' has spurred meaningful dialogue across scientific, technological, religious, political, and business sectors around one of the most pressing issues of our time.

Sacred Heart Community Services in San Jose, California, follows the mayor, highlighting the reality that we can't know what our common good is until we listen to the stories of the poor displaced by climate change.

The Economy of the Commons

A member of the Pontifical Academy of the Social Sciences, Stanford University professor Gretchen Daily has been a global leader in the "natural capital" movement—an effort to protect ecosystems as integral aspects of the common good. "We don't really think about them," she says about ecosystems in her talk at the conference—which also praises *Laudato Si's* recognition of the intrinsic value of such rich repositories of life. SCU economics professor William Sundstrom responds to Daily by praising the "natural capital" movement as an innovative, practical way to address complex policy choices.

Green Market Leadership

A former partner at Kleiner, Perkins, Caufield, & Byers, the storied Silicon Valley venture capital firm, John Denniston has worked for years at the leading edge of finance and green business. In his talk at the conference, he disputes critics who argue that *Laudato Si*—and Pope Francis more generally—has an insufficient understanding of capitalism. Ann Skeet, director of leadership ethics at the Markkula Center for Applied Ethics at SCU, responds by noting how the "myth of shareholder primacy" has allowed corporate boards to detach themselves from broader commitments to the common good.

Dialogue across Traditions

Laudato Si' is addressed to all people of good will. As Pope Francis urges, the way forward requires dialogue and action across all religions and cultures. The SCU conference responded to this imperative by hosting a dialogue between religious leaders from the Jewish, Muslim, Buddhist, and Christian traditions, reflecting on the ways in which religious communities together can underwrite dynamic and transformative responses to the global challenge of climate change. We hope that you will be challenged and engaged in reading this issue of *explore*, and join us in responding to Pope Francis' call. ©

DAVID DECOSSE is the director of campus ethics programs, Markkula Center for Applied Ethics and adjunct associate professor, Department of Religious Studies, Santa Clara University. He earned his doctorate in theological ethics from Boston College and is currently working on a book project entitled: *Catholicism and the Equality of Freedom: An Essay in Social Ethics*.

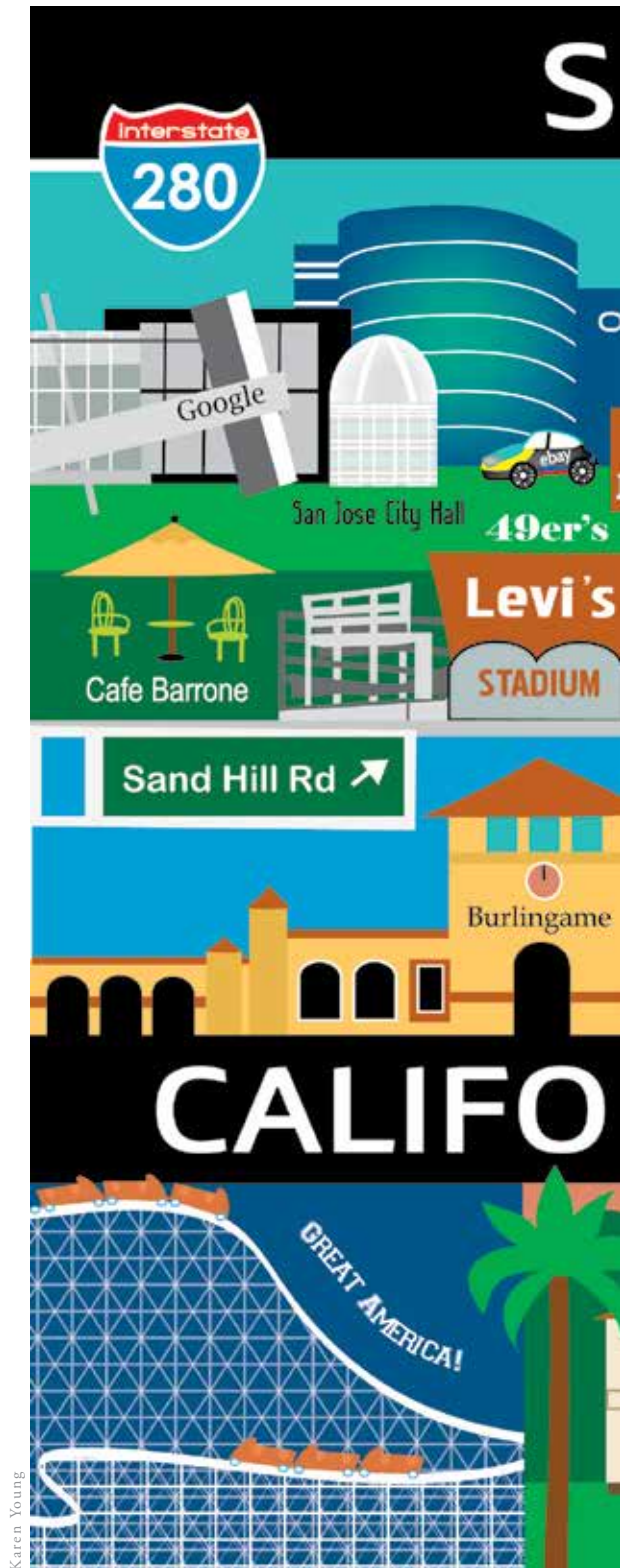
THERESA LADRIGAN-WHELPLEY is the director of the Bannan Institutes, Ignatian Center for Jesuit Education and adjunct lecturer, Department of Religious Studies, Santa Clara University. She earned her doctorate in Christian spirituality from the Graduate Theological Union, and is currently developing a university-wide Bannan Institute on the topic: *Is There A Common Good in Our Common Home? A Summons to Solidarity*.

LAUDATO SI' AND SILICON VALLEY

We have the freedom needed to limit and direct technology; we can put it at the service of another type of progress, one which is healthier, more human, more social, more integral.

—POPE FRANCIS¹

1 Pope Francis, *Laudato Si' On Care for Our Common Home*, encyclical, (24 May 2015), no. 112, available at w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html, accessed 22 March 2016.



SILICON VALLEY



Karen Young, "Silicon Valley," 2015. Used with permission.

Laudato Si' in Silicon Valley

Excerpt from Keynote Address,
“Our Future on a Shared Planet” Conference, Santa Clara University¹



Joanne Lee

BY CARDINAL PETER TURKSON
President, Pontifical Council for Justice and Peace

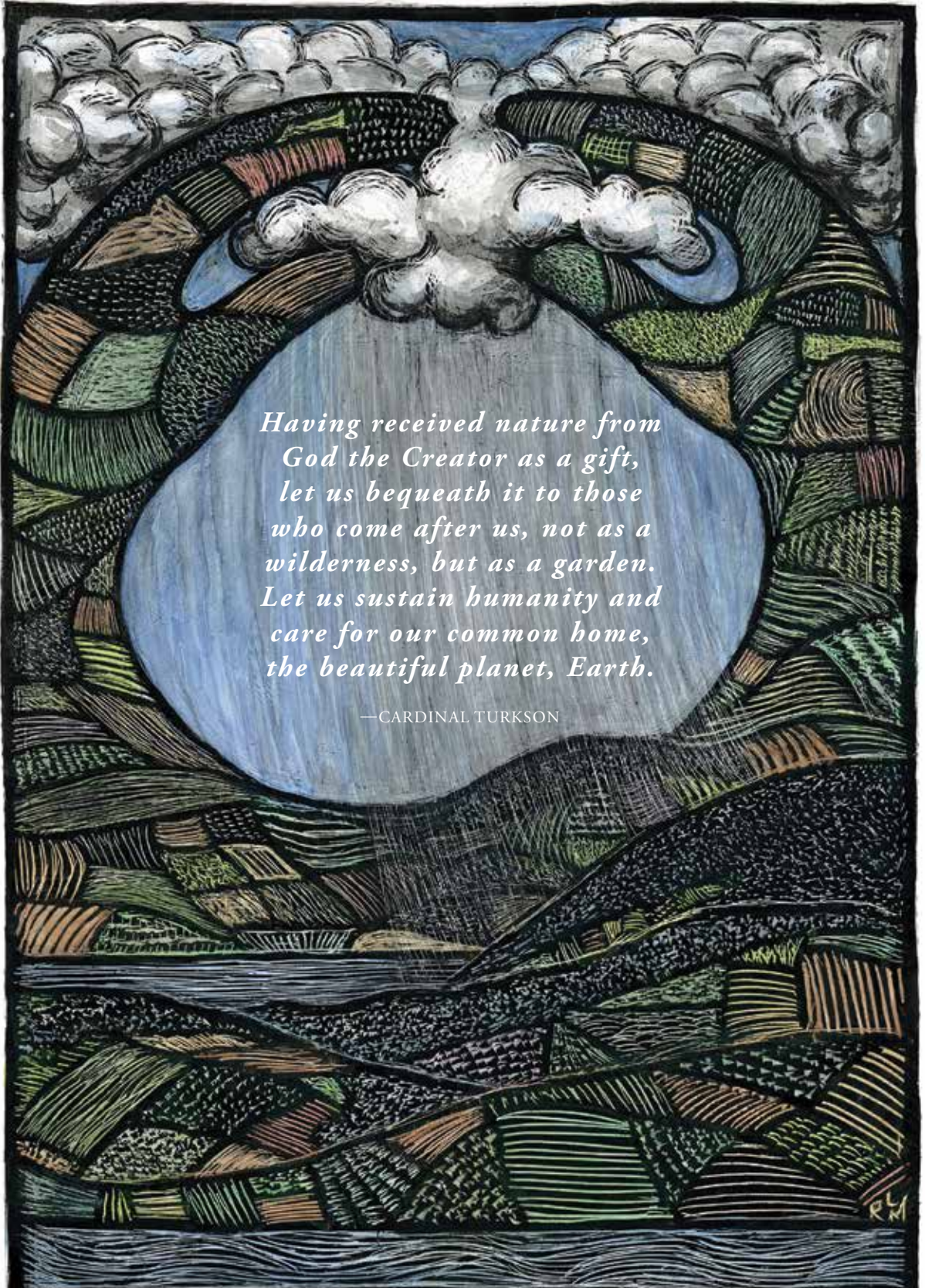
SANTA CLARA UNIVERSITY HAS SET ITSELF THE TASK OF EXPLORING THE IMPLICATIONS OF POPE FRANCIS' RECENT ENCYCLICAL ON INTEGRAL ECOLOGY. IT SEEMS ESPECIALLY FITTING TO TALK ABOUT THE ENCYCLICAL OF THE FIRST JESUIT POPE AT A LEADING JESUIT UNIVERSITY.

You are probably aware of the broad vision of *Laudato Si'*. Here are some of its main points: Humanity is not separate from the environment in which we live; rather humanity and the natural environment are one. The accelerating change in climate is undeniable, catastrophic, and worsened by human activities, but it is also amenable to human intervention. The grave errors that underlie our disastrous indifference to the environment include a throwaway culture of consumerism, and the marginalization and trivialization of ethics. The twofold crisis can be overcome, not by more of the same, but through changes arising from generous dialogue and fundamental ethical, and indeed spiritual, decision-making at every level.

Even this brief summary makes clear that *Laudato Si'* is not strictly a “green,” ecological, or climate-change document, but a full social encyclical in the Catholic Church's tradition, going

back to Pope Leo XIII's *Rerum Novarum* encyclical on capital and labor in 1891. Social encyclicals apply the basic principles of the Church's social teaching to the changing challenges of humanity. *Laudato Si'* is solidly within this tradition. And its subtitle, “On Care for Our Common Home,” conveys an important conviction. Homes are not isolated, each on its own planet. They are located in neighborhoods and communities, and finally in a single, common home called “Earth,” where there are implications to living together.

The word “common” brings to mind the so-called tragedy of the commons, a circumstance where the self-interested actions of one or more agents deplete a common resource. For instance, in *Laudato Si'* the Pope declares the climate and the atmosphere to be common goods “belonging to all and meant for all” (§23). The oceans and other natural resources should likewise be considered as a global commons and protected by an appropriate system of governance (§174). “The principle of the universal destination of the goods of creation is also applied to the global carbon sinks of the atmosphere, oceans and forests. In order to protect the poorest and to avoid dangerous climate change, these sinks must be prevented from overuse.”²



*Having received nature from
God the Creator as a gift,
let us bequeath it to those
who come after us, not as a
wilderness, but as a garden.
Let us sustain humanity and
care for our common home,
the beautiful planet, Earth.*

—CARDINAL TURKSON

Ricardo Levins Morales, "Land and Sky," scratchboard, ink, and watercolor, 2015. Used with permission.



President Michael Engh, S.J., presents Cardinal Turkson with Santa Clara University's highest honor, the St. Clare Medal.

Joanne Lee

So who is going to decide, fairly and squarely, about preserving our common home? And are the decisions really going to be carried out? Among its main points, *Laudato Si'* critiques a naïve confidence that technological advances and undirected commercial markets will inevitably and automatically solve our environmental problems. Let me pause here to dwell on “technological advances.” Few places in the world take such words more seriously than right here! Silicon Valley is the center of the major technological revolution of our times, the revolution that has taken the world beyond the industrial age and into the digital age.

The Pope's approach is a balanced one. He does not call for a nostalgic reversal of history. He does not bemoan technological advance. He does decry the enormous but largely hidden power which technology bestows on those who control it, along with the economy and finance. Here in Silicon Valley, more specifically, I think he might say that, in the midst of so much creative technological thinking, there is far too little critical thinking about technology.

Your challenge is to think in this thoroughly balanced way. The world is expecting you, in this unique place of the planet, to ask bold and avant-

garde questions about the future: How will the “digital ecology” keep the web open in order to democratize knowledge for everyone? How will the digital divide and the data gap be closed, to give all people access to information for a better quality of life? How will the Internet get beyond rampant consumerism and become a space of discussion, production, and solidarity? Moreover, how will Silicon Valley spearhead the right cultural, technological, and economic environment for a carbon-free civilization? In sum, to Santa Clara University, may I suggest that you help Silicon Valley communities focus the critical and prophetic light of *Laudato Si'* on all new micro-technologies as they are created and applied.

Pope Francis' concern for climate change as an integrally human, ethical, and spiritual issue, and his call for effective policies to reverse environmental degradation, are both firmly rooted in traditional Catholic teaching. The Christian commitment to care for our common home goes back to Genesis itself. There, we learn that all Creation is good (Genesis 1). Moreover, we are told that humanity is formed out of the “dust of the earth” and mandated by the loving Creator “to till and to keep” the Earth, the garden “given as a



Hundreds of faculty, staff, students, and community members packed Mission Santa Clara to hear Cardinal Turkson's keynote address.

Joanne Lee

gift to the human family” (Genesis 2). Catholic social teaching since the Second Vatican Council has increasingly recognized that the care of creation is intimately connected to other Christian commitments. In particular, environmental harm compromises the commitments to promote the common good and protect the life and dignity of human persons—especially of the poor and vulnerable. Human-forced climate change is unequivocally a moral issue. Therefore the Church has called for public policies to mitigate greenhouse gas emissions and assist those most affected by the adverse effects of climate change. Blessed Paul VI first articulated such teaching in 1971; Saint John Paul II elaborated it greatly in the 1990s, and it was further developed by Pope Benedict XVI. Throughout these years, individual bishops and episcopal conferences, including the U.S. Conference of Catholic Bishops, have spoken out powerfully.

What has Pope Francis contributed? Beginning with his choice of a name, he has made concern for the poor and the planet a signature of his papacy. Nature and the human family are both works of God, and they are fragile. Moreover, Pope Francis has deliberately inserted his teaching and

indeed leadership into the international political process that is trying to respond to climate change. People trust Pope Francis as a deeply caring person; during his visit to the United States, observers were calling him “the people’s Pope.” For the sake of all, he calls for care, so that the marginalized can participate more fully in society, so that youth may find purpose in their lives and the elderly can end their days in dignity, so that the desperate victims of violence may reach a better life and not drown in their frantic flight.

The Pope speaks to the longing of people to be cared for and in turn to exercise caring. *Laudato Si’* repeats “care” dozens of times, while the more usual word “stewardship” is mentioned just twice in the English version. Stewards take responsibility and fulfill their obligations to manage and to render an account. But one can be a competent or professional steward without feeling connected, without caring. Pope Francis brings the basic message of Jesus—“love one another, as I have loved you” (John 13:34, 15:12)—into the very heart of the world’s greatest challenges: to care for the poor and to care for the planet.

Where do we go from here? Parts of *Laudato Si’* reiterate information and positions that are



Cardinal Turkson, pictured with Bishop Stephen Blaire, Diocese of Stockton, celebrates Mass in Mission Santa Clara to open the November 2015 “Our Future on a Shared Planet” Conference.

Joanne Lee

already widely known. But overall, the encyclical advances at least six significant perspectives.

First, *these issues affect everyone*. Climate, pollution, and weather events do not respect borders, nor wealth and privilege. No walls, no gated community, can keep the environment at bay. Some are more affected than others, because of geographical location or lack of power to protect themselves or to “escape the spiral of self-destruction which currently engulfs us” (§163). At stake is justice between people and generations, the dignity of those who inhabit the planet now and those who will inhabit it in the future. At stake is *the very possibility of human life on earth*. The world’s poor are especially affected by climate change even though they play almost no role in it—the bottom three billion account for a mere six percent of cumulative carbon emissions. So while environmental deterioration affects everyone, the obligation of justice is weighted towards helping the poor to develop and avoid the fallout from climate change.

Second, *everyone must act*. We think automatically about the rulers, and several times the encyclical addresses those who have the power to decide, urging them to take responsibility for the common good, even if they have to go against “the mindset of short-term gain which dominates present-day economics and politics” (§181). But Pope Francis insists this is no topic for experts, technicians, and officials alone. Everyone must act—even the child who turns off lights to reduce electricity consumption. More broadly, a popular movement of citizens needs to act communally to demand courageous action by leaders and negotiators in favor of the poor and of the planet.

Third, *be truthful*. We must have the courage to identify the problems. So many still deny the evident facts of what we are doing to our planet and to each other, “masking the problems or concealing their symptoms” (§26). We gain nothing when we deny the impact of fossil fuels both for good and for ill. Indeed, they powered the technology of the industrial revolution, which

The world is expecting you, in this unique place of the planet, to ask bold and avant-garde questions about the future.


paved the way for unprecedented living standards. But time marches on, and now they threaten to undermine all we have achieved. Further, we must stop pretending that “infinite or unlimited growth” is possible, as if the supply of Earth’s resources is infinite (§106).

Fourth, **embrace integrated ecology**. Our ancient awareness tells us all living beings, human groups and systems as well as nonhuman ones—that is, all of creation—are fundamentally interconnected. Only with attentive care for these bonds will we come “to find adequate ways of solving the more complex problems of today’s world, particularly those regarding the environment and the poor; these problems cannot be dealt with from a single perspective or from a single set of interests” (§110). Reversing the degradation of both the natural environment and the human world requires the combined contribution of all; no branch of science, no form of wisdom including culture, religion and spirituality (cf §63), should be neglected.

Fifth, **practice dialogue**. Pope Francis insists on dialogue “as the only way to confront the problems of our world and to seek solutions that are truly effective.”³ Authentic dialogue is honest and transparent. It insists on open negotiation based on the principles which the social teachings of the Church vigorously promote: solidarity, subsidiarity, working for the common good, universal destination of goods, and preferential option for the poor and for the Earth. Real dialogue would not allow particular interests of individual countries or specific groups to hijack the negotiations.

And sixth, the Pope tells us, **pray**. Prayer is not the general fashion today. It takes humility and daring, because it challenges the hubris of our supposedly advanced, highly secular civilization. Pray for the Earth and humanity, pray for bold

decisions now for the sake of future peoples and of the planet’s future.

From Silicon Valley and Santa Clara through the U.S.A. and around the world, let us learn to exercise global ecological citizenship. Having received nature from God the Creator as a gift, let us bequeath it to those who come after us, not as a wilderness, but as a garden. Let us sustain humanity and care for our common home, the beautiful planet, Earth. 

CARDINAL PETER TURKSON is president of the Pontifical Council for Justice and Peace, archbishop emeritus of Cape Coast, Ghana. He served in several positions of leadership within the Episcopal Conference of West Africa and as chairman of the Ghana Chapter of the Conference of Religions for Peace before being appointed to his current post in Rome. On September 24, 2013, he was confirmed by Pope Francis as President of the Pontifical Council for Justice and Peace. He has been awarded numerous honorary degrees and speaks six languages (Fante, English, French, Italian, German, and Hebrew). Cardinal Turkson is widely acknowledged as one of the most influential Vatican experts on the content of the encyclical, *Laudato Si’, On Care for Our Common Home*.

NOTES

- 1 Cardinal Peter Turkson, “*Laudato Si’* from Silicon Valley to Paris,” keynote address, Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis conference, 3 November 2015, Santa Clara University. This essay is an excerpt from the lecture; a video of the full lecture is available at: scu.edu/ourcommonhome/climate-conference/
- 2 Ottmar Edenhofer and Christian Flachslund, “*Laudato Si’: Concern for Our Global Commons*,” *ThinkingFaith* (23 September 2015), available at www.thinkingfaith.org/articles/laudato-si%E2%80%99concern-our-global-commons, accessed 1 November 2015.
- 3 Pope Francis, Address on Environmental Justice and Climate Change, 9 September 2015, available at w2.vatican.va/content/francesco/en/speeches/2015/september/documents/papa-francesco_20150911_fondazione-sviluppo-sostenibile.html, accessed 1 November 2015.

Climate Resilience, Social Entrepreneurship, and Silicon Valley

Response to Cardinal Turkson's Keynote Address,
"Our Future on a Shared Planet" Conference, Santa Clara University



Daniel Byun

BY THANE KREINER

*Executive Director, Miller Center for Social Entrepreneurship,
Howard and Alida Charney University Professor,
Santa Clara University*

AS A SUCCESSFUL SILICON VALLEY ENTREPRENEUR FOR 17 YEARS BEFORE COMING TO SANTA CLARA UNIVERSITY TO LEAD ITS MILLER CENTER FOR SOCIAL ENTREPRENEURSHIP, I FIND CARDINAL TURKSON'S COMMENTS ON TECHNOLOGY DEEPLY RESONANT. SPECIFICALLY, SILICON VALLEY NEEDS TO THINK ABOUT HOW TECHNOLOGY CAN HELP REPAY THE "ECOLOGICAL DEBT" ACCRUED BY THE GLOBAL NORTH AND DUE TO THE GLOBAL SOUTH.

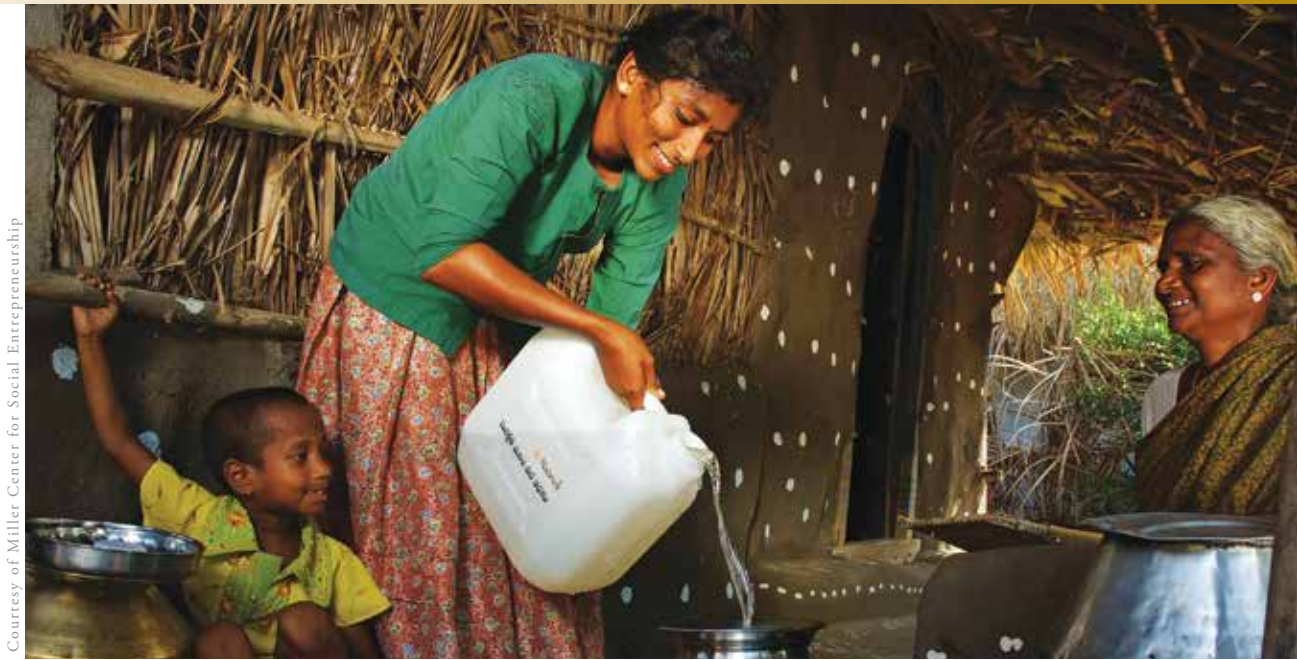
Entrepreneurship and innovation in service to the planet's poor can both eradicate poverty and generate climate resilience in developing communities. Climate resilience is the capacity for these communities to absorb the stresses already wrought by climate change, and to adapt and evolve more sustainable social and ecological systems. Indeed, this is the strategic vision of our work.

To date, the Miller Center has worked with more than 570 social enterprises in 66 countries. Over half of these enterprises promote climate resilience through clean energy, safe drinking water, sustainable agriculture, and other solutions.

We have developed a mentor pool of over 110 Silicon Valley executives, many of them former CEOs, who work with these social entrepreneurs to apply the entrepreneurial principles of Silicon Valley to scale their ventures. While we are proud of the collective impact on more than 150 million people living in poverty, Cardinal Turkson's exhortation that "everyone must act" resounds clearly.

Expanding engagement of Silicon Valley executives as mentors who help social enterprises serving the poor and protecting the planet is one way we can respond to Cardinal Turkson and Pope Francis. However, our response must be broader and deeper.

As the Jesuit institution of higher education in the heart of Silicon Valley, the world's most entrepreneurial ecosystem, Santa Clara University has a special obligation—"a differentiated responsibility" in the words of Pope Francis—to educate future leaders who adopt a holistic approach to innovation and entrepreneurship. As Cardinal Turkson asked, "How will Silicon Valley spearhead the right cultural, technological, and economic environment for a carbon-free civilization?"¹




Courtesy of Miller Center for Social Entrepreneurship

Naandi Community Water Services, one of the social enterprise partners of the Miller Center for Social Entrepreneurship, works to bring safe water to India's villages by dispersing 100,000 liters of water every day through its community water centers.

At the Miller Center, in addition to applying technologies to reduce carbon emissions, we believe Silicon Valley can act truthfully and embrace an “integral ecology”—the interrelationship of our environment, economy, and society—by advancing the lenses of social entrepreneurship and impact investing within Silicon Valley's innovative ecosystem. Cardinal Turkson describes the stakes as “justice between people and generations, the dignity of those who inhabit the planet now and those who will inhabit the planet in the future, and the very possibility of human life on earth itself.”² In *Laudato Si'*, Pope Francis notes, “Worldwide there is minimal access to clean and renewable energy. There is still a need to develop adequate storage technologies” (§26).

Tesla's investment in a “gigafactory” is a massive step in the right direction, but mechanisms to enable poor communities' access to such technological advances are essential. Indeed, this is the distinction Cardinal Turkson made between technological thinking and thinking about technology. Our recent study, *Universal Energy Access*, reveals the need for 7,000 to 20,000 financially sustainable, community-based clean energy enterprises to meet the needs of the 1.5 billion poor living “off the grid.” I imagine that a conversation among Pope Francis, Elon Musk, and

Melinda Gates could stimulate more Silicon Valley leadership, and we would be honored to host that convening here. Together, we can focus Silicon Valley's entrepreneurial acumen and innovative technologies on service to the poor and the planet. 

THANE KREINER is executive director of Santa Clara University's Miller Center for Social Entrepreneurship. Miller Center's mission is to accelerate global, innovation-based entrepreneurship in service to the poor and the planet. Its flagship Global Social Benefit Institute (GSBI®) program, as of January 2016, has graduated more than 570 social enterprises and collectively impacted the lives of more than 151 million people worldwide. Kreiner was previously founder, president, and CEO of PhyloTech, Inc. (now Second Genome) as well as founder, president, and CEO of Presage Biosciences, Inc. Kreiner was the start-up president and CEO for iZumi Bio, Inc. (now iPierian). Kreiner earned his Ph.D. in neurosciences and his MBA from Stanford University.

NOTES

- 1 Cardinal Peter Turkson, “*Laudato Si'* from Silicon Valley to Paris,” keynote address, Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis conference, 3 November 2015, Santa Clara University. This essay is an excerpt from the lecture; a video of the full lecture is available at: scu.edu/ourcommonhome/climate-conference/
- 2 Ibid.

Environmental Justice, Technology, and Silicon Valley

Response to Cardinal Turkson's Keynote Address,
"Our Future on a Shared Planet" Conference, Santa Clara University



Joanne Lee

BY KIRK HANSON

*Executive Director, Markkula Center for Applied Ethics,
John Courtney Murray, S.J. University Professor,
Santa Clara University*

IN HIS VISIT TO SANTA CLARA UNIVERSITY AND TO SILICON VALLEY, CARDINAL TURKSON ADDRESSED SEVERAL THEMES WHICH I BELIEVE CAN PROVOKE PRODUCTIVE MORAL REFLECTION IN SILICON VALLEY AND BEYOND. AMONG THESE ARE:

1. Identification and Moral Critique of Destructive Uses of Technology. As Cardinal Turkson notes, much technology can be used for good or ill. A more robust discussion of good and bad uses of specific technologies must be developed. The Markkula Center for Applied Ethics at Santa Clara University, for example, is developing a partnership with the iconic Tech Museum of Innovation in Silicon Valley to include such a discussion in the presentation of future exhibits at the Tech Museum.

2. The Socially Beneficial Uses of Technology. Cardinal Turkson could be more effective in his engagement with Silicon Valley and all technology-centric groups by emphasizing more how technology can and must be harnessed to

benefit our common home and humanity. In Silicon Valley, a pre-existing and substantial interest seeks "technology benefiting humanity," exemplified by a prominent awards program sponsored by the Tech Museum of Innovation and co-created by Santa Clara University. Silicon Valley is already committed to "social entrepreneurship," a concept advanced by the Silicon Valley-based Skoll Foundation, created in 1999 by eBay co-founder Jeffrey Skoll. Notably, Santa Clara University's Miller Center for Social Entrepreneurship strongly promotes such efforts.

3. Access to the Benefits of Technology. "Access"—a topic long raised by Silicon Valley participants and observers—must be encouraged. Valley entrepreneurs have frequently discussed the "digital divide," often imagined as simply a connection to the Internet, but we need a more sophisticated notion that includes access to applications of technology which can enhance human flourishing. For example, can the poor access the wealth of educational and health management resources on the Internet?




We must focus on how technology and environmental degradation harm the poor and the 99 percent who don't share in the fabulous wealth being generated in Silicon Valley.

Shutterstock

4. Technology and Its Impact on the Human Spirit. Cardinal Turkson has dealt with how technology, particularly electronic devices, can occupy and preoccupy the days of both young and old. The effect of this trend on moral awareness, particularly, on being aware of people outside one's social and cultural group, is troubling. Too little time is left for a spiritual life and its practices. Whatever stirrings of awareness about this topic in Silicon Valley exist today ought to be encouraged.

5. Silicon Valley Wealth and Our Common Home. The cardinal's emphasis on the Earth as our common home is an important theme for Silicon Valley. A prevailing assumption holds that the wealthy of Silicon Valley can escape negative environmental consequences. They may avoid urban pollution, congestion, and even "the cries of the poor" who cannot flee these same threats. Yet although the rich may retreat to higher income suburbs or gated communities, or even fly in private jets to second and third homes in the remote wilderness, we must focus on how technology and environmental degradation harm the poor and the 99 percent who don't share in the fabulous wealth being generated in Silicon Valley.

6. The Moral Critique of Capitalism. *Laudato Si'* and other writings of Pope Francis on the morality of capitalism reflect what some in Silicon Valley may perceive as a naïve European perspective. While Cardinal Turkson has not addressed this theme as frequently as Pope Francis, he has an opportunity to shape a more sophisticated critique regarding how modern capitalism works. The development of a more incisive moral critique would be a significant contribution to Silicon Valley and the broader North American culture. 

KIRK HANSON is executive director of the Markkula Center for Applied Ethics at Santa Clara University and John Courtney Murray, S.J. University Professor of Social Ethics. He has been at Santa Clara since 2001 taking an early retirement from Stanford University, where he taught in the Graduate School of Business for 23 years. He has written extensively on the ethical and public behavior of corporations, and has consulted with over 100 organizations on managing ethics. Hanson currently serves on the boards of the Skoll Community Fund and the Center for International Business Ethics in Beijing.

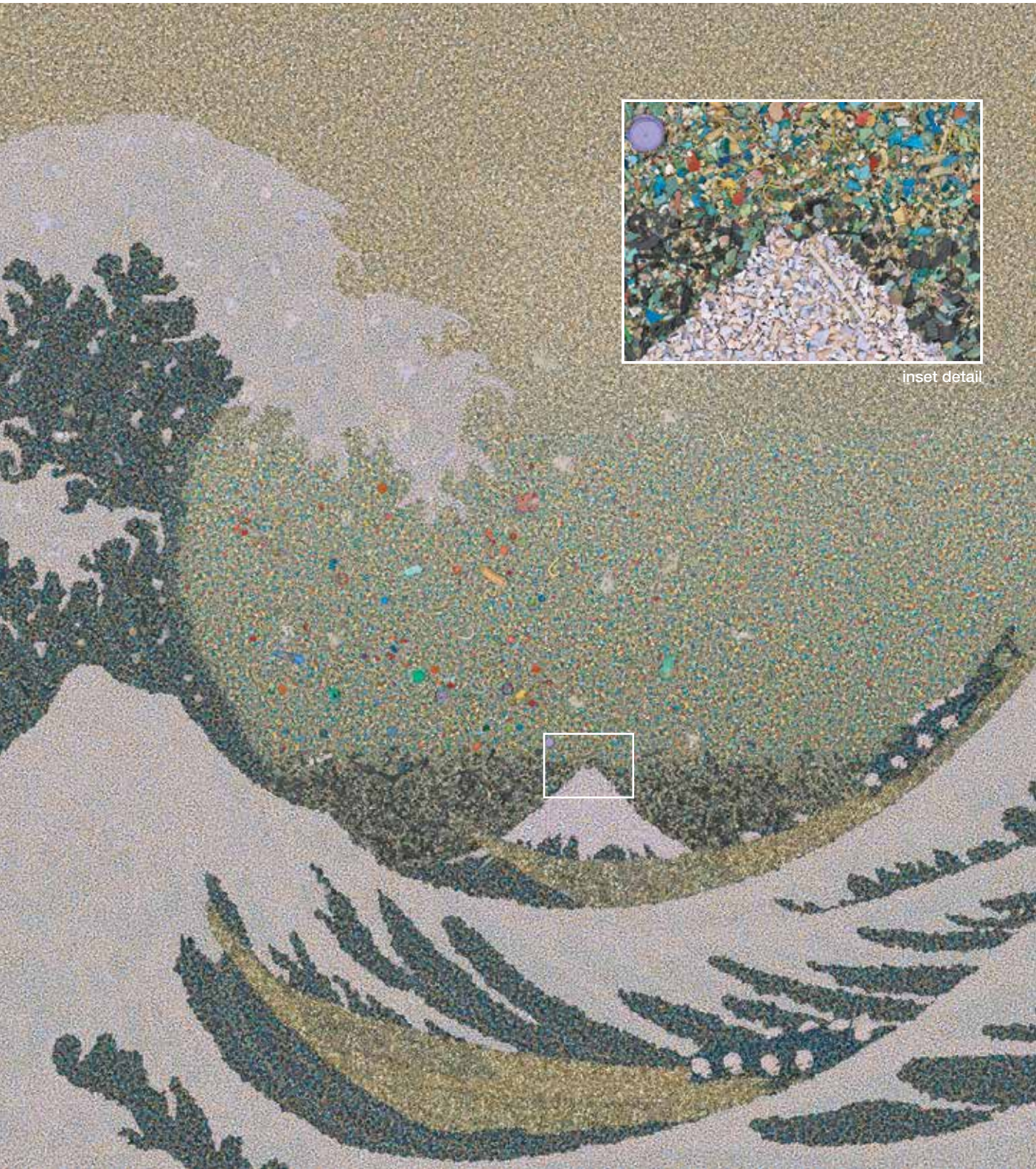
CLIMATE SCIENCE, CLIMATE JUSTICE

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.

—POPE FRANCIS¹

¹ Pope Francis, *Laudato Si' On Care for Our Common Home*, encyclical, (24 May 2015), no. 48, available at w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html, accessed 22 March 2016.





Chris Jordan, "Gyre," plastic, mixed media, 2009. Mosaic image depicts 2.4 million pieces of plastic, equal to the estimated pounds of plastic pollution that enter the world's oceans every hour. All of the plastic in this image was collected from the Pacific Ocean. Used with permission.

Fighting Climate Change: A New Alliance between Science, Religion, and Policy

Excerpt from Public Lecture,
“Our Future on a Shared Planet” Conference, Santa Clara University¹

Courtesy of Veerabhadran Ramanathan



BY VEERABHADRAN RAMANATHAN
*Professor of Atmospheric and Climate Sciences,
Scripps Institution of Oceanography,
University of California, San Diego*

ABOUT TEN YEARS AGO I TURNED 60. I WAS DOING A FIELD EXPERIMENT IN THE MIDDLE OF THE INDIAN OCEAN OFF THE MALDIVES WHEN I RECEIVED AN EMAIL FROM THE VATICAN.

What would you think if you were me? You are sitting on a tiny island looking at your computer and the first sentence of the email begins with “Pope John Paul II.” Of course, I assumed that it was spam. I was going to delete it.

Fortunately, my curiosity got the better of me. Reading further, I found the Holy Father inviting me to join the Pontifical Academy of Science! It was the first moment I began to realize that religious partnerships could be a new force to fight climate change.

We once thought science and policy could stem climate change, and yet the problem goes on unsolved. We are rushing headlong into a disastrous climate disruption—a lot more severe, and a lot sooner than we once thought. Yet I think

the alliance between science and policy *and religion* is going to save us from this battle. Otherwise, millions, if not billions, are going to suffer, most of them innocent bystanders.

Let’s look at the natural systems. We immediately think of environmental issues. We think of population dynamics. Oh, the planet is going to nine billion, so of course it’s a problem. But climate pollution is primarily produced by the top one billion, who generate 60 percent of the pollution, mostly from unsustainable consumption. My own take is that our standard of living is not the issue; it is trying to maintain that standard of living with outdated technologies.

The most outdated technology is coal, a close second is oil, and next to that, gas. Let’s look at the other side of the planet. The bottom three billion of the poorest are primarily forced by poverty to rely on 18th century technologies. Their contribution to global warming is about five percent. And we know these three billion



people are primarily farmers—rural folks, living on subsistence farming, tilling the soil to grow food that just lasts them for that year. A five-year drought like what we are seeing in California would wipe out their livelihood, making the young people, boys and girls, into what Pope Francis calls the “socially excluded,” leading even in some cases to slavery. Why do I home in on this? I grew up in such circumstances.

So let’s talk about this pollutant carbon dioxide. The fuel we burn—whether it is grass or trees or fossil fuel—consists of hydrocarbons: carbon and hydrogen attached together. And when you burn it, the carbon combines with the oxygen in air to become carbon dioxide. It’s colorless. You don’t see it coming out of your tailpipes, but it

The poorest three billion who had very little to do with causing climate change will suffer the worst consequences, making it a huge moral, ethical issue for us.

John Sabraw, “Chroma,” mixed media on aluminum composite panel, 2013. Used with permission.



Professor Veerabhadran Ramanathan addresses the relationship between science, religion, and policy in his public lecture at the “Our Future on a Shared Planet” Conference, Santa Clara University.

Joanne Lee

is there. How much of this carbon dioxide have we released? Since James Watt’s invention of the steam engine, which ushered in the fossil fuel era, we took 220 years to dump one trillion tons of CO₂ into the atmosphere. A trillion tons is a thousand billion tons. Okay? And a billion tons is a thousand million.

Today we are emitting about 40 billion tons every year. At that rate we will have pumped out the second trillion in 20 years. By 2030—just 15 years from now—the third trillion will be up there. We have already committed the planet to a 2.25-degree warming. Most of us scientists know a warming of two degrees would be disastrous—first for ecosystems and then to humans. Earth has not seen that warming in the last two million years. None of the species alive today evolved on such a warm planet. The problem has become imminent. Urgent. A lot more serious. I can talk about climate change effects like droughts, fires, storms, sea level rise, and more. But what most concerns me is its impact on human health, something very few have realized.

So I’ve given you all the bad news I want to give for today. That talk is done. Let’s talk about a new birth.

I want to brief you on my recent encounter with Pope Francis at the Pontifical Academy of Science. At the end of a three-day meeting there, we were being marched over to formally brief Pope Francis. So I was waiting in the parking lot, anticipating this encounter with Pope Francis in a breathtaking room in the basilica, when suddenly, I saw someone getting out of a small car. There was Pope Francis, right in front of me, beaming his smile! I didn’t know what to do. Chancellor Marcelo Sorondo stood next to Pope Francis and said, “You have to brief the Pope in two sentences. He has to go somewhere.”


So, I had two sentences. First, I told him: We are all here as the world’s experts, concerned about climate change. Second, I described that the poorest three billion who had very little to do with causing climate change will suffer the worst consequences, making it a huge moral, ethical issue for us. Pope Francis then said something in

Fundamentally, the solution to this problem requires a change in attitude toward nature and toward each other...it requires moral leadership.

Aerial view, United States. Courtesy of NASA.

Spanish. The chancellor translated: “The Holy Father is asking you what he can do about it.” So my third sentence was: When you preach, please mention to people to be good stewards of the planet.

What we concluded was remarkably atypical for a scientific meeting. We stated that fundamentally the solution to this problem requires a change in attitude toward nature and toward each other. Therefore, it requires moral leadership. As scientists, we don’t necessarily have the authority to preach morality. I doubt very much even if political leaders have that authority. But faith leaders do have that authority.

Some have said how lucky we are to have Pope Francis as a moral leader at this crucial moment. Perhaps this transformational step may well be a massive mobilization of public opinion by the Vatican and other religious leaders. Collective action can safeguard the well-being of both humanity and the environment. 

VEERABHADRAN RAMANATHAN is professor of atmospheric and climate sciences at the Scripps Institution of Oceanography at the University of California, San Diego. He has been conducting original research in climate and atmospheric science since the 1970s. He discovered the super greenhouse effect of halo-carbons (CFCs) in 1975 and used observations to quantify the large global warming effect of black carbon. He has won numerous prestigious awards including the Tyler Prize, the top environmental prize given in the US; the Volvo Prize; the Rossby Prize and the Zayed Prize. In 2013, he was awarded the top environmental prize from the United Nations, the Champions of Earth for Science and Innovation. He has been elected to the US National Academy of Sciences, American Philosophical Society, the Pontifical Academy by Pope John Paul II, and the Royal Swedish Academy of Sciences.

NOTES

- 1 Veerabhadran Ramanathan, “Fighting Climate Change: A New Alliance between Science, Religion, and Policy,” public lecture, Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis conference, 4 November 2015, Santa Clara University. This essay is an excerpt from the lecture; a video of the full lecture is available at: scu.edu/ourcommonhome/climate-conference/

Greening the Growing Deserts: Reflections from a Hydrologist

Response to Veerabhadran Ramanathan's Public Lecture,
"Our Future on a Shared Planet" Conference, Santa Clara University¹



Joanne Lee

BY IRIS STEWART-FREY
*Associate Professor and Chair,
Department of Environmental Studies and Sciences,
Santa Clara University*

DR. VEERABHADRAN RAMANATHAN SPOKE WITH PASSION ABOUT THE CONNECTIONS AMONG SCIENTISTS AND FAITH LEADERS GLOBALLY AS WE SEEK TO BRING THE WORLD TOGETHER TO ADDRESS CLIMATE CHANGE. FOR MY PART, I WANT TO EXAMINE THIS ISSUE THROUGH A SANTA CLARA UNIVERSITY LENS—A LENS FOCUSING ON THE COLLECTIVE, COMMITTED WORK OF THE UNIVERSITY, ITS STUDENTS, STAFF, AND FACULTY IN BUILDING A MORE JUST, HUMANE, AND SUSTAINABLE WORLD, ALONG WITH A GROWING AWARENESS OF HOW WE USE RESOURCES.

Santa Clara University's Center for Sustainability partners with the wider campus community to provide residential laboratories on sustainable living here on campus. Our Miller Center for Social Entrepreneurship connects the campus community to marginalized communities worldwide, leveraging appropriate technologies and social entrepreneurship to transform lives

and promote climate resilience. The School of Engineering's sustainable energy initiative is furthering technology conversions. Santa Clara researchers are investigating how the climatic changes already underway are affecting the water cycle and water resources.

The effects of warmer temperatures on the water cycle are widely acknowledged to be among the most serious issues confronting humanity. Warmer temperatures increase evaporation rates and thus alter atmospheric water, clouds, precipitation patterns, and stream flow. Warmer temperatures also dry soils, melt glaciers, and cause precipitation that historically came as snow to fall as rain.

The combination of these processes means that now, and in the future, we can rely less on the historic availability of precipitation and must contend with floods and droughts that we have not experienced before. In California, recent studies have found that climatic changes are already influencing the frequency, magnitude, and duration of these droughts.



“As a human family, we have also drained and altered the hydrology of even the largest of lakes...and what is left of them is choking under the constant input of fertilizers, salts, and agriculture chemicals.”

Keith Tyson, “Nature Painting,” detail, mixed media on aluminum, 2006, © Keith Tyson. All Rights Reserved, DACS 2016. Used with permission.

Even without climatic changes, we have altered our water supplies worldwide and in many cases irreversibly so. Groundwater resources that accumulated over decades, centuries, and millennia, have been mined to the point where water tables have taken a freefall and aquifers have permanently compacted. Loose or nonexistent regulation and monitoring continue to make this tragedy of the commons possible. Increasingly farmers and communities are sitting on dry wells. We only need to look as far as the Santa Clara Valley and the Central Valley of California for examples, but this story is repeated worldwide.

Around the globe we have dammed and altered the flow and natural functioning of rivers, draining wetlands—one of the great sources of biodiversity—and starving floodplains that bring nutrients to the surrounding areas with the goal of storing and diverting water into reservoirs to supply water to hungry cities and fields. As a human family, we have also drained and altered the hydrology of even the largest of lakes, like the Aral Sea and Lake Victoria. And what is left of them is choking under the constant input of fertilizers, salts, and agriculture chemicals.

The encyclical is a plea to truly hear, understand, and relieve the sufferings of the poor, who continue to bear the brunt of the burden of environmental degradation.



Susanna Raj '16, "Parched," acrylic on wood, mixed media (almond slices and pouring medium), 2015. Used with permission.

"Parched" is about rural women around the globe walking miles to get water for cooking and drinking. Most have no shoes or footwear and walk over parched, searing hot land for hours. The almond slices represent the parched nature of the ground as well as the richness of life despite the struggles.

Ground and surface water sources have been greatly impacted by our collective industrial mining and agricultural activities. Many communities that rely on these compromised water sources suffer health consequences. Here in Silicon Valley the legacies of chip manufacturing are still in our subsurface water. There are the obvious examples of acid mine drainage leaching into the water supplies of remote Indian communities. More subtly, pharmaceutical residues permeate water sources everywhere.

And although the United Nations now has explicitly recognized a human right to clean drinking water and sanitation, for many communities this goal is increasingly elusive, even without climatic changes.

Clearly our mindset, policies, scientific investigations, and market-based incentives have not been sufficient to protect the fabric of the natural world that sustains us. And yes, many have pointed out to environmentalists that people are tired of hearing these doomsday messages. We are tired of saying them.

However, amid this continued exploitation, injustice, gridlock, and indifference, Pope Francis' encyclical letter *Laudato Si'* has been a transformational game changer. He is asking us to understand these realities and use the failure of our ability to address them as an impetus for a path forward.

In *Laudato Si'*, the Holy Father calls for an ecological conversion of all humanity. For a shift in consciousness from being the masters of the earth, entitled to plunder her at will, to one of caring and caretaking. Of a renewed understanding at the core of our beings that it is Mother Earth who sustains us and of whom we are a part. Pope Francis



Iris Stewart-Frey discusses the climatic changes already underway that are affecting the Earth's water cycle and water resources at the "Our Future on a Shared Planet" Conference at Santa Clara University.


appeals to us not only for a change in technology, but a change in humanity. The encyclical is a plea to truly hear, understand, and relieve the sufferings of the poor, who continue to bear the brunt of the burden of environmental degradation.

Pope Francis calls us to question a rampant consumer mentality where life is on overdrive and everything has its price. Instead, he invites us to reconnect with the humanity within ourselves, with the Earth, and on a spiritual level inherent in all. That spiritual connection is not exclusively Catholic, and that spiritual connection is in harmony with the concepts and understandings of science and for scientists.

In this context, a sentence from the encyclical had a particular resonance with me as a scientist and as a hydrologist. "The external deserts in the world are growing, because the internal deserts have become so vast" (§217).

Dr. Ramanathan pointed out that a sustainable relationship with nature requires scientific and moral leadership. When we put our multidisciplinary heads together, powerful synergies evolve. To achieve these synergies we must be guided by our moral compass, rigor, empathy, and imagination. There are increasingly more of us that must share shrinking resources,

and it is becoming increasingly harder to ignore the ethical questions that implies.

Climate, energy, and water are integrally linked—to each other and to questions of justice and our humanity. *Laudato Si'* challenges us to explore these linkages with our heads, our hearts, and our souls to chart the course towards restoring life to those deserts that we have created. 

IRIS STEWART-FREY is associate professor in hydrology and the current chair of the Department of Environmental Studies and Sciences at Santa Clara University. Her research is focused on past and future impacts of climate change on water resources for humans and ecosystems. She is also interested in questions of water access and the development of adaptation responses to expected hydrologic changes. Stewart-Frey is currently working with an interdisciplinary team on a project examining food and water security under climate change for smallholder farmers in Nicaragua.

NOTES

- 1 Iris Stewart-Frey, "Greening the Growing Deserts: Reflections from a Hydrologist," public lecture, Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis conference, 4 November 2015, Santa Clara University. This essay is an excerpt from the lecture; a video of the full lecture is available at: scu.edu/ourcommonhome/climate-conference/

PUBLIC POLICY FOR SUSTAINABLE COMMUNITIES

What happens with politics?
Let us keep in mind the
principle of subsidiarity, which
grants freedom to develop the
capabilities present at every level
of society, while also demanding
a greater sense of responsibility
for the common good from those
who wield greater power.

—POPE FRANCIS¹

¹ Pope Francis, *Laudato Si' On Care for Our Common Home*, encyclical, (24 May 2015), no. 196, available at w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html, accessed 22 March 2016.



Eric Bonilla



This vibrant mural is one of the projects created by Art for Change (*Arte para el Cambio*), one of Santa Clara University's Thriving Neighbors Initiative after school programs for third and fourth grade students at Washington Elementary School in San Jose, California. The mural was produced in partnership with artist Carlos Rodriguez of the New Edge Creative Services (pictured here) who taught several lessons on art and vocation to the students.

Public Policy and the Environmental Teachings of Pope Francis

Excerpt from Public Lecture,
“Our Future on a Shared Planet” Conference, Santa Clara University¹

Courtesy Sam Liccardo



BY SAM LICCARDO
Mayor, San Jose, California

AS AN ELECTED OFFICIAL STANDING IN FRONT OF YOU, I KNOW YOU ARE UNDOUBTEDLY FAMILIAR WITH THE ROUTINE WHEN ELECTED OFFICIALS SPEAK. USUALLY YOU HEAR ONE OF TWO THINGS. YOU EITHER HEAR WHAT YOU ALREADY KNOW OR YOU HEAR THEM ASK YOU FOR SOMETHING. AND I SEE NO REASON WHY TODAY SHOULD BE ANY DIFFERENT. SO I AM GOING TO TELL YOU WHAT YOU ALREADY KNOW AND I AM GOING TO ASK YOU FOR SOMETHING.

However, I am going to interrupt that sequence by also committing a bit of political suicide and offer some criticisms of a document that I think virtually everyone in this room—I’m guessing by your attendance today—strongly agrees with. A document with great support globally. Because I think some criticism promotes dialogue.

A few disclaimers: My view is a first world view. That is, I have a very distinctive perspective sitting here in Silicon Valley, where many of us know full well that criticism of the technocratic paradigm strikes right to our hearts. Certainly we are limited by our perspectives and how we grew up.

Second, I am an elected official. And we know politics is the art of the possible. Everything beyond the art of the possible belongs in the realm of faith. And Pope Francis is in the faith business. I am in the “possible” business, and so occasionally that may mean differences of views. Nonetheless, clearly this document, *Laudato Si’*, compels us.

Issued last spring by the Vatican, *Laudato Si’* is profoundly countercultural within the development of political thought in this country and in most countries. The notion that we share this planet and should all take responsibility for our shared home is contrary to the phrase of former Speaker of the U.S. House of Representatives Tip O’Neill: “All politics is local.”

I suspect that you have felt as deeply challenged as I have in reading the document. It is not easy stuff. It’s even harder to implement. But as a local elected official, I think this document moves the conversation forward in several very important ways, and I will outline four of these ways here today.

The first, most critical contribution of the *Laudato Si’* is that it elevates the *moral dimensions* of climate change and the care for our common home.



Justin Wojcik

In West Virginia, a staff member from the Appalachian Institute at Wheeling Jesuit University stands with Santa Clara University students above a five billion gallon coal plant slurry pond, one of the largest in the nation. The SCU students were on an immersion, learning about the scale of the storage pond for waste produced from washing coal. Just beyond the smokestacks lies the Ohio River, which supplies water to millions of Ohio and West Virginia residents.

Pope Francis takes the conversation out of the routine bickering we see so often in Washington and elevates climate change to a concern that involves all of us, whether Democrat or Republican.

The second way this document moves us forward significantly is by advancing the notion that the challenge we face with climate change cannot be solved simply with technological solutions. We would all love to see that wonderful invention that will enable carbon sequestration to happen throughout the globe; certainly I'll be rooting for it as much as anyone else. But we also know that technology alone isn't going to get us there. As Ron Heifetz put it, we need adaptive change, not merely technical change.² And of

course that's not a very common response from a political system. We have a hard enough time just getting to solutions of any kind.

Third, I think there is a profound local emphasis in this document—and wonderfully so. As it says in *Laudato Si'*: "While the existing world order proves powerless to assume its responsibilities, local individuals and groups can make a real difference" (§179). It is clear as we look around our own country and globally that national governments haven't exactly stepped up to the plate. The document criticizes even the *Rio Declaration on Environment and Development* as being largely ineffectual. As it says, we have countries that place their national interests above

Those who bear the impact of environmental degradation most severely also suffer the most from economic deprivation. We hear this from Pope Francis routinely, and I think many of us are welcoming this message and wish we heard it more in our public discourse.

the global common good. Not an easy thing to overcome. The good news is that we are seeing really dramatic changes and wonderful innovations in cities throughout this world. And I know grassroots community leaders like Poncho Guevara [see page 34 of this issue] are making meaningful change every day at the local level.

Finally, the last important and transformative element of this document is linking the environment and social justice. The cry of the Earth and the cry of the poor. Those who bear the impact of environmental degradation most severely also suffer the most from economic deprivation. We hear this from Pope Francis routinely, and I think many of us are welcoming this message and wish we heard it more in our public discourse.

So I have told you what you already know. Now let's move on to what I think are the limitations of this document from my own biased, first world, political point of view. Let me be very clear: This is criticism around the edges of a critically important document for the world. First, *Laudato Si'* undoubtedly holds profound suspicion of technology. It is certainly Pope Francis' right to take on the technocratic paradigm, which he describes as a unilateral, overly-focused commitment to technology, and a one-dimensional, unreflective view of technology as some kind of panacea for the world's ills. I think we all agree it's not the panacea—but it is a very, very important part of the solution. Technology is nothing more than a tool. Technology enabled me to get to city hall in an electric vehicle that was powered by solar panels on my house.

So we all recognize that technology can be used poorly or well. But we absolutely need technology to be able to move forward. I say this primarily because we see in the developing world extraordinary transformation in economies in China and India, for example. Yet these are still largely economies that depend enormously on coal. We also see millions of people moving into the middle class or something closer to it every year, and that's a good thing. It's the only way people can move into a standard of living that reflects more global egalitarianism and social justice. We are going to need all the tools we have here in Silicon Valley and throughout the world to enable that to happen.


Furthermore, as we think about the limitations of the document, I know many of you are familiar with the very frontal attack on carbon credit. According to the document, "The strategy of buying and selling 'carbon credits' can lead to a new form of speculation which would not help reduce the emission of polluting gases worldwide. This system seems to provide a quick and easy solution..." (§171). *Laudato Si'* goes on to criticize cap-and-trade systems. Now, for those of us in the state of California, I think we all recognize it was not easy getting cap-and-trade implemented here. It was far from "quick and easy." In fact, it is so hard that it hasn't really been implemented anywhere else in the country—at least not very extensively.

An awful lot of economists believe that a critical path for market economies is to price carbon. If we don't do that, we're going to have



Michael Engh, S.J., president of Santa Clara University, David DeCosse, and Mayor Sam Liccardo address public policy and the environmental teachings of Pope Francis at the “Our Future on a Shared Planet” Conference at Santa Clara University.

a very difficult time orienting an economic system with appropriate incentives to conserve and to innovate. Many would say we’ve taken a revolutionary step in California, and this is not to say our work is done. However, we need to embrace these mechanisms; we need to be able to work with the market, particularly if we move in the realm of the possible.

So I’ve offered a bit of what you already know and a few criticisms. To conclude, I would like to move on to the last element for today and that is the “ask.” I’m asking you to get engaged. Many of you are already engaged. But I would like to ask you to get engaged with us in City of San Jose as we seek to prioritize select sustainable development goals from among the seventeen goals that were identified by the Sustainable Cities Initiative advanced by the Vatican and Jeffery Sachs, a prominent economist working closely with the United Nations. We need your help in identifying which goals we should be target with our scarce resources and how best we can meet these goals. We have a whole lot of work to do and I look forward to doing it with all of you. 

SAM LICCARDO took office as mayor of San Jose in January 2015 and at the age of 44 became one of the youngest mayors in San Jose’s history. Prior to being elected mayor, Liccardo served two terms on the City Council, where he led efforts to revitalize downtown, preserve San Jose’s hillsides and open space, boost funding for affordable housing, and open a world-class soccer stadium for the San Jose Earthquakes. Liccardo began his public service as a Santa Clara County District Attorney and is a proud graduate of San Jose’s Bellarmine College Prep, Georgetown University, Harvard Law School, and the John F. Kennedy School of Government.

NOTES

- 1 Sam Liccardo, “Public Policy and the Environmental Teachings of Pope Francis,” public lecture, Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis conference, 4 November 2015, Santa Clara University. This essay is an excerpt from the lecture; a video of the full lecture is available at: scu.edu/ourcommonhome/climate-conference/
- 2 Ron Heifetz, Marty Linsky, and Alexander Grashow, *The Practice of Adaptive Leadership: Tools and Tactics for Changing your Organization and the World* (Boston: Harvard Business Press, 2009).

Social Action and Community in an Integral Ecology

Response to Mayor Sam Liccardo's Public Lecture,
"Our Future on a Shared Planet" Conference, Santa Clara University¹



BY PONCHO GUEVARA
*Executive Director, Sacred Heart Community Service,
San Jose, California*

I WANT TO SHARE A LITTLE BIT OF A STORY. WHEN I READ *LAUDATO SI'* WHAT HIT ME MORE THAN ANYTHING WAS ONE WORD: DISPLACEMENT. WHY DID THAT HIT ME?

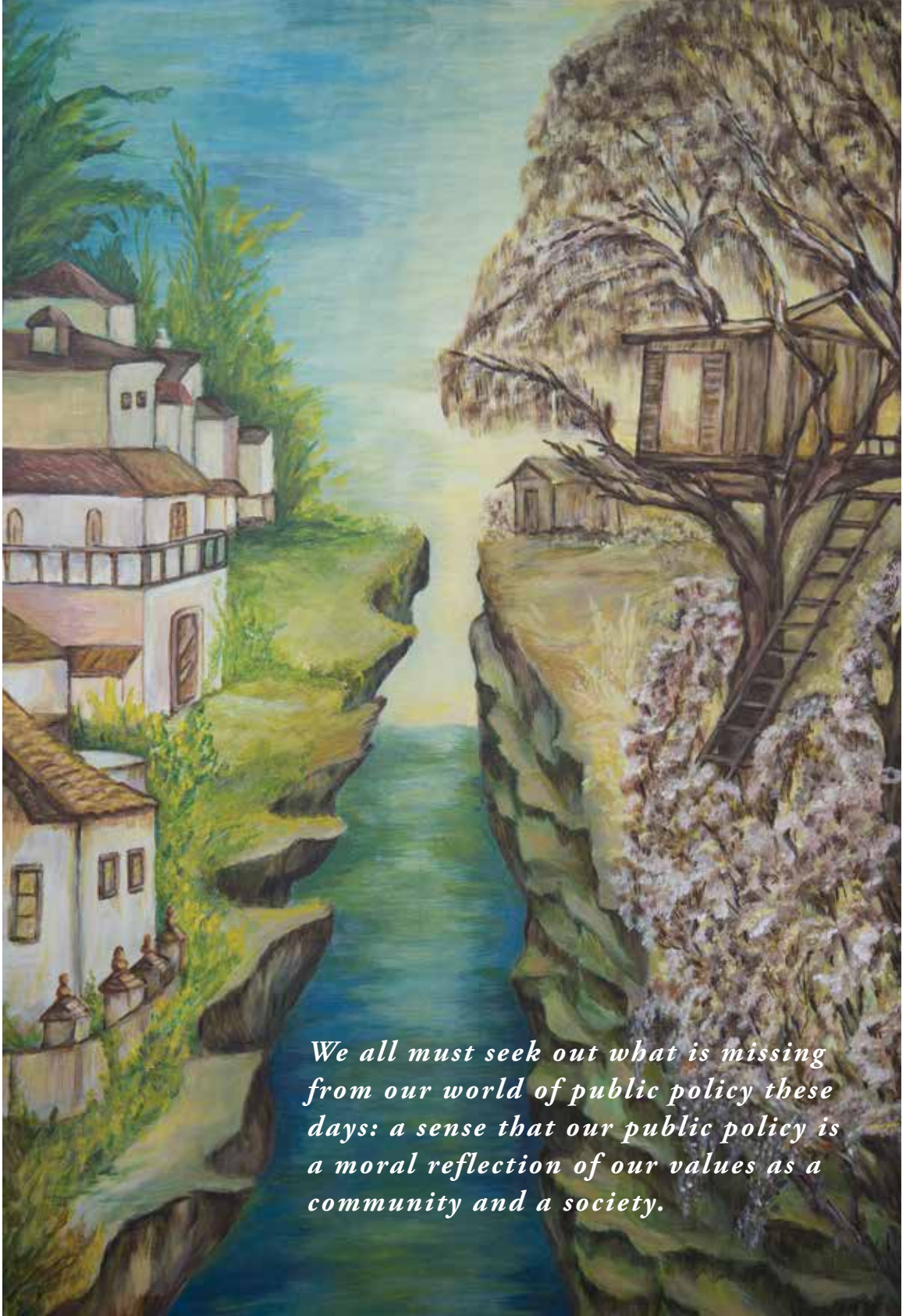
YOU SEE, A COUPLE OF WEEKS AGO I MET A YOUNG WOMAN, ANA LUCIA, A YOUNG MOM, AND I TALKED TO HER A LITTLE BIT ABOUT HER SITUATION. SHE HAD GOTTEN INVOLVED IN A COMMITTEE WORKING ON TENANT RIGHTS AND TENANT ISSUES. SO I ASKED HER HOW SHE WAS. WHAT WAS HER HISTORY AND WHAT WAS HER STORY?

Ana Lucia talked about how she grew up in Guanajuato, Mexico. She came from family that owned a dairy farm there. Ultimately, the farm ended up having to close due to changes in the economy in the 1990s. The dairy industry in Mexico was basically obliterated after certain public policies liberalized trade that helped protect highly supported industries in the United

States. Ana Lucia's family business tried to compete. They tried to do things like using bovine growth hormones and other modes of increasing production. And basically, it all crumbled. Her family had to leave.

They came to the United States, and she had virtually nothing. She grew up here from her teens on. She is involved in her community and does what she can, but she's struggling right now to be able to make ends meet. She is, as I mentioned, a young mom. But her entire world changed dramatically because of the impact of U.S. public policy that was more about liberalizing trade than paying attention to the environmental, cultural, and economic impact of what we do.

One basic response I have to *Laudato Si'* is that it is a countercultural document. It is extraordinary, truly revolutionary. We all must seek out what is missing from our world of public policy these days: a sense that our public policy is a moral reflection of our values as a community and a society. We often end up pushing forward what we think we are beholden to—the needs of



We all must seek out what is missing from our world of public policy these days: a sense that our public policy is a moral reflection of our values as a community and a society.

Susanna Raj '16, "Conflict," acrylic on canvas, 2015. Used with permission.

our economy and the liberalization of trade and incentivizing jobs. But what kind of jobs? What kind of impact? What is happening to families and workers and communities all around the world?

Laudato Si' critiques consumerism, the immorality of a system that chews up and spits out especially our most underprivileged. Pope Francis urges that if we don't respond to these immoralities, we will see more unrest. We will see more displacement. We will see more dysfunction. I look at this encyclical not as an environmental document, but as a human document. *Laudato Si'* talks about the world that we live in and the values that undergird our humanity. It is a call to action. It is a call to build a more just world, a call to realize the impacts that we will all endure.

At Sacred Heart Community Service, we are a traditional service-based institution in the Washington neighborhood of San Jose, California. Last year we served around 75,000 unique men,

Laudato Si' talks about the world that we live in and the values that undergird our humanity. It is a call to action. It is a call to build a more just world, a call to realize the impacts that we will all endure.

women, and children who came through our doors looking for help and assistance. About five years ago we decided to take on a program that would help people with some of the economic costs they are facing around environmental choices and challenges and the use of energy. Our clients live in often substandard housing not developed




Local families and Santa Clara University community members work together to plant raised garden beds at Washington Elementary School in San Jose, California.



Courtesy Thriving Neighbors Initiative

La Mesa Verde, a program offered through Sacred Heart Community Services, partners with SCU students and faculty to establish home-gardens with local families in San Jose, California. Since 2009, over 450 families have established garden beds, and over 100 families are currently active in the program.

with energy consciousness in mind. We took on a program that partnered with a state agency to do energy retrofits for our families. Why did we do that? Well, it saved them money. It makes a big difference in how they spend their paycheck. However, the real reason for this program is suffering. Families are suffering because of public policy choices—building codes and how we allocated resources. These are moral choices. Who benefits from our public policy decisions? Who bears the burden? Are we looking through that lens?

Laudato Si' makes a profound connection between environmental and social justice. Talking about environmental justice is not just about solar panels and transportation systems; it's about how we come together and engage other people in our community. Hear their stories. Be involved with them. Action builds up our common humanity. 

PONCHO GUEVARA is the executive director of Sacred Heart Community Service, one of Silicon Valley's largest social service providers. He previously worked for the South Bay Labor Council, where he helped start Working Partnerships and the Interfaith Council. In the '90s, Guevara helped build the Children's Health Initiative, which provides health insurance to uninsured children, and the Housing Trust to increase affordable housing.

NOTES

- 1 Poncho Guevara, "Social Action and Community in an Integral Ecology," public lecture, *Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis* conference, 4 November 2015, Santa Clara University. This essay is an excerpt from the lecture; a video of the full lecture is available at: scu.edu/ourcommonhome/climate-conference/

THE ECONOMY OF THE COMMONS

The climate is a common good,
belonging to all and meant for
all. At the global level, it is a
complex system linked to many
of the essential conditions for
human life.

—POPE FRANCIS¹

¹ Pope Francis, *Laudato Si' On Care for Our Common Home*, encyclical, (24 May 2015), no. 23, available at w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html, accessed 22 March 2016.



Jimmy Tran/Shutterstock



Rice terraces, Yuanyang County, Honghe, Yunnan Province, China

Securing the Well-Being of People and Nature: A Reflection on *Laudato Si'*

Excerpt from Public Lecture,
“Our Future on a Shared Planet” Conference, Santa Clara University¹

Courtesy Gretchen Daily



BY GRETCHEN DAILY

*Bing Professor of Environmental Science, Department of Biology;
Senior Fellow, Woods Institute for the Environment;
Director, Center for Conservation Biology
Stanford University*


CLOUD FORESTS PROVIDE US WITH A TREMENDOUS AMOUNT OF WATER. THEY HELP STABILIZE THE CLIMATE. THEY'RE KIND OF THE GENETIC LIBRARY OF ALL KNOWN LIFE IN THE UNIVERSE FROM WHICH WE HAVE DERIVED ALL KINDS OF CLUES AS TO HOW TO LIVE A BETTER, MORE FULFILLING, HEALTHIER LIFE. INCREDIBLE BENEFITS COME FROM CLOUD FORESTS, AND YET WE DON'T CAPTURE THEM ANYWHERE. WE DON'T REALLY THINK ABOUT THEM. WE DON'T FACTOR THEM INTO OUR DECISIONS. AND SO CLOUD FORESTS ARE DISAPPEARING ALL OVER THE PLANET.

So what we'd like is to see is alternatives, and connect what we're doing today, our big and small choices to ecosystems. Ecosystems are our life support systems; the many services we get from them supply our human well-being. Thus we want

to connect ecosystems up through institutions, such as the city government of San Jose for example, and drive change that results in better decisions and better alternatives.

I was extremely lucky to get to work in Costa Rica starting around 1991—right after a time when Costa Rica led the world in extinctions and tropical deforestation. It had the highest deforestation rate on the planet. And yet Costa Rica has turned around. They now have the highest reforestation rate. (Costa Rica, together with—you won't believe this, but keep reading—China!)

But how did Costa Rica do that? First, a bunch of people came from universities, some in the Bay area. Hydrologists and others recognized what was happening and what a tragedy it was. They also saw how flooding would become much worse, which had already begun with the stripping away of forests. Forests are like sponges that soak



*Ecosystems are our life support systems;
the many services we get from them
supply our human well-being.*

Cloud forests occur when atmospheric conditions allow for a consistent cover of clouds. They provide us with a tremendous amount of water, but are actively disappearing all over the planet due to deforestation.

Glenn R. Specht/Shutterstock

up heavy rain that naturally falls in the tropics. And they thought, okay, the way to secure Costa Rica economically and otherwise is to invest in forests. They therefore established the world's first nationwide policy to pay people to replant or conserve forests on their land.

Amazingly—speaking of equity, engagement, and inclusiveness—they fought the World Bank. Although contentious from an economic point of view, I appreciate what they did. Rather than just paying those who had the most important forest that protected people from flooding or secured drinking water quality, they said, “We’re going to pay anybody. You just come here and sign up. And that’s because we want everybody to be part of this social movement. It’s about a lot more than just storing carbon or purifying water or securing our communities from flooding. It’s about the whole change in our values.” And that’s the way they’ve driven the program. It was immediately heavily

oversubscribed and has basically remained so.

In *Laudato Si’*, Pope Francis urges: “Interdependence obliges us to think of one world with a common plan” (§164). Acknowledging our interdependence is essential to confronting deeper problems which cannot be resolved by unilateral actions. So how do we come together in our tightly interlinked world and address some of these challenges? How do we develop a common plan, a common vision?

Coffee is a tropical forest plant. But you could say coffee has been the enemy of the tropical forest. How could we possibly harmonize coffee production and the livelihood of the farmers, the people, and the rainforest?

We went out and looked at the different types of wildlife in the Costa Rican landscape. How many birds do you think exist there? It turns out there are about 200 different species of common birds flying around out there. Guess how many

bees are there? How many different types of bees do you think we caught in one month? I thought it might be something like 30 to 50. That's what a friend of mine caught up in California's Central Valley on some organic farms. So I thought it would be a little higher than that, but not too daunting. We caught 700.

After a ton of hard work, we found out that bees actually boost coffee yield by 20 percent and the quality of coffee beans by about 50 percent. So having rainforest right near your coffee farm is actually a blessing—an economic blessing, in that these farmers are often on the edge financially.

Those boosts are very significant. And the bees aren't going to fly 100 miles to go pollinate some coffee bush. Right? They're going to pollinate right nearby.

We also found out that birds reduce infestation of coffee's main pest, the Coffee Berry Borer, for which there is no chemical pesticide, by 50 percent. The livelihood of farmers and the well-being of the rainforests are linked.

Now I'd like to jump into the activation part. How do we go from understanding our connections to nature, our dependence on nature, to actually changing what we do?

"A true ecological approach always becomes a social approach... so as to hear both the cry of the Earth and the cry of the poor" (§49). *Laudato Si'* calls for a legal framework to set clear boundaries and ensure the protection of ecosystems. Amazingly, my example of a legal framework that sets such clear boundaries is China.

We get so much bad news on China you might disbelieve me. But a couple of years ago the Chinese government, the president, and the premier announced China's dream of becoming the ecological civilization of the 21st century. What you see in China today is a massive battle going on internally, pitting development as done in the past, proceeding apace, against this new set of forces driving toward a much more sustainable set of outcomes. Harmonizing people in nature.

China has seen massive floods—the worst flooding on the planet in 1998. All these leaders asked, "Where and what should we protect?" Now many areas receive payments through a deal similar to the Costa Rica deals. Payments went to people to shift out of growing annual crops like rice and corn on really steep slopes, the source of much of the flooding, and instead, people were paid to grow forest or



Charles Barry

Bees at the Forge Garden, Santa Clara University, a living laboratory for the exploration of environmental and food justice.

A true ecological approach always becomes a social approach...so as to hear both the cry of the Earth and the cry of the poor.

—POPE FRANCIS

in some cases grassland. A hundred and twenty million households enrolled. That's the main message. I mean, where can you do that? That happened overnight. Within about a year, 120 million households are getting paid to make that shift. So that's why China has the highest rate of reforestation worldwide.

And to go one step further in China and then I'll close, the state government also approved a year ago a plan to go beyond gross domestic product (GDP). GDP alone guided China's growth in the last century. For this century the state government decided to continue to pay attention to GDP, but also to attend to the gross ecosystem product (GEP): a measure that looks at all the goods and services that come from ecosystems at every scale and promotes or removes political leaders based on their GEP performance.


On one hand, there's obviously a long way to go. On the other, I often think about the story of a friend I have who is in an investment sector helping to drive this kind of integrated ecological vision and action forward. He grew up in the United Kingdom, and his dad, who was really into sailing, would make him, even as a young boy, board this small boat and sail across to North America. He was always terrified as they lost sight of land out in the middle of the Atlantic. For days on end they would be hurled by waves, and then a time would come when they could smell land. They couldn't see land, but they could smell it. And he'd finally feel at ease in the boat at that point.

My sailing friend says: At this moment, we can't quite see it. But you know what land will look like. We can smell it.

He's hopeful, along with many people in this movement—and there are a lot—a lot of

people in this movement around the world. I've just highlighted a few cases here today. But a *lot* of people feel that we're approaching what Pope Francis is calling for. A common set of goals and a morality to what we're pursuing.

I feel there is a good shot of things coming together if we activate. If we actually all become involved. At least educating ourselves, bringing others in, driving change here or in other ways as we can in our lives. We all know Silicon Valley can lead the world. It's our responsibility and it can be our joy to do that.

We can smell the land now. 

GRETCHEN DAILY is the Bing Professor of Environmental Science in the Department of Biology; senior fellow in the Woods Institute for the Environment; and director of the Center for Conservation Biology at Stanford University. She is also co-director of The Natural Capital Project, a partnership among Stanford University, The Nature Conservancy, World Wildlife Fund, and the University of Minnesota, whose goal is to align economic forces with conservation. Daily received her B.S., M.S., and Ph.D. in biological sciences from Stanford University. She serves on numerous boards, including the Beijer Institute for Ecological Economics (part of the Swedish Royal Academy of Sciences) and The Nature Conservancy. She has published over 200 scientific and popular articles.

NOTES

- 1 Gretchen Daily, "Securing the Well-Being of People and Nature: A Reflection on *Laudato Si'*," public lecture, Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis conference, 4 November 2015, Santa Clara University. This essay is an excerpt from the lecture; a video of the full lecture is available at: scu.edu/ourcommonhome/climate-conference/

Valuing our Common Home

Response to Gretchen Daily's Public Lecture,
"Our Future on a Shared Planet" Conference, Santa Clara University

Courtesy William Sundstrom



BY WILLIAM SUNDSTROM

*Professor, Department of Economics, Leavey School of Business,
Santa Clara University*

IN *LAUDATO SI'*, POPE FRANCIS ARGUES THAT THE GLOBAL PROBLEMS OF INJUSTICE AND ENVIRONMENTAL CATASTROPHE THAT WE FACE CAN ONLY BE SOLVED WITH RADICAL CHANGES IN PERSPECTIVE AND LIFESTYLE. HIS ENCYCLICAL IS A POWERFUL MANIFESTO FOR SUCH A PROFOUND CULTURAL AND SOCIAL TRANSFORMATION.

I share the Pope's sense of urgency and his critique of humanity's current path. And perhaps the teachings of Francis and others will sufficiently move hearts and minds to bring about the needed changes. But as a pragmatist, I tend to place more hope in policies that harness baser human motivations—including financial—to steer technological innovation and consumerism toward a more sustainable path: a revolution of incentives, if you will.

I thus find myself in enthusiastic agreement with Professor Daily's pragmatic, and profoundly hopeful, vision. I have admired her work for a long time. She has been a leading scholar and proponent of the idea of valuing ecosystem services

and natural capital, and of using those valuations as an integral input to the decision-making process in both public and private life.

An important strength of this work, which comes across so clearly in her presentation, is the emphasis on decision-making processes at the scale of actual human institutions and communities. It is in fact possible to calculate the value of ecosystem services at the global scale, and such exercises come up with impressive numbers—amounts in the many, many trillions of dollars.¹ Such estimates can serve a useful rhetorical purpose in reminding us how much we “owe” our planet, and how much we risk losing if we fail to save it. But these kinds of calculations cannot play the direct policymaking role that Professor Daily's calculations of the value of, for example, regional watershed services do. For me, the message of her work is: “Think globally—calculate (and act) locally!”

Placing a dollar value on natural capital and ecosystem services comes naturally to me as an economist. After all, economists are among the few people who are comfortable with the idea of selling the right to pollute, or deriving the dollar



Ricardo Levins Morales, "The Earth is Not For Sale," scratchboard, ink and watercolor, 2015. Used with permission.

value of a human life. But employing valuation in a decision-making process does not require that we reduce all competing and plural values down to a single cash nexus. It does, however, acknowledge the fact that human decisions involve numerous tradeoffs between competing uses of resources and allocations of goods. Some reckoning of costs and benefits is an important step in assessing the tradeoffs. Much of the power of Professor Daily's work is in taking a much broader, more flexible, and more nuanced view of what those costs and benefits are.

One might reject as reductionist, or even amoral, any thinking in economic terms about ecosystem services and natural capital, but I think it unlikely that doing so would result in a more thoughtful or participatory dialogue among all the relevant parties. Rather, typically what has happened in the past is that the value of nature is simply ignored or downplayed.

Like a private home, a factory, or even an education, our common home is of tremendous value to us, but it will depreciate in the absence of proper upkeep.

Our habit of shortchanging the planet comes as no surprise to economists. Ecosystem services are, as Cardinal Turkson suggested, a common resource. Common resources usually lack a particular stakeholder who owns them and captures market value from maintaining them. Even when there are such owners or stakeholders, it is not uncommon for them to be marginalized people—for example, indigenous peoples—who have limited political or economic power. Valuation can give those interests, and those stewards, a voice in the decision.

A sustainable economy is one in which the net impact of human activity leaves the next generation with a stock of capital—including physical, human, and natural capital—sufficient to maintain at least the standard of living of the previous generation.

Professor Daily and her colleagues invite us to think about our common home much as a conscientious homeowner would think about the house that she or he lives in: as a source of essential services, including shelter, but also as an infrastructure for a variety of life-supporting and life-enhancing activities.

Like a private home, a factory, or even an education, our common home is of tremendous value to us, but it will depreciate in the absence of proper upkeep. Thinking about natural

capital as part of the capital stock that must be maintained to continue providing services offers a suitably economic definition of sustainability. Namely, a sustainable economy is one in which the net impact of human activity leaves the next generation with a stock of capital—including physical, human, and natural capital—sufficient to maintain at least the standard of living of the previous generation.²

This definition of sustainability is anthropocentric in its focus on the value of nature *for humans*. But it is compatible with a diverse and all-encompassing view of the variety of human values, including aesthetic, spiritual, moral, and so on.

I'd like to finish my remarks by applauding one additional aspect of the approach Professor Daily has taken in much of her work. As our livelihoods here in Silicon Valley and elsewhere have moved away from the land, and our everyday lives have become increasingly urbanized, it's easy to overlook the extent and depth of our continuing dependence on ecosystem services. Valuing ecosystem services and natural capital brings those critical life support systems back into view—even for us city or suburban folks.

Urbanization presents great challenges but also great opportunities for solving the crises of the environment and social justice. On the one hand, rapid urbanization does have the potential to isolate us from each other as well as from our experience of the natural world. That comes out very clearly in Pope Francis' words: How can we expect solidarity with nature from someone who has spent their entire life in crowded apartments or shanties in Mumbai or Mexico City or Chicago?



William Sundstrom engages the audience at the "Our Future on a Shared Planet" Conference at Santa Clara University.

Joanne Lee



The Forge Garden at Santa Clara University is a half-acre urban, organic garden that serves the campus as a space for course research, service learning, and sustainable food production.

Doug Plummer

But on the other hand, urbanization is one of the most promising avenues we have for reducing our carbon and land use footprints and for nurturing a rich, diverse, and tolerant—i.e., cosmopolitan—human community.³ In this respect, building livable, energy-efficient cities, with enough open space to keep us all sane, is really one of the most important investments we can make in both social and natural capital at this point in our history. 🌱

WILLIAM A. SUNDSTROM is professor of economics at Santa Clara University. He is the author of numerous scholarly publications in economics and economic history. His current research focuses on the impact of climate change and poverty in developing countries as well as the causes and consequences of poverty and income inequality in the Silicon Valley region. He teaches courses in econometrics, environmental economics, and the economics of race and gender.

NOTES

- 1 Robert Costanza, Ralph d'Arge, Rudolf de Groot, Stephen Farber, Monica Grasso, et al., "The Value of the World's Ecosystem Services and Natural Capital," *Nature* Vol. 387 (May 1997), 253–260.
- 2 Kenneth Arrow, et al., "Are We Consuming Too Much?" *The Journal of Economic Perspectives*, Vol. 18, No. 3, (Summer, 2004), 147–172. Professor Daily was a co-author of this influential article.
- 3 Edward L. Glaeser and Matthew E. Kahn, "The Greenness of Cities: Carbon Dioxide Emissions and Urban Development," *Journal of Urban Economics*, Vol. 67 (May 2010), 404–418.

GREEN MARKET LEADERSHIP

By itself the market cannot
guarantee integral human
development and social inclusion.

—POPE FRANCIS¹

¹ Pope Francis, *Laudato Si' On Care for Our Common Home*, encyclical, (24 May 2015), no. 109, available at http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html, accessed 22 March 2016.



Charles Barry



Santa Clara University's Refract House, an 800-square-foot zero energy home, finished first in both the architecture and communications contests in the 2009 Solar Decathlon, a challenge by the U.S. Department of Energy to design, build, and operate solar-powered houses that are cost-effective, energy-efficient, and attractive.

Laudato Si' and Inclusive Capitalism

Excerpt from Public Lecture,
“Our Future on a Shared Planet” Conference, Santa Clara University¹



Courtesy John Denniston

BY JOHN DENNISTON
Chairman of the Board, Shared-X

MANY IN THE MEDIA HAVE PORTRAYED POPE FRANCIS'S *LAUDATO SI'* AS AN ENVIRONMENTAL CALL TO ACTION, AND WHILE THAT IS TRUE, IT IS ONLY PART OF A MUCH LARGER PICTURE THE POPE IS PAINTING. HE ALSO CONFRONTS SOCIAL INJUSTICE: "WE ARE FACED NOT WITH TWO SEPARATE CRISES, ONE ENVIRONMENTAL AND THE OTHER SOCIAL, BUT RATHER WITH ONE COMPLEX CRISIS WHICH IS BOTH SOCIAL AND ENVIRONMENTAL" (§139).

The root cause of environmental degradation, Pope Francis writes, is an ethical and cultural decline worldwide, characterized by individualism and self-centered instant gratification. In *Laudato Si'*, Pope Francis urges all of us to pioneer solutions that combat poverty, restore dignity to the marginalized, and protect nature—all of these tasks, not just one.

Some media coverage of the encyclical has been supportive and some not. I'd like to begin my remarks today by using the adverse reactions as a

prism of sorts to help us see more clearly how an alternative theology has emerged recently in our culture, and also to see more clearly the challenges of reconciling this new creed with Catholic social teaching.

I'm going to use one particular critique as a proxy: an op-ed by the prominent journalist George Will, the headline of which reads, "Pope Francis' Fact-free Flamboyance."²

Will argues that the pope doesn't understand how the free market has lifted millions out of poverty, how environmental damage can be fixed, and how his own policy proposals will hurt the poor. (As an aside, I have to say, I wonder how many critics have actually read the encyclical and not just the highlights in the newspapers.) George Will lectures the pope, claiming that only economic growth has ever produced broad amelioration of poverty. However, if you *read* the encyclical you'll discover that Pope Francis is well aware of this fact. Truth be told, the pope is even stronger on this point than Will, marveling at the good done by inventions born of human



A public art installation entitled “Illuminating Our Common Home” projected on St. Peter’s Basilica at the opening of the Extraordinary Jubilee of Mercy, December 8, 2015. The installation featured images of humanity, the natural world, and climate change, and was inspired by Pope Francis’ ecological encyclical *Laudato Si’*.

Photo by Steve McCurry. Artwork by Obscura Digital.

ingenuity. *Laudato Si’* tells us we should all rejoice at the potential to reduce human suffering even more going forward.

Here’s another mischaracterization. Will tells us the pope is proposing dangerous public policies that are destined to hurt the poor. Again, those who have read *Laudato Si’* know it’s not a policy manual; nothing in the encyclical even approximates legislative recommendations. To the contrary, the pope explicitly says that the church is not a substitute for the political system. Regarding the environment, Will argues we should overlook fossil fuels’ externalities because they powered economic growth in the past, and in any event we will likely be able to reverse any significant environmental damage. Will seems unable to envision a future in which energy is both a driver of prosperity and clean. In fact, we’re moving in precisely that direction today.

Like so many of the critics, Will demonstrates a limited understanding of the social dimensions of

the encyclical. Pope Francis isn’t saying capitalism is inherently bad. He’s urging us instead to adopt a more inclusive form of capitalism.

So what do we see when we look through this prism of opposition? We see that a segment of our society has come to a religious-like belief that the invisible hand of the market achieves optimal outcomes across the board—economic, social, and environmental. A trifecta of perfection, if you will. George Will captures well the zealotry with which this new religion has taken hold at the close of his article: “Americans cannot simultaneously honor [the pope] and celebrate their nation’s premises.”³ In other words, the two religions in question—Catholicism and the Church of Market Fundamentalism—clash and are irreconcilable.

Will and other critics try to strengthen their case by portraying Pope Francis as a radical, as an outlier, and as a pope who’s making up his own catechism and in so doing taking the church wildly off course. That’s simply not the case. In

The pope isn't saying capitalism is inherently bad. He's urging us instead to adopt a more inclusive form of capitalism.

Laudato Si', Pope Francis is channeling mainstream and long-standing Catholic social teaching, very much along the lines of papal encyclicals or other statements published by Pope Paul VI in 1971, St. John Paul II in 1991, and Pope Benedict XVI in 2007.⁴ And all of those documents can trace their heritage, in part, to the *Rerum Novarum*, issued by Pope Leo XIII 125 years ago in 1891.

And so I pose to you a question, which perhaps doesn't have a clear answer. What has changed? Why the shrill reactions now to Pope

Francis' social justice and environmental reflections when the pope's predecessors made the very same points?

We could organize days-long seminars on this question, I think. Pope Francis points to one potential cause: a seismic shift in our culture toward more and more individualism. I'd like to propose two other potential causes. One is political extremism, resulting in part from the hollowing out of the middle class due to globalization and automation. The second is the series of self-reinforcing special interest echo chambers, so plentiful on digital media now, thanks to the low cost of information distribution on the Internet.

I'd like to conclude by considering one of the many tangible beacons of progress that address the social and environmental dimensions of the larger crisis *Laudato Si'* describes. In his encyclical, the pope highlights an opportunity to help small farmers worldwide through innovation. Poor farmers are a worthy target, as 70 percent of the world's poor live in rural areas where agriculture is basically the only economic opportunity.

For nearly every crop, farmers in developed countries substantially out-produce their emerging country counterparts. Why is this? Mainly because they have two things emerging country farmers don't—access to capital and advanced, sustainable farming techniques.

I serve as Chairman of the board of a company called Shared-X. Our business plan is to collapse that yield gap by deploying advanced, sustainable farming techniques in remote areas of the emerging world. We are a for-profit company with three goals: generate profits, lift poor farmers out of poverty by integrating them in the prosperity that we create, and deploy environmentally sustainable farming techniques. Our formula is to grow high-value specialty crops




John Denniston delivers his talk at the "Our Future on a Shared Planet" Conference at Santa Clara University.

Joanne Lee

such as organic bananas and specialty coffee on high-potential farmland. We optimize production by bringing to these regions proven technologies. Where feasible, we sell our crops directly to end users, skipping the middlemen along the way and getting a premium price. In our mixed model we buy midsize farmland from wealthy families and then engage with our small holder farmer neighbors and share our best practices with them. The name “Shared-X” stands for the shared exchange of capital, know-how, and prosperity.

Shared-X is but one of many examples. There’s a lot of momentum right now around developing an impact economy. A Harvard Business School professor has gone on record as saying impact investing will become the next venture capital. In the summer of 2014, Pope Francis hosted a seminar in the Vatican on impact investing.

I will close with a reflection, almost a meditation, which Pope Francis offers towards the end of *Laudato Si’*. It is very good food for thought. “When we ask ourselves what kind of world we want to leave behind, we are led inexorably to ask other pointed questions. What is the purpose of our life in this world? Why are we here? What is the goal of our work and all our efforts, and what need does the earth have of us? We need to see that what is at stake is our own dignity. Leaving an inhabitable planet to future generations is first and foremost up to us. The issue is one which dramatically affects us, for it has to do with the ultimate meaning of our earthly sojourn” (§160). 

JOHN DENNISTON is the president of the Society of St. Vincent de Paul of San Mateo County, a nonprofit organization focused on poverty, and a former partner at Kleiner Perkins Caufield & Byers, a venture capital firm. He co-founded and co-ran the firm’s \$1 billion Green Growth Fund. He was also a managing director and head of technology investment banking for the Western United States at Salomon Smith Barney. Denniston is currently the chairman of the board of Shared-X—a company that aims to improve agricultural productivity in Latin America while producing attractive financial returns for its investors.



MI Prototype/Shutterstock

NOTES

- 1 John Denniston, “*Laudato Si’* and Inclusive Capitalism,” public lecture, Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis conference, 4 November 2015, Santa Clara University. This essay is an excerpt from the lecture; a video of the full lecture is available at: scu.edu/ourcommonhome/climate-conference/
- 2 George Will, “Pope Francis’ Fact-free Flamboyance,” op-ed, *The Washington Post* (18 September 2015), available at www.washingtonpost.com/opinions/pope-franciss-fact-free-flamboyance/2015/09/18/7d711750-5d6a-11e5-8e9e-dce8a2a2a679_story.html, accessed 22 March 2016.
- 3 Ibid.
- 4 See references in paragraphs 4, 5, and 6 of *Laudato Si’*. Pope Francis, *Laudato Si’ On Care for Our Common Home*, encyclical, (24 May 2015), available at w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html, accessed 22 March 2016.

Leadership Ethics and *Laudato Si'*

Response to John Denniston's Public Lecture,
"Our Future on a Shared Planet" Conference, Santa Clara University¹



Joanne Lee

BY ANN SKEET

*Director of Leadership Ethics, Markkula Center for Applied Ethics,
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IN HIS ENCYCLICAL *LAUDATO SI'*, POPE FRANCIS OPENS A DIALOGUE WHICH INVOLVES BOTH INQUIRY AND ADVOCACY, ASKING BIG QUESTIONS. JOHN DENNISTON SPOKE FROM AN INNOVATOR'S PERSPECTIVE, NOTING THE POSSIBILITIES THAT MARKET FORCES CREATE. MARKETS AT THEIR CORE ARE A GATHERING OF PEOPLE.

Successful innovation meets people's needs—sometimes those they can identify, sometimes those they may not even realize they have. Denniston noted shifts that he feels have clouded the exchange around our planet's condition and future. These include individualism, political extremism, and realities such as the lower cost of information distribution over the Internet, offering an echo chamber of digital communications for special interests. What I welcome in *Laudato Si'* and Pope Francis' overall leadership is his willingness to reframe this set of issues in a way that invites us to consider that all of our interests might be met because they are shared.

As Denniston has related, Pope Francis builds on the comments of previous church leaders in advancing our discussion of the planet we inhabit. Pope Francis is moving us from language associated with political views, words

like "climate change" and "global warming," and brings us instead to "our common home." As a student of leaders in all sectors—public, private, and nonprofit, each with their own set of market forces—I am encouraged by this shift. As Denniston noted, Pope Francis is far from the first Pope to advance environmental issues. It is how he does it that is helpful to us now.

Moving from the power of Pope Francis' chosen language, I want to comment on Denniston's observations about impact investing in our own current Gilded Age. I support and amplify Denniston's view that markets, these gathering places of people, offer us opportunities to care for our common home in unique, hopeful, and positive ways. Pope Francis says, "We look for solutions not in technology but in a change in humanity" (§9)—not because he does not believe technology will help us or innovation will not improve our circumstance. Rather, Pope Francis is reminding us, as did Denniston with the example of Shared-X and the small farmer, that our motivations matter.

Pope Francis brings us to the ethical and spiritual roots of environmental problems by pointing out that we must change our goals if technology is to be used for the good of our shared nature with the Earth.

However, I would take the stories Denniston shared today about the power of impact investing and Pope Francis' evident endorsement of this approach even further. Scholars today reinforce that multiple stakeholders can and should be considered in business, supporting Denniston and Pope Francis' view that impact investing is a commercial opportunity to improve our shared natural condition rather than see business or its capitalistic underpinnings as problematic.


Problems arise when leaders act in ways that limit stakeholders served by business to narrow interests. A working paper published in 2015 by Robert Eccles and Tim Youmans at Harvard Business School explored laws around the globe regarding shareholder primacy,² the notion that corporate boards *must* place shareholder return as the sole interest they protect. Eccles and Youmans found that such a view is "ideology" only, not law.

Markets are not preventing us from protecting our ecosystem. How people choose to lead and govern within a market economy will make the difference.

Shareholder value, they contend, is an outcome of how a corporation's capital is used, not the objective of the corporation.

Eccles and Youmans are not just calling for more research, a typical academic paper's conclusion. They are also actively campaigning for adding a "statement of material audiences" to the set of corporate reports legally required to improve transparency and advance understanding of a corporation's intent and time horizon.³ Others in business today are trying to counter a trend in activist shareholders driving corporate decision-making for the short-term by reminding corporations of their ability to consider the long-term as an appropriate timeline over which to create value. Such a position was recently and notably taken by Larry Fink at BlackRock. Mr. Fink reminds us in a letter now publicized widely in business media, that a director's duty of care is to the corporation, not to individual shareholders.⁴

What does this have to do with Pope Francis' and John Denniston's thoughtful reflections on how innovators and businesses can find common ground in caring for our common home? The work of these scholars and the comments of business influencers like Larry Fink should fuel the courage of people serving in board and management roles to think broadly about their responsibilities. They should feel comfortable and right in setting goals to be realized over the long term, to serve interests beyond just those of financial investors, and to actively design the larger business system they operate within to promote ethical behavior.

St. Ignatius of Loyola, who inspires Pope Francis and those of us here at a Jesuit university, reminds us that we are all leaders. Leadership is not a job but a way of living. Markets are not preventing us from protecting our ecosystem. How people choose to lead and govern within a market economy will make the difference. 

ANN (GREGG) SKEET is director of leadership ethics at the Markkula Center for Applied Ethics, a position that directs the Center's work in business ethics, nonprofit ethics, and considers the unique ethical concerns of those in leadership positions. Skeet served as CEO of American Leadership Forum Silicon Valley for eight years, as president of Notre Dame High School San Jose for three years, and as a media executive for Knight Ridder at the *San Jose Mercury News* for a decade. Skeet is a *magna cum laude* graduate of Bucknell University and member of Phi Beta Kappa. She holds a master of business administration degree from Harvard Business School.

NOTES

- 1 Ann Skeet, "Leadership Ethics and *Laudato Si'*," public lecture, Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis conference, 4 November 2015, Santa Clara University. This essay is an excerpt from the lecture; a video of the full lecture is available at: scu.edu/ourcommonhome/climateconference/
- 2 Robert G. Eccles and Tim Youmans, "Materiality in Corporate Governance," *Harvard Business School* (3 September 2015), working paper 16-023, available at www.hbs.edu/faculty/Publication%20Files/16-023_f29dce5d-cbac-4840-8d5f-32b21e6f644e.pdf, accessed 3 September 2015.
- 3 Ibid.
- 4 Larry Fink, "BlackRock CEO Larry Fink Tells the World's Biggest Business Leaders to Stop Worrying about Short-term Results," *Business Insider* (14 April 2015), available at www.businessinsider.com/larry-fink-letter-to-ceos-2015-4, accessed 3 September 2015.

Multifaith Dialogue on Climate Justice: Principles and Practices across Traditions

Excerpt from Multifaith Dialogue,
“Our Future on a Shared Planet” Conference, Santa Clara University¹

REV. SALLY BINGHAM, *Founder and President, Interfaith Power and Light* (dialogue facilitator)

RABBI ALLAN BERKOWITZ, *Executive Director, Environmental Volunteers*

LINDA CUTTS, *Central Abbess, San Francisco Zen Center, Green Gulch Farm*

AMEENA JANDALI, *Founding Member and Content Director, Islamic Network Group*

CARDINAL PETER TURKSON, *President, Pontifical Council for Justice and Peace*



CARDINAL TURKSON:

It's a great honor always to be here at this University. Where else could we be discussing this encyclical? From a Jesuit pope, it can best be discussed

at a Jesuit university! As you know, when Jorge Bergoglio was chosen, elected as the pope at the conclave, Cardinal Hummes was sitting next to him and leaned over, trying to encourage him, he whispered to him, “Do not forget the poor.”

With that suggestion, Bergoglio took the name “Francis.” So Pope Francis is not just a name; it's a program; a program of a pontificate, a program of action, and a program of life, and that's what it's been. *Laudato Si'* is to a large extent inspired by this.

The name *Laudato Si'* is taken from the Hymn of St. Francis about creation. *Laudato Si'* is “May you be praised, O Lord for Mother Earth. May you be praised, O Lord for Brother Sun. May you be praised, O Lord for Sister Moon,” and so on. So in this particular case, the praise that Francis

authors is for Mother Earth, and as the pope says, because Mother Earth is crying and is crying loud for abuses that it has suffered, but Mother Earth is not crying alone. Mother Earth is also crying with the poor who inhabit the Earth, and so the two are crying because, as the pope discussed, there are two fragilities, two vulnerable elements in our creation: the Earth and the poor among us.

But for all of this, the encyclical is therefore not just a simple social document or even still less a scientific document. It's a document that inspires prayerful contemplation of the universe. There's a lot of prayer, there's a lot of meditation in the encyclical. It begins that way and it concludes that way, and on this act then of prayerful contemplation, the encyclical is presented as a gift. The Pope's argument for inviting concern and respect for the earth is essential because the Earth is a gift, a gift of God to humanity, and what you do with that gift is you are grateful.

You express appreciation and gratitude for it, and that takes the form of prayer, contemplation,



Joanne Lee

(Left to right) Aameena Jandali, Linda Cutts, Cardinal Peter Turkson, Rabbi Allan Berkowitz, and Rev. Sally Bingham enter into dialogue around the ways in which diverse communities can and are mobilizing around issues of climate justice at the multifaith dialogue panel at the “Our Future on a Shared Planet” Conference at Santa Clara University.

and celebration. Because the Earth is so with the poor among us, the pope invites that we also imitate God who gave this to us as a gift. And so we too must gift, if you will, the Earth to other people. Therefore in the light of that the pope analyzes the various abuses of the earth, and that’s where he appeals also to science. Scientific research points to this global warming, climate change, and abusive treatment of the Earth.

So the pope calls for conversion which resonates with the life of St. Francis, the saint of conversion. Francis’ life is a life of conversion, conversion to see God in everything around us, creation, and the poor, and that’s also what inspires Pope Francis. In the life of conversion is an invitation to ecological conversion first used by Pope John Paul II, but ecological conversion and a training in ecological citizenship. All of us must become sensitive to ecology, to how we can preserve the Earth, how we can protect it. What kind of world would we want to leave to those who come after us? Having received the Earth as

a garden, we don’t pass it on as a wilderness—or still less, a desert.

REVEREND BINGHAM:

As Cardinal Turkson said, Pope Francis links the cry of the Earth to the cry of the poor and casts these expressions within the same underlying dynamic: “The human environment and the natural environment deteriorate together” (§48).

So we cannot really help one without helping the other. I’m curious about the recent declarations that have come out from the Islamic tradition, from the Jewish tradition, the Rabbinic Letter on the Climate Crisis, and the Buddhists as well have a statement on climate change. Rabbi Berkowitz, let me ask you, how does the Rabbinic Letter on the Climate Crisis connect to the fact that the poor suffer drastically more than wealthy people and countries? Could you tell us a bit about how the rabbis came together to do a statement on climate change?

The rabbinic letter says we urge those focusing on social justice to address climate change, and those focusing on climate change to address social justice, and I see it as an appeal to two caring communities who share a commitment or commitments that align.



RABBI BERKOWITZ:

The last part of your question, why rabbis came together is the same reason that we're coming together today, because the Earth is crying out, continuing to cry out. So the rabbinic letter says we urge those focusing on social justice to address climate change, and those focusing on climate change to address social justice, and I see it as an appeal to two caring communities who share a commitment or commitments that align, and the opportunity for these two communities who wouldn't necessarily on their own think to align with the other community. I see it as a call for these two communities to broaden the tent of caring and activism.

If we go a little bit deeper I would turn to *shemitah*, the sabbatical year, as the example and teacher. The sabbatical year, which just ended, is a ready resource to understand the Earth-human connection. As we know the sabbatical year has two sides. It has the land side and the human side. Regarding the land, we're commanded to release it from subjugation, to let it lie fallow. Regarding humans, we're taught by the Torah to release the impoverished by relinquishing debts, remission of debts, release of ownership and privatization of our land, allowing anybody who wanders by to harvest that which grows freely during that year.

For me, *shemitah*—and I think this is the spirit behind the rabbinic letter—forces the question: Who or what is really being released? Is the land being released from being overworked, or it is us from the naïve belief that we actually can control and own nature? Who or what is being released? Those who are in debt and are hungry? Or is it a release of our own hearts that sometimes think we can ignore human suffering? So I think

in these ways the rabbinic letter and *Laudato Si'* perfectly align, and I think those are some of the themes and the spirit behind the rabbinic letter.

REVEREND BINGHAM:

Ameena, with the Islamic Declaration on Global Climate Change, which came out really quite recently—in fact, since the pope has visited the United States—can you enlighten us on why that has happened? Who are the folks that put this declaration forward and who wrote it?



AMEENA JANDALI:

A group of scholars and activists worked together to bring the Islamic voice to the table, which has I must say been fairly new and absent for some period of time, despite the fact that Islamic history does have a long tradition of environmentalism with regard to water. There's actually very detailed descriptions of how to conserve water and how to use water in a way that is renewable in the Qur'an. And though there are many Qur'anic and prophetic sayings, I want to just mention a couple of the applicable pieces from the declaration. "We have no right to oppress the rest of creation or cause it harm; intelligence and conscience behoove us, as our faith commands, to treat all things with care and awe (*taqwa*) of their Creator, compassion (*rahmah*), and utmost good (*ihsan*)."²

Lastly the Qur'anic verse that reads: "There is no animal on the Earth, or any bird that wings its flight, but is a community like you" (Qur'an 6: 38). This reflects as well some of the prophetic narratives about the good treatment of insects. The Prophet forbade some of his companions from destroying anthills. He praised highly a



Liora Davis, "Wake UP! Save the Earth!" mixed media, © 2005. Used with permission. www.lioraart.com

We believe it is imperative that the global Buddhist community recognizes both our dependence on one another as well as on our natural world. Together humanity must act on the root causes of this environmental crisis.

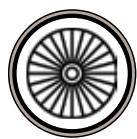
woman who brought water to a thirsty dog and condemned a woman who tied up her cat, not allowing the cat to eat.

So this very clearly demonstrates that creation is not just human beings but all creatures, and obviously the poor and those who are disenfranchised, whether we're talking about people in Richmond, California, who are getting the fumes from the Chevron refinery, while those of us in the hills can just look down on Richmond and breathe the fresh air. Or entire countries like Bangladesh that are suffering very, very destructive effects from climate change, some of which are threatening to wipe some of these countries off the Earth.

Certainly these are some of the poorest countries, that in the most egregious injustice, contributed the least to climate change. And so we see this locally and we see this globally. Reflecting that, again, reading from the declaration: "Recognize the moral obligation to reduce consumption so that the poor may benefit from what is left of the Earth's nonrenewable resources."³

REVEREND BINGHAM:

And Linda, does the Buddhist Declaration on Climate Change have in it an understanding of the relationship between the exploitation of humanity and the exploitation of the earth?




LINDA CUTTS:

The Buddhist climate change statement to world leaders came out [in] October 2015, and it is signed by His Holiness the Dalai Lama as well as Zen Master Thich Nhat Hanh and a number of other teachers of different schools of

Buddhism, and it is being sent around to many, many people. The main point it mentions is the Buddhist realization of what is called dependent co-rising, or interdependence with one another. So the consequences of our actions are critical, and it mentions the beings that have least contributed to our situation are bearing the brunt of it. This teaching of inter-being or interdependence is that we are not separate beings, those beings who are suffering. We owe it to them. The core teaching is that we are to live for the benefit of all beings. Altruism, you might say. The word "altruism" comes from the others, thinking of the others, always as actually bringing happiness to ourselves, compassion. So it does mention that: "We believe it is imperative that the global Buddhist community recognizes both our dependence on one another as well as on our natural world. Together humanity must act on the root causes of this environmental crisis."⁴

The desire for things outside ourselves is often where we try to find happiness and contentment and peace. There's a vow, which says, "Desires are inexhaustible. I vow to put an end to them." There's been a lack of understanding that desires are inexhaustible. If you try to fulfill those desires it just causes more desires. It's like drinking saltwater and becoming more thirsty.

Trying to fill ourselves from external sources is impossible and leads to more and more consumption and more and more unhappiness, discontent, and also to the breaking of our own precepts of not killing, not taking what is not given. So this to me seems so core: How do we find real contentment and real peace? We have to deal with this well or it won't make a difference. 

REV. SALLY BINGHAM is an Episcopal priest in the Diocese of California, and the founder and president of Interfaith Power and Light. She is one of the first religious leaders to recognize climate change as a moral issue and has been awarded the Audubon Society's Rachel Carson Award.

RABBI ALLAN BERKOWITZ is the executive director of Environmental Volunteers, a nonprofit organization located in the Palo Alto Baylands Nature Preserve. He was ordained in 1985 at the Jewish Theological Seminary in New York.

AMEENA JANDALI is a founding member and content director of the Islamic Network Group (ING). She received her M.A. in Near Eastern studies from the University of California, Berkeley, and B.A. in history from the University of Illinois.

LINDA CUTTS is the central abbess of the San Francisco Zen Center and lives at the Green Gulch Farm Zen Center campus, a meditation and conference center as well as an organic farm and garden.

CARDINAL PETER TURKSON is president of the Pontifical Council for Justice and Peace, archbishop emeritus of Cape Coast, Ghana. He served in several positions of leadership within the Episcopal Conference of West Africa and as Chairman of the Ghana Chapter of the Conference of Religions for Peace before being appointed to his current post in Rome.

NOTES

- 1 "Multifaith Dialogue on Climate Justice," Our Future on a Shared Planet: Silicon Valley in Conversation with the Environmental Teachings of Pope Francis conference, 3 November 2015, Santa Clara University. This feature is an excerpt from the event; a video of the full dialogue is available at: www.scu.edu/ourcommonhome/climate-conference/
- 2 "Islamic Declaration on Global Climate Change," (18 August 2015), available at islamicclimatedeclaration.org/islamic-declaration-on-global-climate-change/, accessed 1 November 2015.
- 3 Ibid.
- 4 "The Time to Act is Now: A Buddhist Declaration on Climate Change," (October 29, 2015), available at fore.yale.edu/files/Buddhist_Climate_Change_Statement_5-14-15.pdf, accessed 1 November 2015.

Resources for Climate Justice and Sustainability across Religious Traditions

The following documents are declarations on climate change, advanced by Christian, Buddhist, Jewish, and Muslim global leaders.



LAUDATO SI'

On Care for Our Common Home, Pope Francis
(May 24, 2015)



BUDDHIST DECLARATION

"The Time to Act is Now: A Buddhist Declaration on Climate Change" (October 29, 2015) fore.yale.edu/files/Buddhist_Climate_Change_Statement_5-14-15.pdf



JEWISH DECLARATION

Rabbinic Letter on the Climate Crisis (October 4, 2015) theshalomcenter.org/RabbinicLetterClimate



MUSLIM DECLARATION

Islamic Declaration on Global Climate Change (August 18, 2015) islamicclimatedeclaration.org/islamic-declaration-on-global-climate-change/

I Am Climate Change. I Am the Cause. I Am the Solution.

BY CAROLYN WOO, *President and CEO, Catholic Relief Services*

“We are all in the same universe, in the same ecosystem. We are all joined. We with each other and we with creation. Pope Francis has emphasized that human life is based on three foundational relationships: our relationship with God, our relationship with each other, and our relationship to creation...”¹

—CAROLYN WOO



Jocelyn Hung

Is There a Common Good? Exploring the Politics of Inequality

BY MATTHEW CARNES, S.J., *Associate Professor, Department of Government, Georgetown University*



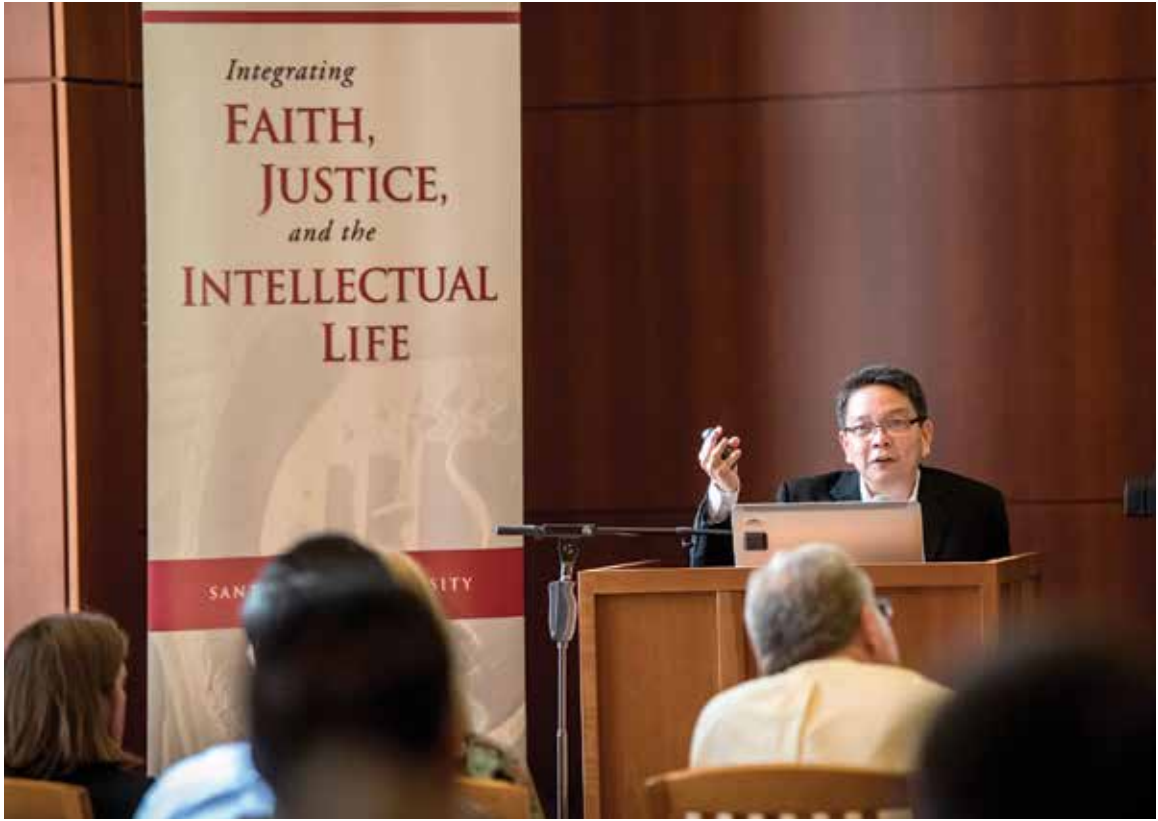
Paige Mueller

“The challenge of our age is a growing inequality and the challenge of our age is achieving a common good in the midst of this inequality...Worldwide, we still have the dismaying number, 700 million people, who live below that World Bank poverty standard and well over 2 billion people who live below \$3.25 a day...Growth has lifted many boats, but the rise has been highly uneven. So while some very low-income individuals have been lifted marginally out of poverty, most of the gains in growth in recent years have accrued to a small set of elites. And this trend has been particularly apparent in the developed countries.”²

—MATTHEW CARNES, S.J.

The Pope, the Poor, and the Planet: Overcoming Insularity in an Integral Ecology

BY JOSE RAMON “JETT” VILLARIN, S.J., *President, Ateneo de Manila University, Philippines*



Joanne Lee

“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.”³

—JETT VILLARIN, S.J.

NOTES


- 1 Carolyn Woo, “I Am Climate Change. I Am the Cause. I Am the Solution.” lecture, 2015-2016 Bannan Institute series, 15 October 2015, Santa Clara University. This is an excerpt from the lecture; a video of the full lecture is available online at: www.scu.edu/ic/media--publications/video-library/
- 2 Matthew Carnes, S.J., “Is There a Common Good? Exploring the Politics of Inequality,” lecture, 2015-2016 Bannan Institute series, 11 February 2016, Santa Clara University. This is an excerpt from the lecture; a video of the full lecture is available online at: www.scu.edu/ic/media--publications/video-library/
- 3 Jett Villarin, S.J., “The Pope, the Poor, and the Planet: Overcoming Insularity in an Integral Ecology,” lecture, 2015-2016 Bannan Institute series, 6 April 2016, Santa Clara University. This is an excerpt from the lecture; a video of the full lecture is available online at: www.scu.edu/ic/media--publications/video-library/

Thriving Neighbors Initiative

2015-2016 University-Community Participatory Action Research Grant Reports

The SCU Thriving Neighbors Initiative actively promotes strategic ties between Santa Clara University and the Greater Washington community of San Jose, California, in order to advance prosperity and education within SCU and Greater Washington. The Ignatian Center for Jesuit Education invited faculty-student-community partner teams to submit grant proposals for projects that advance the aims of the Thriving Neighbors Initiative in its inaugural year. The following grants, awarded in 2015-16, supported education and health projects that were collaboratively designed, developed, and evaluated. For additional information on the Thriving Neighbors Initiative and the 2015-2016 grant projects, please visit: scu.edu/tni/


Madres Discussion Group

The Madres Discussion Group, led by Dr. Lucia Varona and Lecturer Maria Bauluz of the Spanish Department at Santa Clara University, SCU students, community leaders Liz Molina and Maria Claudio, and WES mothers has become a place of collaboration and support for groups of mothers in the Washington Elementary School (WES) area. Some discussion topics include Hispanic identity in America, family, religion and spirituality, traditions: old and new, education, and integration of cultures. In a recent conversation, parent leaders spoke passionately about the importance of these reflection groups and the collective ownership that they feel towards these groups as the organization and rules within the group continue to be implemented by the mothers. When asked about the future of this program, the mothers echoed these sentiments: “Take anything away from us, but never the Grupo de Reflexion, that is where we find relief to our burdens, we learn to be strong women.” 




Elizabeth Day

Mindfulness Project

The Mindfulness Project is a collaboration between Dr. Elizabeth Day of Santa Clara University, Liberal Studies and Child Studies students, Sacred Heart Community Service's (SHCS) staff, and the Executive Director of an educational nonprofit called Restore: Carry the Vision. Lessons in this program focus on grades 2-8 and are administered during SHCS' after-school academy program. Together, both SCU and SHCS students practice “cultivating the self” and developing the qualities inherent in mindful leadership. Since the inception of the project, Dr. Elizabeth Day and her 12 students have worked with 66 children within the Greater Washington Neighborhood. The team of students, faculty, and educational nonprofits look forward to continuing implementation of their co-created mindfulness curriculum for the 2016-17 academic year. 


Community Training in Action Research

Dr. Laura Nichols, from the Department of Sociology, in conjunction with the Thriving Neighbors Initiative, is designing a pilot program to provide Community-based Training in Participatory Action Research. The purpose of the program is to expand the training and employment opportunities for Washington residents as well as SCU students interested in a possible career or temporary work in social science research. To date, a team of four community action researchers have helped recruit their own neighbors, implementing a 90-question Community Assessment Survey gathering data from 220 participants. We look forward to learning even more about the Greater Washington Community in order to better inform the multi-faceted efforts of the Thriving Neighbors Initiative. 



Courtesy Thriving Neighbors Initiative


Madres Walking to Health

Drs. Katherine Saxton and Laura Chyu of Santa Clara University's Public Health Program joined forces with members of Washington Elementary School's Madre a Madre parent committee to develop a sustainable, community-based health program for families. The program, called Camino a la Salud, focused on supporting and expanding an existing walking group with the goal of promoting physical, mental, and social well-being. Community leaders Yazmin Ballesteros, Juanita Escamilla, Jessica Lopez, Eva Marrón, and Arcelia Ramirez played an integral role in organizing walking group activities and strengthening community bonds. The program has since expanded to also include Zumba and yoga classes, under the leadership of Juanita Escamilla, Marlen Monroy, and SCU Neighborhood Prosperity Fellow Erika Francks. When asked how she felt about the impact of exercise classes, one of the community leaders proudly said, "even though each person needs to make their own decision to make a lifestyle change, our Zumba classes and walking classes create a feeling of a healthier community." 



Liz Molina

iPad Tutoring Program

The iPad Tutoring Program, also known as *Abriendo Caminos*, is a collaborative effort of Dr. Marco Bravo and seven Pre-service Teachers (SCU graduate students) from the Department of Education at Santa Clara University, as well as Washington community parents and children. The project involves sessions over six months during which parents are introduced to new approaches in utilizing technology to build the numeracy and literacy of children between the ages of 3 and 5. Parents are familiarized with the use of Spanish apps on iPads to strengthen both language and math skills throughout joint sessions, alongside researchers and faculty. Ultimately, the goal is for parents to feel empowered to be co-educators of their children through the use of technology at home. Today, parents are collecting personal photos and videos on their iPads with the goal of creating their own e-books and collages. 

Air Quality Initiative

The Air Quality Initiative builds on previous research assessing the cumulative environmental impacts in Santa Clara County and seeks to understand the distribution of exposure to high concentrations of hazardous pollutants at public elementary schools in Santa Clara County and to identify potentially useful and locally preferred mitigation strategies to enhance community health, access to environmental benefits, and environmental justice, especially in the Greater Washington Neighborhood. Dr. Chris Bacon from the Department of Environmental Studies and Sciences, student researchers, and key community leaders are researching collaboratively to measure concentrations of critical air pollutants along the edges of school properties, identify key environmental hazards that impact student health and learning, use geographic information system (GIS) software to analyze socioeconomic and racial enrollment data, and explore preferred mitigations measures. ©

Resilient Families Program

The Resilient Families Program (RFP) is a family education program in the Greater Washington Neighborhood developed by Dr. Barbara Burns of the Liberal Studies Department at Santa Clara University, and her students from the Public Health, Psychology, Liberal Studies, and Engineering departments. The RFP team also includes 30 promotoras (community leaders) and six staff members at Sacred Heart Community Service (led by education director Roberto Gil). In RFP, parent and preschool workshops are designed to support “habits of resilience” centered on three building blocks: parent-child attachment, self-regulation skills in preschoolers, and parent stress management. More than 35 families from the communities of Sacred Heart Community Service and Washington Elementary School have completed the RFP program this year. ©



Community Gardening Project

The Community Gardening Project, led by Dr. Leslie Gray, students, and two community harvest leaders, works closely with both Sacred Heart Community Service’s *La Mesa Verde* (LMV) program and a nonprofit called Garden2Table. As a component of this program, participants receive raised garden beds that include soil, seeds, and a drip irrigation system, then attend a yearlong course that includes monthly organic gardening classes and mentor visits in order to produce their first bountiful harvest over two growing seasons. Research is focused on the potential nutritional, health, economic, social, and environmental benefits of home gardens for low-income communities. The group advocates for policies to increase access to urban agriculture in low-income neighborhoods, and about the efficacy of fruit gleaning to enhance neighborhood food security. ©

2016-2018 BANNAN INSTITUTE

Is there a common good in our common home?

Pope Francis, in his encyclical, *Laudato Si' On Care for Our Common Home*, argues that the practice of the common good today must be understood as a practice of solidarity—a practice by which we come to know and value the full and innate dignity of every person, every cultural ecology, every dimension of the natural world, and seek to share our diverse goods freely with one another for mutual benefit, for the good of all creation. “In the present condition of global society, where injustices abound and growing numbers of people are deprived of basic human rights and considered expendable, the principle of the common good immediately becomes, logically and inevitably, a summons to solidarity and a preferential option for the poorest of our brothers and sisters” (§158).



The **2016-2018 Bannan Institute: Is There A Common Good in Our Common Home? A Summons to Solidarity** will explore pressing racial, economic, gender, and environmental justice issues facing our world today and resource SCU faculty, staff, students, alumni, and the broader community to advance the common good through a summons to solidarity.

2016-2018 BANNAN FACULTY FELLOWS

Four interdisciplinary Bannan Institute faculty seminars will convene over two years to collaborate on research, teaching, and university initiatives that advance the common good and extend the Jesuit, Catholic vocation of SCU as a *proyecto social*, a transformative social force. Each interdisciplinary faculty seminar is comprised of one Bannan Faculty Fellow, five Bannan Institute Scholars, a student fellow, and student research assistants.



Racial and Ethnic Justice and the Common Good

BRETT SOLOMON
Associate Professor
Liberal Studies, SCU



Economic Justice and the Common Good

WILLIAM SUNDSTROM
Professor
Economics, SCU



Gender Justice and the Common Good

SHARMILA LODHIA '94
Associate Professor
Women's and Gender Studies, SCU



Environmental Justice and the Common Good

CHRISTOPHER BACON
Associate Professor
Environmental Studies and Sciences, SCU



INTEGRAL PODCAST

In Fall 2016, the Bannan Institute will launch a quarterly thematic podcast series comprised of 20-minute segments exploring pressing contemporary social, cultural, and religious issues from the perspective of SCU's Jesuit, Catholic tradition of higher education.

Please take a few minutes to complete a short survey about your experience with *explore*, and enter for a chance to win a gift card. To access the survey please visit SCU.edu/exploresurvey

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explore
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Ryan Reynolds, Assistant Professor,
Department of Art and Art History, Santa
Clara University, "Monterey Cypress #2,"
watercolor, 2014. Used with permission.

"There is a subtle mystery
in each of the movements
and sounds of this world.
The initiate will capture what is
being said when the wind blows,
the trees sway, water flows,
flies buzz, doors creak, birds sing,
or in the sound of strings or
flutes, the sighs of the sick,
the groans of the afflicted..."

—ALI AL-KHAWAS¹

¹ This passage is drawn from the work of Ali al-Khawwas, a Muslim spiritual writer, as cited by Pope Francis in *Laudato Si'* (§233, note 159). See also Eva de Vitray-Meyerovitch, ed., *Anthologie du Soufisme* (Paris, 1978), 200.