

**INTEGRAL Season Four: Environmental Justice and the Common Good**

**Bannan Institute, Ignatian Center for Jesuit Education, Santa Clara University**

**Chad Raphael, Professor, Department of Communication**

**Engaged Scholarship for Environmental Justice**

**January 23, 2018**

**THERESA LADRIGAN-WHELPLEY:** Welcome to INTEGRAL, a podcast production out of the Ignatian Center for Jesuit Education at Santa Clara University; exploring the question: is there a common good in our common home?

I'm Theresa Ladrigan-Whelpley, the director of the Bannan Institutes in the Ignatian Center, and your host for this podcast. We're coming to you from Vari Hall on the campus of Santa Clara in the heart of Silicon Valley, California. This season of INTEGRAL, we're looking at the ways in which issues of environmental justice are central to the pursuit of the common good. Pope Francis, in his encyclical *Laudato Si'*, on care for our common home, urges us to acknowledge that "the human environment and the natural environment deteriorate together. We cannot adequately combat environmental degradation unless we attend to causes related to human and social degradation...We have to realize that a true ecological approach always becomes a social approach." How does one realize such a true ecological approach today? What does it look like to advance environmental justice and the common good in the 21st century?

**CHAD RAPHAEL:** The most important cause of poor health is poverty, along with the attendant lack of educational and employment opportunities, social exclusion, lack of access to healthy food and housing, and toxic environments – all of which are problems of social and environmental justice. Environmental justice is strengthened when community partners help make decisions about research that represents them and that could help to improve their conditions.

**THERESA LADRIGAN-WHELPLEY:** To unpack these issues, we're joined today by Chad Raphael, Professor in the Communication Department at Santa Clara, and Bannan Institute Scholar in the Ignatian Center. He has worked on environmental justice issues for over 20 years as a researcher, a consultant on communication campaigns, and a former chair of the board of the Jessie Smith Noyes Foundation and the Silicon Valley Toxics Coalition. Welcome, Chad.

**CHAD RAPHAEL:** Thanks, Theresa.

**THERESA LADRIGAN-WHELPLEY:** It's great to have you here today. First of all, what is environmental justice?

**CHAD RAPHAEL:** Environmental justice is a principle that affirms the rights of *all* people to healthy livable communities – and, not just to shining seas and majestic mountains, but all of the places where we live, learn, work, play, and pray. It's no secret that some people around the world live in less healthy surroundings. Often, they're people in poverty, people of color, women, oppressed ethnic groups, indigenous peoples, immigrants, and others. When we talk about environmental justice for these peoples, we often mean three things. First, we're talking about *distributive* justice. Do all people have equitable access to protection from environmental hazards (like toxic chemicals or flooding from rising sea levels) *and* equal access to environmental benefits (like clean air and water, neighborhood parks, and green jobs)? We're also talking about *procedural* justice, about democracy. Do the people who are most affected by environmental policy decisions have a right to participate fully in making those decisions? And then sometimes we're talking about *restorative or corrective justice*. How do we repair the environmental inequities we've inherited from the past, such as the fact that some of us have grown wealthy from activities that cause climate change, while people in poverty face the greatest threats from increased flooding, and fires, and forced migration because of global warming?

There's increasing concern for environmental justice (or EJ) around the world. In the United States, the EJ movement began in the 1980s, at first to stop the disproportionate siting of hazardous waste sites in low-income communities of color. Globally, EJ is reflected in the United Nations' three pillars of sustainability: economic vitality, environmental protection, and social development. People in the developing world have rallied around these themes to defend themselves against deforestation, the mining and fossil fuel industries, toxic waste dumping, and climate change. As you mentioned, Pope Francis' recent encyclical, *Laudato Si'*, calls on people of all faiths to recognize that care for people in poverty is inextricably linked to care for their environment, and to work for a socially just and sustainable world.

**THERESA LADRIGAN-WHELPLEY:** Your current project focuses on how scholars can collaborate with communities to do research on environmental justice. Why is that important?

**CHAD RAPHAEL:** Let me give you an example. Imagine you're a parent in Harlem in New York City in 1996. You look around and see that about one in four kids in your neighborhood suffers from asthma. And some of them are dying from it. Harlem has one of the highest asthma mortality rates in the country.

Your child says her asthma is often triggered as she walks to school past one of the six diesel bus depots in Harlem, where a third of the city's buses are housed in a single neighborhood. Fortunately, there's a smart community group in Harlem called WE ACT and they see that tiny particles in the diesel exhaust emitted by idling buses is probably a big contributor to asthma. But they don't have evidence of how much particulate matter is being emitted and the city's transportation authority won't take their complaints seriously.

So the community group partners with epidemiologists from Columbia University to design a study. They train young people to measure street-level concentrations of diesel particulates using air monitors clipped to the kids' backpacks, and they also have the kids count the number of buses, trucks, cars, and pedestrians that pass through busy intersections. They show that

particulate emissions are significantly higher than the U.S. EPA's recommended limits, and they provide the first evidence tracing particulate exposure to bus exhaust. In response, the EPA initiates its own regular air monitoring of these pollutants. So now the community and regulators have systematic research that justifies taking action.

The Columbia researchers and WE ACT educate the community about the problem through health workshops. WE ACT starts a public campaign for cleaner buses. They buy ads on bus shelters with a picture of two kids wearing gas masks on a street corner that say "If You Live Uptown, Breathe at Your Own Risk." They appeal to state and federal regulators. They sue the transportation authority. And while change is slow and the community group doesn't get everything it wants, the city eventually agrees to convert its fleet to a cleaner fuel.

This kind of community-based participatory research is especially useful for environmental justice. It involves the community in helping to set the research agenda, conduct the research, and publicize and act on the findings. It makes scholarship more responsive to community needs, and it involves community groups in advocating for solutions to problems documented by research. It's engaged research.

Now, it can be challenging for scholars to partner with community groups in this kind of work. Academics have to share their power and their funding, and learn to communicate and negotiate with their community partners. But the payoffs for everyone involved can be worth it. Research becomes more relevant to real-world problems and inequities, and it's more likely to inspire policy solutions because a community partner will carry the results into the public arena and work for change. Environmental justice is strengthened when community partners help make decisions about research that represents them and that could help to improve their conditions.

**THERESA LADRIGAN-WHELPLEY:** What are some other ways in which scholars can contribute engaged research for environmental justice?

**CHAD RAPHAEL:** I've been looking at five main ways that academic institutions can contribute to this kind of work. And not just public health researchers, like the ones from Columbia, but scholars from all disciplines. And not just professors, but also students. You can think of them as five streams of engaged scholarship. Each one makes distinct contributions to environmental justice. And while it's useful to distinguish these research streams, one or more of them often converge in the work of many centers and projects. So, like real streams, they can flow together.

The most traditional stream for academics is providing *public information* that helps communities to understand and use EJ resources. Scholars have long acted as expert sources in the news media, they've authored opinion articles, and translated their research for mainstream news outlets and specialty sources, like *Solutions Journal* and *The Conversation*. Having scholarly authorities backup EJ advocates' claims with research in the media is *really* important because a lot of studies show that community-based advocates have a hard time getting their claims heard in the mainstream news, which is oriented to reporting the news of established authorities in business and government. In addition, a few academics have partnered with advocates and foundations to conduct research interventions in the field of environmentalism itself. For example, Dorceta Taylor's recent report, *The State of Diversity in Environmental Organizations*, documents the lack of demographic diversity among leaders of America's environmental foundations, advocacy groups, and government agencies, and the need to redouble efforts to create a more inclusive field.

The newest part of this stream, and the one I'm most excited about, involves academics helping to build an infrastructure of databases, apps, and other tools that allow people to make their *own* use of information. For example, academics serve as advisers and peer reviewers of government and nonprofit databases, such as the EPA's EJScreen, which is a great tool for mapping environmental and demographic characteristics of communities and identifying disproportionate environmental impacts. Scholars also share their own EJ data, such as some of the data sets on health disparities found on the HealthyPeople.gov web site, run by the U.S. Office of Disease

Prevention and Health Promotion. Others have assigned or encouraged students to help create information tools, such as the GetCalFresh smart phone app, which helps low-income Californians to sign up for food stamps, strengthening food security and food justice.

A second stream focuses on scholarship on *civic education and literacy*, which strengthens the public's ability to engage institutions that influence environmental science, technology, and policy. Example EJ projects include UNESCO's Global Action Programme on Education for Sustainable Development, which has created and evaluated some useful curricula. There are also good learning materials created by advocacy organizations, like the NAACP's Climate Justice Initiative Toolkit, which links information to specific actions that adults and youth can take to advance climate justice. The Natural History Museum is a mobile museum based in Brooklyn, which often works from an EJ perspective. Some of its exhibits draw attention to how mainstream museums' dependence on corporate funding can influence their presentation of nature and social justice. Digital games and simulations can also teach about EJ, like *Inside the Haiti Earthquake*, which uses documentary footage shot in the aftermath of the 2010 quake to teach how foreign journalists and aid workers can do their jobs fairly and effectively. With colleagues here at Santa Clara, I've done some of the growing research that's identifying how games and simulations can promote players' empathy and their interest in the conditions faced by developing-world survivors of environmental disasters and sweatshop workers.

A third stream of engaged research concerns *public consultation and deliberation*, which are really at heart of democratic decision making about EJ issues. Many federal, state, and municipal agencies are required to consult stakeholders about their activities. The traditional way of doing that is through public hearings, which are awful. The regulators sit on a raised stage, literally putting themselves above the public. Experts give mind-numbing technical presentations that are difficult to follow, which is why some people call them "public tellings" rather than "public hearings." And then citizens get to speak about some complicated issue, but they only get three minutes apiece to talk and they can only speak individually, even if they want to make a group statement. By the time they get to the mic they're usually angry. Sometimes it doesn't matter at

all what they say because the agency has already made its decision and is only there to defend it, or the whole hearing is just for show. And these hearings tend to attract unrepresentative samples of the public who are already highly engaged in politics, which often means they are disproportionately white, male, educated, and affluent.

Thankfully, there's been a movement to design more inclusive and meaningful forms of public consultation on EJ and other issues too. There's been an explosion of different formats for convening the public, face-to-face and online, typically at the local level. They're designed to foster more constructive and egalitarian deliberation among community members, and between them and public officials, which is a central goal of EJ. And these deliberative processes can be organized by a lot of organizations, not just governments, including universities, churches, and community groups. Academics have played a big role in designing and researching these kinds of forums. A good place to learn about them is the web site of the National Coalition for Dialogue and Deliberation and also a book that I recently published with my colleague Chris Karpowitz, called *Deliberation, Democracy, and Civic Forums*.

I think it's especially valuable to seek public input on potential inequities posed by scientific and technological developments during their *design* stage, before they're implemented, when it often becomes too late to change them. For example, in the United Kingdom, a project convened small groups of community members in several cities to discuss climate engineering, which envisions using technological interventions to try to alter the climate to mitigate effects of global warming. The participants ended up expressing serious concerns about devising fair procedures for engineering the climate, especially whether it would mainly benefit wealthy regions at the expense of less affluent ones. Those aren't usually the first issues raised by experts, so it was a valuable contribution to the regulatory debate.

A fourth stream is *participatory research* (some people call it "participatory action research" or "community-based participatory research" or "citizen science"), like the Harlem air monitoring study that I mentioned earlier, and in this, academic researchers collaborate with marginalized

communities to design, conduct, and interpret research that benefits the community. It's especially taken root in the field of public health, in part because under the Obama administration, the National Institutes of Health really promoted participatory research through its grantmaking. They did that because in addition to making research more responsive to public needs, this kind of research can also translate findings into practice more effectively, increasing the adoption of health programs and interventions in the community.

The participatory approach also helped usher in a real paradigm shift in public health research. Increasingly, that research is showing that health inequities are not so much rooted in disparities of healthcare, or lifestyles, or genes, but much more so in differences among the social, economic, and physical conditions in which people live. In other words, the most important cause of poor health is poverty, along with the attendant lack of educational and employment opportunities, social exclusion, lack of access to healthy food and housing, and toxic environments – all of which are problems of social and environmental justice.

There are several great places to learn more about this approach. For more on community-based participatory research, check out the web site of the Campus-Community Partnerships for Health. For citizen science tools and projects, look at [publiclab.org](http://publiclab.org). And for a global view of EJ projects, look at [ejatlas.org](http://ejatlas.org). This Environmental Justice Atlas, developed at the Universitat Autònoma de Barcelona, is an amazing database of social science case studies of EJ conflicts around the world, and they're all written collaboratively by academics and community organizers.

The last stream I've been looking at is *university-community partnerships*, in which universities act as anchor institutions in their cities and regions, investing their human and economic resources to improve services, public school education, health care, community economic development, arts and cultural activities, and so on. Many of these partnerships prioritize strengthening low-income and marginalized neighborhoods, and they do it through long-term commitments rather than one-shot projects. These are sustained efforts that involve



faculty-community research partnerships, community-based learning opportunities for students, and creating new programs and institutions in the community.

We have a good example of this right here at Santa Clara University: our Thriving Neighbors Initiative, focused in the Greater Washington neighborhood of San Jose. Thriving Neighbors has launched a broad range of programs. Some of the ones most relevant to EJ include an air quality monitoring initiative to reduce pollution around schools (thank you, Harlem); a community gardening program to improve food security; legal workshops to inform tenants and workers of their rights (including addressing environmental threats in the workplace and home, like lead paint); even the “Madres Walking to Health” program, which brings together mothers who can’t afford fancy gym memberships to walk together regularly, and improve their health and social connectedness. And there are other schools – like Portland State University – that are incorporating environmental justice into their university-community partnerships too.

**THERESA LADRIGAN-WHELPLEY:** You’ve mentioned several ways that engaged research for environmental justice could benefit scholars and communities. But how can it contribute to the common good?

**CHAD RAPHAEL:** Let’s go back to that Harlem story for a moment. That study was instrumental in convincing the U.S. EPA to initiate regular air monitoring not just in Harlem, but in other cities around the country. It helped spark a shift to cleaner bus fuels, and not just in Harlem but across New York City and in other cities. So a study carried out in part by teenagers became widely cited in the academic and regulatory literature. And it provided a model for other research projects that brought scholars and community members together to tackle urgent problems.

By democratizing control over the research agenda, we’re more likely to direct research grants and attention to neglected and important social concerns, like reducing childhood asthma. We can help academia become more responsive to the citizens and the taxpayers who support higher

education. By working with community groups, we can increase the impact of our scholarship, we can translate it into practice, when community members carry our findings into the public sphere and help implement solutions or demand action from government and private institutions. We can create informational tools that allow communities to analyze their own conditions. We can foster better public deliberation about environmental justice issues, overcoming some of the political polarization that's gripping our country. And we can strengthen the communities around our universities in ways that help us fulfill our educational mission.

We're also likely to do better research when we supplement scholarly viewpoints with community viewpoints, when we connect systematic thinking with local knowledge, and theoretical insights with experiential knowledge. During that Harlem study, when they wanted to measure particulate exposure in schools, one of the academic researchers decided to put ambient air monitors only on the school roofs. But one of the community researchers said that didn't make sense because the air that kids actually breathe comes in through the windows, so they put the monitors on the windows instead. It seems obvious, but it isn't always. Here's that the academic said that:

Sometimes as scientists we make assumptions and don't rethink assumptions to see how they fit in a natural situation. I think community people, because they are looking at it from a fresh perspective, will question the assumptions in a way that actually improves the science.

As academics, we tend to see things from the rooftops, and while that can be useful, we also need to see things at street level, through a school window or from a kid's backpack, because the air on high isn't necessarily the same air people are breathing on the ground.

**THERESA LADRIGAN-WHELPLEY:** Thanks for listening to INTEGRAL, a Bannan Institute podcast of the Ignatian Center for Jesuit Education at Santa Clara University. Special thanks to Professor Chad Raphael for his contribution to today's episode.

Coming up next week is Iris Stewart-Frey, Associate Professor in the Environmental Studies and Sciences department at Santa Clara, who will be examining issues of water justice and the common good, in California, Nicaragua, and beyond.

Technical direction for INTEGRAL was provided by Fern Silva. Our Production Manager is Kaylie Erickson, and our Production Assistant is Manny Sanchez. Thanks to Mike Whalen for advisory and editorial support. You can find us on the web at [scu.edu/integral](http://scu.edu/integral), or subscribe via iTunes, SoundCloud, Stitcher, or Podbean.