

An Interview With James Boyce: Agrarian Societies, Environmental Economics And Climate Change



C.J. Polychroniou interviews [Professor Emeritus James K. Boyce](#) about his career exploring agrarian societies, environmental economics and climate change.

This is part of PERI's economist interview series, hosted by C.J. Polychroniou. *It was first posted [here](#).*

C.J. Polychroniou: How did your interest in economics come about, and why did you choose to pursue graduate studies at Oxford University after having completed your undergraduate degree at Yale?

James K. Boyce: Midway through my college years I worked for two years on a land reform and rural development project in the Indian state of Bihar. I had taken introductory economics in my freshman year, but it was in Bihar that I really began to learn and think about how economies function and malfunction.

On returning to Yale I designed an independent major in Agricultural Development that included some more courses in economics. More importantly, I met my life partner, Betsy Hartmann, who had just come back from working in India, too. After graduating we returned to South Asia and lived for about a year in a village in Bangladesh. Our aim was to write a book that would give readers a window into the lives and perspectives of some of the world's poorest people - an oral history of the present.

The book, *A Quiet Violence*, came out in 1983 after dozens of rejections from publishers. While we were completing it, we pieced together a living among other ways by teaching a Yale seminar on the political economy of world hunger. One book we used in the seminar was *The Political Economy of Agrarian Change* by Keith Griffin, an economist at Oxford. When I decided to go to grad school, I wrote to Keith and asked if he would consider working with me. He sent an encouraging reply, and that is the main reason I went to Oxford. It turned out to be a wonderful place to be. Keith was a splendid mentor, and I was also fortunate

to study with Amartya Sen, who introduced me to the deep normative questions of value and distribution that lie at the heart of economic theory. I could not have had better teachers.

CJP: Your early research centered around food and development policy for mainly agrarian societies. What lessons have we learned about agrarian reform and economic growth in developing countries?

JB: In my dissertation I analyzed agricultural growth in Bangladesh and the neighboring Indian state of West Bengal, the two halves of Bengal that were partitioned in 1947 when India and Pakistan became independent nations. My central thesis was that water control - irrigation, drainage, and flood control - is the "leading input" in Asian rice agriculture, and that Bengal's agrarian structure posed formidable obstacles to resolving the attendant problems of coordinated water management and collective action. The self-interest of the larger landowners who dominated rural society often undermined possibilities for improving agricultural performance. It is an example of what is sometimes called the "inefficiency of inequality."

After receiving my doctorate, I embarked on a book about the Philippine economy in the Marcos era. The Philippines was the birthplace of the so-called "green revolution" in Asian rice agriculture, the introduction of highly fertilizer-responsive varieties that allowed major increases in output. In that country, too, agrarian inequality acted as a brake on growth and on the extent to which the growth that did occur improved the lives of the poor.

The Philippine experience stands in marked contrast to that of South Korea, which was poorer than the Philippines at the end of World War Two. Today South Korea's per capita income is about ten times greater than that of the Philippines, and income inequality is far lower. The superior performance of South Korea in both respects can be traced above all to the fact that the country implemented a serious land-to-the-tiller agrarian reform shortly after the war, whereas the Philippines did not and still has not.

Thoroughgoing land reform was a key distinguishing feature in the postwar economic trajectories of East Asian countries more generally. China, Japan, South Korea, and Taiwan shared this experience in common despite their diverse political circumstances. Land reform ended the fateful dichotomy between

ownership of the land and labor on it. In so doing, it unleashed broad-based growth not only in the agricultural sectors but in the economy as a whole.

CJP: Over the years your research interests have shifted towards environmental economics. Why did the political economy of the environment become such a major focus of your research?

JB: I've been interested in the environment for as long as I can remember. When I started graduate school, there was not a single course on environmental economics at Oxford. This was not unusual for the time. When a faculty member introduced a new course on the subject, I was the only student to show up. We turned this into a two-person study group, working our way through the classic works in the field. It was a rather short list.

I quickly saw connections between economic development and environmental economics. In both arenas, bringing a political-economy lens to bear - that is, asking about not only the size of the pie but also how it is sliced - could help to explain pervasive market failures and government failures. In both arenas, inequalities of power and wealth impede the coordinated action needed to resolve these failures. In both, the self-interest of those on top - those who extract rents from land and power and those who profit from environmentally degrading activities - leads to outcomes that are inefficient as well as inequitable.

When I joined the UMass economics faculty in 1985, the department did not have any courses in environmental economics. I launched a new undergraduate course called "the political economy of the environment." It began with a couple dozen students, and over the years it grew into a larger lecture. Some years later, at the instigation of grad students, I started a graduate course of the same name.

When I had my first sabbatical in the early 1990s, I was a Fulbright scholar at the National University in Costa Rica. There I helped set up a master's program in ecological economics and sustainable development for students from across Central America and the Caribbean. This was when I wrote my first research paper on the political economy of the environment. It was called "Inequality as a Cause of Environmental Degradation," and it was published in the journal *Ecological Economics* in 1994.

At around the same time, I also began working on the economics of violent

conflict and peacebuilding, another arena where large inequalities of wealth and power often lead to dreadful outcomes for the majority of people. I visited El Salvador soon after the signing of the peace accords that ended the country's long civil war. Soon thereafter the United Nations Development Program in San Salvador asked me to organize a study on the interface between economic policies and peace implementation. The resulting book, titled *Economic Policy for Building Peace*, led me onto work in other war-torn societies, including Bosnia, Guatemala, and Cambodia. Peacebuilding became another major focus for my research and writing.

In the past decade or so I have concentrated mostly on the environment. Climate destabilization in particular has become an urgent global issue, and my own country has been more part of the problem than part of the solution. Like many other Americans, I feel a sense of obligation to try to do something about it.

CJP: Environmental justice figures prominently in your analyses of climate change and climate policy. Why and how?

JB: Environmental justice (EJ) is about the distribution of environmental harms (and also the distribution of benefits from using and abusing the environment). In the 1980s pioneering research by Dr. Robert Bullard and others documented the fact that low-income communities and racial and ethnic minorities in the United States often bear disproportionate burdens from pollution and other environmental hazards.

EJ activists and researchers have helped to reframe environmental problems to ask not only what people do to nature but also what we do to each other. Environmental costs are not impersonal "externalities" that fall randomly across the populace; these costs are often inflicted on communities that are disadvantaged both politically and economically, that is, in terms of both political power and purchasing power. In the U.S. multivariate analyses have shown that race and ethnicity have major impacts on exposure to environmental harm that are independent of income.

Climate change and climate policy intersect with environmental justice in multiple ways. Let me highlight five here.

1. Differential vulnerability: Climate change affects everyone, but throughout the world it is low-income and politically disempowered communities that are at the

greatest risk. Many people live precariously close to the margin of survival where droughts, floods, and extreme heat waves can push them over the edge. They cannot afford private insurance, and typically they lack the political leverage to obtain insurance from the public sector. They often live in especially vulnerable settings, such as low-lying lands that are susceptible to storm surges. We saw these multiple factors clearly at work when Hurricane Katrina hit New Orleans in 2005.

2. Disproportionate impacts of co-pollutants: Fossil fuels are not only the main source of the carbon dioxide and methane emissions that are destabilizing the Earth's climate, but also the source of a slew of hazardous air pollutants that constitute a leading cause of premature mortality around the world. From an environmental justice standpoint, it is crucial that policies to reduce the use of fossil fuels take "co-pollutant" impacts into account and ensure that these are reduced first and foremost in the most vulnerable communities.

3. Carbon dividends: If the climate policy mix includes tight restrictions on the supply of fossil fuels allowed to enter the economy - and it must to guarantee that we achieve ambitious targets for emission reductions - this supply constraint will raise the price of fossil fuels, much as OPEC supply restrictions raised oil prices in years past. In many countries, including the U.S., higher fuel prices are tantamount to a regressive tax: as a percentage of expenditure (though not in absolute dollar terms) fuel price increases hit low-income households harder than middle class households, and the middle class harder than the rich. To offset this regressive impact and its political repercussions, a substantial share of the revenue from auctioning permits to bring fossil carbon into the economy (or, equivalently, from a carbon tax) can and I believe should be returned directly to the public as equal per person payments. This is something I've studied for a number of years, culminating in my 2019 book, *The Case for Carbon Dividends*. From the standpoint of environmental justice, the gifts of nature - in this case, the limited capacity of the biosphere to safely absorb carbon - are owned equally by all. Pollution should not be free even when it is legal. Those who make use of the limited capacity of our environment to safely dispose of wastes should pay for their use, and the proceeds should be shared by all as equal co-owners.

4. A just transition: Like all major transformations, the shift from the fossil fueled economy of the past to the clean energy economy of the future will result in winners and losers. The overwhelming majority of humankind, including future

generations, will benefit immeasurably. But in the course of the transition some people will incur costs. These include losses not only to fossil fuel firms and their shareholders, who can afford them, but also to workers and communities who have depended on the industry for their livelihoods. Policies to assist these workers and communities, many of whom have borne great sacrifices to provide our energy, is another dimension of environmental justice. A just transition also requires investing in the ecological restoration of landscapes that have been damaged by mountaintop removal, coal ash residues, oil spills and other toxic legacies of fossil fuel extraction and combustion.

5. Adjustment for whom? Tragically, the world's failure to respond more quickly and resolutely to the climate emergency means that we're already seeing its impacts and that they are sure to worsen in years ahead. Adjustment to climate change that we have failed to prevent will be a crucial challenge even as we move forward on mitigation. A key question is how the scarce resources available for adaptation - for building sea walls, establishing cooling centers to protect people during heat waves, protecting critical ecosystem functions and the like - will be allocated across competing needs and communities. From the standpoint of environmental justice, a bedrock principle is all lives are equally valuable and deserve equal protection. This is very different from prioritizing the lives and property of those who wield the most purchasing power or the most political influence.

These and other justice-centered policies can help to build a more egalitarian society in the course of climate change mitigation and adaptation. In turn, building a more egalitarian society will help to advance effective climate policy. The two go hand-in-hand.

CJP: You advocate carbon pricing policies as a means of reducing carbon dioxide and emissions of hazardous air pollutants into the air. Is there evidence that carbon pricing policies work for lowering global warming emissions?

JB: We know that price signals affect consumption and investment decisions. When the price of gasoline went up in the 1970s, for example, as a result of the supply restrictions imposed by OPEC and the Iran-Iraq war, consumers cut back their automobile use and began to demand more fuel-efficient vehicles. Businesses invested in energy efficiency. Governments - federal, state, and local - responded to the price incentive, too, by implementing policies to reduce their

use of oil.

Of course, a carbon price is not an end in itself. The end is to curb emissions along a path consistent with stabilizing the Earth's climate. The Paris Agreement's target of holding the rise in average surface temperatures to 1.5-2 °C above the pre-industrial level translates this goal into quantitative terms. Achieving this goal will require cutting emissions at something like 8% per year - if we start now - and even more quickly if we delay further.

Past carbon prices invariably have been too low, far too low, to achieve such steep reductions, even when they have been coupled with other climate policies like public investment and regulatory standards. Politicians routinely succumb to the temptation to err on the side of optimism, hoping that a modest carbon tax (alone or in combination with new regulations, more investment, and moral suasion) will suffice do the job. I would like to believe this too, but just because I hope it's true doesn't mean I think it necessarily is.

This is why I believe we must include in the climate policy mix a hard limit on the amount of fossil carbon that is allowed to enter the economy each year, a limit anchored to targeted reductions of, say, 8% per year. If other climate policies turn out to be adequate to meet this goal, that's great, the limit does not act as a binding constraint. But if they are not sufficient it becomes binding, and a limited number of permits (also known as allowances), up to the level set by the target, are issued to bring fossil carbon into the economy. I believe these permits should be auctioned to the energy firms, not given away free as under a cap-and-trade policy. Most, if not all, of the value of these permits will be passed on to consumers as higher fuel prices. We need to face up to this reality. And we need to face up to the impact that higher fuel prices will have on working families.

By recycling most or all of the revenue from permit auctions (or from a carbon tax) to the public as equal per person dividends, we can transform the regressive impact of the higher fuel prices into a progressive net impact. If the carbon dividends are delivered in manner that is fair, transparent, and visible (and not buried in the fine print of income taxes or electricity bills), they can help to sustain durable public support for the policy.

CJP: A growing number of environmentalists are adopting the position that economic growth is incompatible with environmental sustainability and any

sincere struggle to deal with the climate crisis, but you find this perspective to be flawed and perhaps unrealistic. Why? Can capitalism co-exist with a sustainable, equitable, and environmentally friendly economy?

JB: The first question is whether economic growth is compatible with environmental sustainability, above all climate stabilization. We know that national income (or GDP) is a deeply flawed measure of human well-being. As I wrote in the opening essay of my 2019 book *Economics for People and the Planet*, it is a combination of things that are good, bad, and useless. Anything that carries a price tag in the market gets counted as part of national income, no matter whether it's good (like food and housing), or bad (like the costs of pollution remediation and incarcerating people), or useless (like rat-race spending on "positional goods," a phenomenon described a century ago by the economist Thorstein Veblen). Meanwhile, things that are not exchanged in the marketplace, whether good (like unpaid child care) or bad (like environmental degradation) are not counted even though they can greatly affect human well-being.

If national income is an unsatisfactory measure of well-being, then by the same token the growth of national income ("economic growth") is an unsatisfactory measure of changes in human welfare. When environmentalists and their opponents argue about the "limits to growth," they're thinking about different things: environmentalists think about the bad stuff, while growth proponents think about the good stuff. When they assume that the good and bad are bound together, both sides repeat the mistake in national income measures: they fail to separate the good from the bad. I believe that we need a new banner: grow the good and shrink the bad. The clean energy transition is an example of doing precisely this.

Your second question is about capitalism. Like socialism, this is a word that carries a lot of baggage. If by capitalism you mean a world where wealth and power are concentrated in a narrow elite, then no, I don't think it's compatible with environmental sustainability or equity. But if you mean an economy where there are markets and private property, co-existing with other kinds of property and other institutions for resource allocation, then yes, I think it is. The same applies to different meanings of socialism.

The market-versus-state dichotomy that framed debates between the "right" and "left" in the 19th and 20th centuries turns out to have been off the mark. More

fundamental, and more decisive for the well-being of ordinary people, is the dichotomy between an oligarchic order in which wealth and power are concentrated in the hands of a few and a democratic society in which they are broadly and equitably shared. This, to my mind, is the most important lesson we can draw from the tumultuous history of the 20th century.

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C. J. Polychroniou is a political scientist/political economist who has taught at numerous universities in Europe and the United States and has also worked at various research centers. He holds a PhD in Political Science from the University of Delaware and is author/editor of several books, including *Marxist Perspectives on Imperialism* (1991), *Perspectives and Issues in International Political Economy* (1992), *Socialism: Crisis and Renewal* (1993), *Discourse on Globalization and Democracy: Conversations With Leading Scholars of Our Time* (in Greek, 2001) and hundreds of articles and essays, many of which have been translated into scores of foreign languages. His latest book is a collection of interviews with Noam Chomsky titled [*Optimism Over Despair: On Capitalism, Empire, and Social Change*](#) (*Haymarket Books, 2017*).