

Editors' note:

We of Let Cuba Live regretfully take note of the recent death of Richard Levins, who for many years held a professorship at the Harvard School of Public Health. The accompanying article by Carmelo Ruiz tells the story of Richard Levins with an emphasis on the years Levins lived in Puerto Rico, where he pursued his already established radical politics, took up the cause of Puerto Rican independence, and developed his knowledge of ecology and organic agriculture. As befits a onetime Puerto Rican, Levins was a great friend of Cuba. In that regard, his article "[How to visit socialist country](#)" is required reading. The College of Atlantic in Bar Harbor, Maine, in 2012 awarded Richard Levins an honorary degree.

[Richard Levins: Scientist, Activist and Friend](#)

by CARMELO RUIZ FEBRUARY 24, 2016

Counterpunch

American scientist Richard Levins, philosopher of science, titan of ecology, forebear of agroecology, renowned authority on the social and ecological dimensions of disease, and friend of Puerto Rico, has passed away. His scientific and intellectual contributions spanned the most varied fields, from population biology to political theory. Levins led the battle against biological determinism and reductionist conceptions in evolutionary biology. He applied dialectical materialism to the problems of modern biology using Friedrich Engels' method, he questioned the ideological and conservative

bias of Darwinism, and fought against Edward O. Wilson's sociobiology, which he viewed as a pseudoscience that justified imperialism and class hierarchies.

In the 1950s he was persecuted for his Marxist ideas and went, with his Puerto Rican wife Rosario Morales, to exile in Puerto Rico, where he taught at the University of Puerto Rico (UPR) and joined the ranks of the PR Communist Party, integrating himself fully into the Caribbean island-nation's independence movement. After being sacked from the university for his ideology, Levins went to live in a farm in the rural municipality of Maricao, where he and his wife developed their initial concepts of agroecology.

“As a farmer in a poor region of Puerto Rico, I saw the significance of agriculture for people's lives”, said Levins in a *Monthly Review* article. “That experience introduced me to the realities of poverty as it undermines health, shortens lives, closes options, and stultifies personal growth, and to the specific forms that sexism takes among the rural poor. Direct labor organizing on the coffee plantations was combined with study. Rosario and I wrote the agrarian program of the Puerto Rican Communist Party in which we combined rather amateurish economic and social analysis with some firsthand insights into ecological production methods, diversification, conservation, and cooperatives.”

In the 1960s Levins participated in a university protest against the Vietnam war, which the campus administration prohibited. The demonstration took place nevertheless in Ponce de León avenue, on the west side of the campus. From a ladder, he and his companions used a

bullhorn to speak up against militarism. The event later inspired the creation of *La Escalera* (The Ladder), a leading cultural and political journal of the time.

“Together with professors Gervasio García and George Fromm, Levins was an active participant in all the struggles that took place during those years inside and outside of UPR for university reform, against the Vietnam war and the draft, and in support of independence and socialism”, reminisces veteran *independentista* militant Manuel de J. González, who was a student activist in UPR in the 1960’s. “He also linked the student movement, being mentor of a generation of youths that from the university dreamed of changing the world. His profound knowledge of Marxism and of all the revolutionary thought of the time made him a valuable resource. My first Marxist theory course was taught by Levins in a small apartment in the neighborhood of Santa Rita.” (*Claridad*, February 4 2016) Levins was invited to join the US National Academy of Sciences but he refused, in protest against the shameful collaboration of academics and scientists with the Vietnam war. In 1969 he co-founded Science for the People, an organization of progressive activist scientists.

Right in the middle of the Vietnam war, Levins traveled to North Vietnam to express his solidarity with the Vietnamese people in their struggle and resistance, and traveled frequently to Cuba, where he was scientific advisor to the government.

I had the great pleasure of meeting Levins in 2005 when he invited me to speak about GMO’s to his students at the Harvard School of Public Health. In that cold and cloudy

October morning in Cambridge we had a long and interesting conversation about numerous subjects, from human health and the role of scientists in society to the struggles of the Puerto Rican left. He told me he remembered full well that Spring day in 1959 when a young lawyer, Juan Mari-Brás, drove over from his hometown of Mayagüez to visit his neighbor in Maricao, former PR Communist Party chairman, journalist, playwright, novelist and labor organizer César Andreu-Iglesias, and proposed to him starting a newspaper that would open a breach of clarity in those dark times. And so was born the pro-independence newspaper *Claridad*, now entering its 57th year. (FULL DISCLOSURE: Ruiz has been working for *Claridad* in various capacities for the last 24 years, seven of these (1997-2004) as a full-time staff writer. From February 25 to 28 2016 he will be at the Claridad Festival volunteering as a bartender.)

Levins “revolutionized population biology multiple times, making foundational contributions to modeling evolution in changing environments, the theory of biological control, the philosophy of biology, modeling complex systems, mathematical biology, disease ecology, public health, and agroecology. He coined the term ‘metapopulation’”, said biologist [Rob Wallace](#).

“His thinking remains profound enough to keep us busy for many decades to come... He collaborated with evolutionary biologist Richard Lewontin to develop, via a series of beautifully written essays, a modern-day dialectical biology that attacked the most basic of our premises of the nature of nature and the sciences that

study it, including the biological vs the social, determinism vs chance, the natural sciences vs the social sciences, and other false dichotomies at the heart of modern science.”

“As a scientist Levins had an incredible ability to analyze complex systems — to examine them from multiple, contradictory viewpoints simultaneously — without falling into the seductive traps of reductionism or static thinking”, said physicist [Pankaj Mehta](#). “In the 1960s, Levins authored a series of extraordinary papers that helped launch the field of community ecology — all while facing FBI harassment for his activist work with the Puerto Rican left.”

“These papers combined sophisticated mathematical techniques with profound ecological insights to investigate the origins of biodiversity and evolution in fluctuating environments. Levins seamlessly shifted intellectual fields, going on to make foundational contributions in areas as varied as mathematical modeling of complex systems, agroecology, and disease ecology.” (4)

“Levins’ work remains relevant for having made scientific contributions, since his youth, applying dialectical materialism to the problems of contemporary biology”, said Julio Muñoz Rubio, a scholar at Mexico’s National Autonomous University. “I refer explicitly to the method defended by Friedrich Engels in his [*Dialectics of Nature*](#). Thanks to it, along with his inseparable companions Richard Lewontin and Steven Rose, Levins led a profound reflection among evolutionists about the errors contained in certain conservative aspects of Darwinism and in its ideological roots in the bourgeois world. He

declared himself in that sense against reductionistic and essentialistic conceptions in science in general and in biology and evolutionary biology in particular, that keep mistakenly conceiving the whole as the sum of its parts and the organism as separate from the environment. This reductionism assigns to an essential particle or master molecule the whole of living beings' traits, whether they be morphological or physiological, behavioral or cultural and, in this sense, is very limited when it comes to dealing with biology's actual problems.”

According to [Muñoz Rubio](#), “Levins never gave in to the temptations of postmodernism and of power. He did not succumb to the siren songs of neoliberalism nor did he seek alternatives in the soft and friendly forms of capitalism. His world was never that of awards, prizes and photo-ops. His science was always a science for the people”.