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Rachel Carson and the Environmental Awakening

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Sixty years ago, as chemicals were sprayed on fields in massive quantities, Rachel Carson published what has since become an environmentalist classic: *Silent Spring*. In it, the American biologist documented in meticulous detail the devastating effects of pesticides, and worried about the alarming decline of bird populations in the American countryside. But who was Rachel Carson really? Why was her book pioneering? An interview with environmental philosopher Catherine Larrère.

Sébastien Billard: The biologist and writer Rachel Carson published her seminal environmental text *Silent Spring* in 1962. What does this book say?

Catherine Larrère: With this book, Rachel Carson accomplished pioneering work: she precisely and relentlessly documented the devastating effects of pesticides which were increasingly deployed in industrialised agriculture. She detailed its consequences on the quality of water, soil and air, as well as on flora, fauna and human health. Rachel Carson saw very early the signs of the environmental catastrophes to come. She warned us: with this massive use of chemicals, modern societies had entered "the age of poison".

In the preface to a recent new edition of the book, Al Gore wrote that "*Silent Spring* […] changed the course of history" and "transformed our society". How did its publication mark a turning point?

Rachel Carson was not the first nor the only one to highlight the dangers of pesticides. But through the quality of her arguments and the resounding success of her book, she played a decisive role in raising the alarm. *Silent Spring* drew civil society's attention to the issue and put it on the political agenda.

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This book also marks a turning point in the environmental movement. Hitherto, it had been focused on protecting natural areas untouched by human intervention. Rachel Carson shook things up by clearly identifying enemies: productivism, industrial and economic power, and what she called "the gospel of technological progress". With her, the

environmental movement spread and became politicised.

The book is a powerful indictment of one product in particular: DDT…

This was, at the time, one of the most widespread insecticides and enjoyed a very positive image. In the war that mankind was fighting against insects, DDT was presented as a chemical weapon of mass destruction. Its efficacy was such that it was even compared to the atomic bomb! This nuclear parallel was made by both advocates of pesticides and atomic weapons, which is a fairly good reflection of the unbounded technological optimism that still reigned after the war, despite the bombing of Hiroshima.

When was this product discovered and when did it come onto the market?

Dichlorodiphenyltrichloroethane was synthesised as early as 1874. But it wasn't until the 1930s that its insecticide properties were discovered by a Swiss chemist, Paul Hermann Müller, for which he won the Nobel prize for medicine in 1948. DDT was initially used by the military — at the start of the 1940s during the US army's campaign in the Pacific, then by the Allies — to combat malaria and typhus epidemics among soldiers.

After the war, the chemical industry "recycled" DDT by encouraging its use in fields and forests to get rid of infestations of harmful insects. Dozens of companies, mostly American, produced enormous quantities of it and aerial spraying across vast areas became more and more frequent, as did sales to private individuals. DDT played a major role in the industrialisation of agriculture, which in the United States began after the First World War, then in Europe after the Second World War, and a bit later in developing countries with the Green Revolution.

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The landscape was transformed and homogenised, ecosystems were simplified to the extreme. The scene from Alfred Hitchcock's cult film *North by Northwest* where Cary Grant is chased by a crop-spraying plane across a field that extends as far as the eye can see perfectly illustrates the magnitude of this change. From the 1940s, however, reports by experts began to highlight its toxicity, particularly on wild flora and fauna. Through her awareness-raising work, Rachel Carson amplified this research, which had hitherto gone unnoticed.

In her book, rather than insecticides or pesticides, Rachel Carson prefers the term "biocides". Why this choice?

Under the guise of targeting a specific living organism, in reality, these products attack life in general, including human life. "They have been devised and applied without taking into account the complex biological systems against which they have been blindly hurled," she

explains. She also shows that the mass eradication of insects, as well as being dangerous, is absurd because it's ineffective: the weakest insects die off, while the strongest, which are even more harmful than those that have been eliminated, proliferate even more easily now that their natural predators have been wiped out. Chemical attack, therefore, has opposite effects to those that are expected.

What was she calling for? A ban on all pesticides?

Rachel Carson did not call for their outright ban, but campaigned for more moderate usage and argued for alternative solutions. She recommended using biological control processes by looking for what limits proliferation in the natural environment. Her belief is that the battle to dominate nature is self-destructive. We should see it not as an enemy, but as an ally. To make agriculture less vulnerable to pests, she called for an end to monocultures. Our problems, she wrote, "arose with the intensification of agriculture—the devotion of immense acreages to a single crop.

***Silent Spring* has sold more than two million copies, has been translated into numerous languages and has never been out of print. But did it have an impact on pesticide regulation?**

Silent Spring did not halt their rise. But the book's success forced the authorities to address this issue: President Kennedy cited Rachel Carson's work at a press conference in January 1963; in its wake, a senate committee was set up, which went on to confirm the danger highlighted by the biologist. Above all, *Silent Spring* led to a campaign to ban DDT, which the United States implemented in 1970, followed by a number of European countries. Another consequence was the creation, that same year, of the Environmental Protection Agency. It was tasked with regulating pesticides, which until then had been the job of the United States Department of Agriculture.

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How did the chemical industry react to the publication of *Silent Spring*?

At first, it wanted to kill the book. One of the biggest producers of DDT at the time pressured the publisher to prevent its publication, without success. As Rachel Carson's facts were irrefutable, the chemical industry lobby concentrated their attacks on Carson herself with unprecedented ferocity. It was said that Rachel Carson had been overcome by the irrational emotionalism typical of women, who are overly sentimental when it comes to nature, but scream when they see a spider.

One DDT producer called Rachel Carson a "fanatic defender of the cult of the balance of nature". As for Monsanto, the firm published a parody of the book entitled *The Desola*te Year, which portrayed a world invaded by insects. Rachel Carson was also attacked for being single. Because she never married, the former secretary of agriculture, Ezra Taft Benson, wrote in a letter to former president Dwight Eisenhower that she was probably a

"communist". Benson also explained that it was odd for a childless spinster to be concerned about genetics and the fate of future generations. After DDT was banned, some even tried to blame her for deaths from malaria.

Before *Silent Spring*, Rachel Carson published three books on marine life, all of which were bestsellers. Why did she find such success each time?

Her literary talent has much to do with this. Rachel Carson's writing makes an enormous amount of information accessible to a lay audience. Her work was original for connecting science and literature, whose impermeability has long been lamented, especially when it comes to environmentalism.

Is she part of the tradition of nature writing and wilderness at the heart of American history?

Partly. Because the nature that she describes is not the wilderness, that wild and sublime nature associated with American heroism, but a more modest, everyday nature. She devotes many lines to the close emotional bonds that many people have forged with birds. In an America that is still largely rural, she tells of how people feed them in the winter and look out for the return of migratory birds, which signals the start of spring. Rachel Carson tells us that the crisis caused by pesticides is not just an environmental crisis – which upsets ecosystems – and a health crisis – which threatens human health. It's also a "crisis of the lived world", to borrow André Gorz's characterisation of the environmental crisis. It affects the social world. The disappearance of the robin, for example, was seen by many households as a domestic tragedy.

Some see in her an ecofeminist icon. Do you share this view?

Not exactly… She certainly made choices in her life and activism that, for a woman at the time, were subversive. But she never called herself a feminist, and she never combined feminist and environmentalist struggles. Likewise, she never developed a social critique of relations of domination, nor the inequalities and injustices that stem from them.

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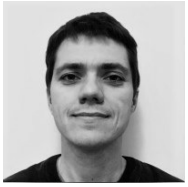

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