

Book Review

Lyons, Kristina. *Vital Decomposition: Soil Practitioners and Life Politics*. Durham: Duke University Press, 2020, 232 pages.

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Kristina Lyons is an American anthropologist whose ethnographic work was carried out at different times over more than a decade in Colombia. Her work moves between worlds and narratives, as she shows the tensions and ontological differences between scientific, bureaucratic, and communitarian relationships of and with the soil. The author guides us on a journey through the laboratories of the Biotechnology Institute of the National University of Columbia and the offices and public events of the country's agrarian entities, to answer questions about the ways in which scientific and political notions have been built around the productivity and use of soils, which contrast with the knowledge and practices of peasant communities living in the southern Colombian department of Putumayo.

The text starts with an extensive overview of the political ecology of the antidrug policy in Colombia and its local impacts in the Putumayo region. Illicit crop eradication strategies in the country began in 1970, with the direct application of a host of chemicals including Paraquat, Garlon 4, Imazapyr, and Tebuthiuron to marijuana, coca, and poppy crops. However, starting in 2000, with the implementation of Plan Colombia, the policy shifted to a massive eradication program through the aerial spraying of a concentrated formula of glyphosate herbicide manufactured by Monsanto. Lyons describes how aerial spraying of glyphosate was a tactic that, together with militarization, was conducted over a fifteen-year period on Colombian territory. Yet, due to the volatile nature of glyphosate, this implied the dispersion of pollutants over forests, soils, cattle, water sources, rivers, wild animals, crops, pastures, and humans. The indiscriminate use of chemicals over five decades reshaped soils and reconfigured life and death.

Lyons shows how the negative material effects of the antidrug policy in Putumayo are intimately connected with the bureaucratic and dominant conception of soil. In particular, the soils of the Amazon have been conceived from the institutional framework as sacrifice zones, that is, as poor and without agro-productive possibilities. This makes the region a strategic space for geopolitical control in the counterinsurgency war. Thus, state presence in this region has been marked by militarization, poisoning, deforestation, and extraction of subsoil resources.

In Amazonia, the traditional scientific categories around soils have been marked by two limiting factors. On the one hand, for many years a geological perspective dominates understandings of soil. That is, because of its proximity to rock layers, soil has been considered as an inert and non-living layer, which can be removed, exploited, and extracted without major consequences. On the other hand, once taxonomic classification studies progressed, the productivity of soil was analyzed in terms of its potential to host large-scale harvests of certain foods and products. In this context, equatorial soils and particularly Amazonian soils have been classified as unproductive, and incompatible with agriculture, in particular with large-scale monocultures.

Lyons traces how soil scientists at the institutional level have distant research practices that tend to take place in laboratories located in a safe, urban setting, and depend on financial and political support from the state and from industry. Indeed, critical soil scientists have had tremendously difficulty influencing national policies to ensure the adequate comprehension of soil complexity and face big challenges and gaps in incorporating in this classification into the knowledge and wisdom of the communities inhabiting the territories. Lyons reveals how the science has now been influenced by concepts derived from systems theory and ecology, which have radically changed the vision of soil, considering it as a natural body and complex life system that defies modern dualisms between nature and culture, and the bio (living) and the geo (non-living). However, such perspective has had little or no impact on the formulation of economic policies and regulatory systems in Colombia.

In contrast to the scientific and institutional frameworks, the experience of the Putumayo peasants evidences a different ontological understanding of soils. Through a series of experimental practices of unlearning, relearning, and learning by doing, peasants have gradually built a series of practices revolving around the cultivation, exchange, and relationship with the soil and forest, making their farms productive, fertile, and diverse spaces of life and death.

In her extended fieldwork on the farms and in the gardens and pastures inhabited by Putumayo peasants, Lyons portrays their agro-living, productive, educational, and experimental practices based on a revaluation of the soil, leaf litter, forest, and the multiple beings that inhabit it. Lyons explores communities' notions of forest and soil, understood as relational concepts that incorporate a multiplicity of practices and living forces. In doing so, she discards the translation of jungle, which has deep colonial meanings, and differentiates jungle from forest, a concept that communities associate with commercial plantations. The concept *selva* serves to redefine the community words *monte*, wooded and mountainous terrain, and *rastrojo*, forage for animals and regrowth of undergrowth.

The farmers call their daily experiences of relating to the *selva cultivando ojos para ella* (cultivating eyes for her), and these are part of a process of thinking from their own perspective and that of place, in order to decolonize their farms. It consists of a series of experimental practices and knowledge in which all the senses are involved, since cultivation is based on the principle of learning to follow the *selva*, to listen to the *selva*, and to talk to it. It is a production oriented to go beyond tending to and satisfying human needs, because it is cultivated thinking about the food needs of the multiple beings inhabiting the place, in which humans are an instrument of service and welfare for all the species that converge on the farm. The farmers called themselves apprentices of the *selva* and the other beings that occupy the space, taking it upon themselves to learn to walk in a different way, to experience new flavors, smells, textures, to develop their instinct, to sharpen their observation skills, or as the locals say, to read nature (*readinature*).

Lyons points out the concept of leaf litter, understood as the layers of leaves, stems, bones, and decomposing fruit peels that are used as compost to nourish and fertilize the soil. Leaf litter was the focus of her ethnographic work, as its slow and permanent process of decomposition allowed her to conceptualize the generative capacities of life, movement, and transformation that surround destruction and death. Lyons argues that given the physical composition of Amazonian soils, the processes of fertility, nutrition, and life depend on the interaction between the thin layer of soil and the leaf litter composed of leaves, stems, fruits and other elements that fall and detach from the jungle vegetation. It is the interaction between plants, animals, soil, and the farmers' knowledge that makes this agro-productive model unique.

The interconnection between soil and leaf litter is fundamental to understanding the transitions between decomposition, putrefaction, and regeneration of life. The practices of cultivation with the *selva* have been incorporated into farms, plots, and gardens in Putumayo amidst a context of violence, racism, and toxicity. This allows us to reflect on how people and ecologies have not transcended such disruptive factors, but rather, sunk into them. Farmers have literally re-emerged from the *rastrojo* to be harvesters of life. The management of their farms responds to an autonomous model disconnected from the action and intervention of the State, where anonymity is crucial to survive the war, persecution, and the harshness of the context. For Putumayo farmers, the territory speaks for itself, it does not need a human spokesperson to convince someone to adopt this model. The farms themselves must speak, so that the peasants do not have to be forced to confront the machine of state policy and war that survives in the territories.

Lyons' understanding and conceptualization of soils according to the state scientific bureaucracy and the community understanding is marked by the existence of equivocations (Viveiros de Castro 2004) that evidence deep contradictions. For Putumayo farmers, soils are part of a network of interconnection of multiple elements provided by the *selva* and its constant transformations, whereas the scientific taxonomy of soils conceives them as stable entities destined to produce economic results. So far, there is no communication between both worlds and visions, due to two factors. On the one hand, the productivist, extractivist, and capitalist vision promoted from the center is in opposition to the vision of community welfare and co-existence with the forest claimed by the locals. On the other hand, state land and agriculture policies are formulated without contact with the inhabitants of the territory.

People in Putumayo are survivors of the armed conflicts, forced displacements, militarization, and glyphosate poisoning, and their daily practices and conceptions of life offer innovative views and practical experiences on the possibility of learning again and learning by doing at different scales and temporalities, in a degraded environment. The communities have returned to inhabit and understand the *selva*, to cultivate with and for it, on soil that has been poisoned, militarized and constructed by official discourse as unproductive and therefore sacrificial. Lyons considers that decomposition, putrefaction, and death are indispensable for the generation of life, food, diversity and community. In this way, the author invites an exploration of the frontiers between life and

death, to accept the fetid, and to find the ways of regeneration that slowly give rise to life.

References

Viveiros de Castro, Eduardo. 2004. "Perspectival Anthropology and the Method of Controlled Equivocation." *Tipiti: Journal of the Society for the Anthropology of Lowland South America* 2(1): 3–22. <http://digitalcommons.trinity.edu/tipiti/vol2/iss1/1>.