



Cultivating power, enacting consent. A critical review of ‘Seeds of power. Environmental injustice and genetically modified soybeans in Argentina’, (A. Leguizamón) 2020, Duke University Press, 221 p

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The literature of environmental justice has consistently showed that social mobilization often emerges at the bottom of the power spectrum, among those actors who bear the costs of toxic activities but reap no benefits.¹ Throughout this literature, central questions emerge, such as: how can local grassroots struggles affect large-scale change? What acts as a catalyst for social mobilization? In her recent book *Seeds of Power*, Amalia Leguizamón (2020) looks at the cultivation of genetically modified (GM) soybean in Argentina and makes a singular contribution to these debates by focusing not only on those who resist, but also on the many people who suffer the toxic impact of pesticides on their own bodies but choose not to engage in any form of collective action because they somehow benefit from this agricultural model.

With a clear ambition to investigate the complex web of power hidden behind the promising discourse of technological innovation for development, Leguizamón argues that research is needed to include the “human dimension of the issue”, to complement the literature on the political economy of soybeans that “has [mostly] studied sky-high macro processes” (p.14) by providing contextualized approaches also taking the meso- and micro-levels of soybean production into consideration. To do so, she proposes to zoom on the rural communities of the Pampas, Argentina’s historic agro-export sector. She wonders why, and how, consent over an unjust and environmentally unsustainable model of production is created and suggests that much of the consent comes from the fact that actors reap economic or cultural benefits and do not “see harm” (p.5). An original choice is made: the one to focus neither primarily on the powerful (CEOs of agribusinesses, soybean producers, state officials) nor on the powerless (such as indigenous peasants and working-class women,

¹ See for instance Lapegna (2016) for a recent example focusing on Argentina.

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who due to their class, gender and/or race occupy the lower rungs of society), but on the range of actors “in between”, i.e. “rural folks of the Pampas who are of European descent and who indirectly reap some of the benefits of soybean production [even if they also bear the impact of agrochemical exposure]: they are the employees of agribusinesses, landowners who rent their land for others to farm, the wives of soybean producers, and other professionals and business owners who benefit from rural economic development but are not ‘in the farming business’” (p.6). Her hypothesis is that these actors in between the powerful and the powerless are key to study because they play an important role in reproducing the status quo. Leguizamón proposes ‘synergies of power’ as “a conceptual shortcut to refer to the intersecting cultural and symbolic dimensions of domination that operate simultaneously and across time to create, compound, and legitimate environmental injustice” (p.15).

Overview and contributions of the book

Chapter 1 explores the “folktales” of Argentina in order to put the soy model into historical perspective, starting with the mythical guiding fictions that were instrumental in setting the basis of Argentine nation. Leguizamón carefully disentangles the cultural and symbolic dimensions ingrained in the minds of the intellectual and economic elites which governed the country for two centuries, turning a former Spanish colony into an agro-exporting nation. In the first part of the chapter, the cultural roots she explores vary from Sarmiento’s civilization/barbarism dichotomy, to Alberdi’s ‘civilization program’ to populate the desert with European immigrants (and eradicate, or at least tame, indigenous people), to Argentina’s belle époque thinking of itself as the “granary of the world”.

In the second part of the chapter, Leguizamón explains the political-economic context in which radical changes (Peron’s Import Substitution Industrialization model, the Green Revolution, the 1976 military coup, the “lost decade” of neoliberal reforms under Carlos Menem’s presidency) but also lasting continuities (the efforts to tame people from the countryside, the structural social and economy inequalities, the deep-rooted tendency to extractivism, the strong reliance on science and technology as engines of modernization and progress) took place, setting the scene for the early adoption, and significant expansion, of GM soybean cultivation. The chapter ends with a central piece in the legitimation of the neoliberal soy model (and the acquiescence of the environmental injustice coming with it) designed in the 1980s: so-called “new extractivism” as a mode of governing, which culminated with the arrival of Nestor and Cristina Kirchner to power at the turn of the millennium, in which the state controls a larger share of the revenues from commodity exports and uses the generated surplus to fund redistribution policies. The chapter closes with a brief description of the massive protest in 2008 (the ‘conflicto del campo’) demonstrations against the Kirchner government, when soy producers hit the street and complained about the President’s decision to increase export taxes on soybeans, which was the only parenthesis of Argentine history where glyphosate found itself in the center of public debates.

Chapter 2 begins with the description of the progressive transformation of the farm into a factory (including the rise of *contratistas*, rural contractors hired by soybean producers to plant, spray and harvest the crops). Leguizamón explains this happens in line with ecological modernization theories: not only are machines expected to relieve workers from hard physical labor, this agro-industry also thrives on the “promise that technological innovation will lead to sustainable development and that GM crops will ‘feed the world’” (p.62). She convincingly argues that new actors join the farming business and operate at a distance, fueling the ‘revolution in the Pampas’, i.e. the new agricultural paradigm, boosted by the adoption of the technological package and in which knowledge is the most important means of agricultural production (p.63).

The chapter then focuses more specifically on those actors “in-between the power spectrum” and it revolves around a puzzle that becomes central to the book: while they certainly suffer the harmful effects of the cultivation of transgenic soy (in particular, the spraying of agrochemical herbicide) in their bodies and their environment, the actors she meets (i.e., in soybean farms, or along the villages abandoned after the rural exodus pushed by the industrialization of agriculture) limit themselves to repeating that they “all live off the countryside” and that there are little negative impacts to their model of agriculture. In so doing, she contends, they conceal, minimize or invisibilize the negative impacts of soy cultivation. The reason, according to Leguizamón, is the alliance between corporations, the state and the mass media, which manipulate the perceptions of the community and constantly reassure it by invoking the state of scientific knowledge about the danger of agrochemicals (especially glyphosate), in order to emphasize the potential for development that accompanies the soy boom.

From this point on, chapter 3 aims at “delving into the micro-level of social interactions and emotions to show how acquiescence is enacted in everyday life” (p.95). It relies primarily on ethnographic fieldwork conducted in the rural town of Santa María, whose data are laid out to serve a central argument: in public, men and women agree on the immense benefits brought to the countryside by the soy boom (repeating the narrative “we all live off the countryside”) but, in private, women cautiously and hesitantly expose their doubts about the health problems associated with agrochemical fumigation, what the author names “latent grievance”. A limited number of field stories, very well contextualized, are mobilized to “prove how successful and efficient the workings of power have been to create [...] consent around GM soybean extractivism” (p.96). According to Leguizamón, this reflects the fact that the emerging concerns raised more or less explicitly by the women “in the safety of kitchens and courtyards” (p.98) ultimately result in silencing, self-policing and denial of health and environmental injustices.

In Chapter 4, Leguizamón broadens the spectrum of actors involved in synergies of power and considers the dynamics and collective social mobilizations, as well as their results, of “gendered and racialized subjects” who do not benefit at all from the soy model and who suffer harshly from its health and environmental consequences. Specifically, she draws on two extended fieldworks: one with the *Grupo de Madres de Barrio Ituzaingó Anexo*, an iconic group of mothers engaged in popular epidemiology activities (joining forces with scientific and professional experts

to demonstrate harmful environmental health effects) to protect their communities suffering from leukemia and other cancers; and another with the *Asemblea Malvinas Lucha por la Vida*, a coalition of neighbors that organized to “say no to Monsanto” in a village of the Córdoba region. The discussion also looks at the impact of these movements (or lack thereof) nationally and internationally, their intersection with other struggles, but also the obstacles they face from corporate and political elites, whose strategies Leguizamón dissects.

Throughout the book, the author analyzes the strategies by which state and corporate actors have managed to generate acquiescence and consent to a seemingly unjust and inequitable agricultural model. She argues that “structural inequities of class, gender, and race operate across the macro-, meso-, and micro-level of the Argentine political economy of soybean extractivism” (p.141). Her work encourages environmental sociologists and social scientists to look at those who are ‘in-between’ on the power scale, i.e. who benefit to some extent while bearing the costs to another extent, in order to tease out the power dynamics at play in health and environmental struggles. *Seeds of Power* will be very useful for social scientists working at the intersection of rural studies, environmental justice and social science. In addition, it is elegantly written, in such a way that no prior academic knowledge is required to appreciate its content. The writing style chosen also allows for regular use of ethnographic vignettes which are very useful in contextualizing and personalizing the story.

Limitations and avenues for further research

From my perspective, like any work this one has its limitations which I wish to present not as outright criticisms but rather as opportunities to pursue these important questions in future work. To start with, there is a discrepancy between the announced plan to zoom in on rural communities in the Pampas and to focus on the category of ‘in-between’ actors who benefit from and suffer from this agricultural model, and the direction the book takes towards the end. Indeed, no doubt driven by the frustration that the actors keep talking half-heartedly or in a roundabout way about the injustices they suffer, Leguizamón’s fieldwork took her far beyond the Pampas, as she followed the injustices associated with the expansion of the agricultural model based on GM soy in the province of Córdoba, where the powerless turned out to be the most demonstrative activists. Thus, contrary to the subject of the first two empirical chapters (chapters 2 and 3), the micro-level processes and actors she studies in chapter 4 are no longer ‘in-between’ actors: they are actors who do not benefit from GM soy and who are simply enduring, and vocally resisting, the agrochemical exposure on their bodies. There is no doubt that this is an interesting step to return to what does and does not constitute a trigger in the constitution of collectives of activists, but it also shows the limits of empirical work on actors ‘in-between’ on the power scale. Not only is the acceptance or rejection of the agricultural model by these actors ambiguous, it also makes it more difficult to use empirical results to support a strong normative commitment that is intended to be unambiguous, which is one of the ambitions of this book. Indeed, actors may not speak up, they may also

disagree with the idea, and the likely consequences on their modes of life, of struggling against the hegemonic organization of soybean agriculture. Even if it is an idea that may seem unpleasant to knowledgeable observers or just out of step with the times, there is still plenty of space to explain why and to take seriously the fact that so many of them continue to care for GM soy, repairing the cracks in the edifice and continuing to ride on the promises associated with it.

If I fully subscribe to the idea that status in social hierarchies and gender identities undoubtedly play a role in risk perception and the ability to speak out critically about environmental injustice, I sometimes got the feeling that the analysis was guided by Leguizamón's dismay and astonishment at so much passivity in the face of a socially and environmentally unjust situation. As a result, I felt that the presentation sometimes drifted towards overgeneralizations — certainly related to realities experienced and observed by the author (i.e., women play mainly the role of mothers and caregivers in their community, while men set themselves up as entrepreneurs, experts and bread-winners) — that lead her to force the line to describe only what one is supposed to see. For example, at the meeting with Mariana, “the only female agronomist employed in el campo [she] met in her fieldwork” (p.103 and following), it turns out that her discourse on glyphosate and agrochemical spraying is the same as that of the other (mostly male) interviewees. While this alignment could have led to interesting reflections on the multiple identities endorsed by the actors (Mariana is a woman, an expert, an engineer, perhaps a mother), her opinion is reduced to that of a clueless subject unable to do anything other than reproduce the hegemonic male discourse of the agricultural paradigm. In other words, this exception that challenges the gendered perspective one is offered to read is quickly reduced to the single angle of interactions between men and women, apparently typical of “the Argentine middle-class identity [which is] at its core white, anti-Peronist and the promoter of modernization and civilization” (p.109). To sum up, if I found the gendered perspective interesting to question the lack of reactivity of publics concerned by a form of environmental injustice but caught up in profit-making relationships of the model that generates this injustice, I would have liked more nuance, and perhaps more development based on the large amount of empirical data collected by the author, who is a little too eager to conclude that inaction or the absence of a critical discourse is just the result of synergies of power at work, and the unequal relationship between men and women within them.

In the same vein, the final section of the conclusion entitled ‘At distance to care’ returns to a significant part of the empirical data analyzed in the book, reminiscent of the whispers of farmers’ wives in Santa María (chapter 3) and the much more vocal actions of the mothers in Ituzaingo (chapter 4). This is to support the idea that modes of knowing and perceiving are cognitive, embodied, and emotional, but also to suggest that the commitment to caring for one’s loved ones is more evident, instinctive and in line with long-term sustainability among women than among men. Leguizamón goes even further by writing that “motherhood as a strategy could open a window of opportunity for activism” because feminized subjects “value long-term care at close distance” (p.146). This cannot be the whole story. In the neighbors who resist Monsanto in Malvinas Argentinas, are there no men? Can’t fatherhood also be associated with the desire to care for and protect one’s children, or just the

capacity to ‘see harm’? Wasn’t the Presidency of the Argentine nation in the hands of a woman between 2007 and 2015, the same woman who still holds the position of Vice-President today? Here too, as I pointed out above with the example of Mariana, the agronomist engineer, it seems too easy to dismiss any female (or male for that matter) counter-example with the argument that they have simply adopted and reproduced the prevailing masculine codes and power structures. To put it another way, it is not a question of rejecting the gendered reading of social or environmental conflicts, quite the contrary, but rather of considering that, on the one hand, this reading should not take up all the available space; and on the other hand, both analytically and strategically, it would be equally useful to examine what brings actors together in their struggles (not) to care for environmental justice, despite and beyond gender and race. There is a growing body of literature on matters of care in science and technology studies (de La Bellacasa, 2011), which could provide a starting point for further exploration of the important findings in this book.

My next point relates to how situated experiential knowledge of “in-between actors” is treated. Leguizamón offers the plausible explanation that danger or risk is harder to “objectively see” (p.86) than in other toxic environments (such as mining towns). Yet the reader senses that there is little room left for the lived experience of the actors who enjoy some trickle-down benefits of the soy model. In short, it seems like all these actors *must* suffer, whatever they say or think, because their minimal perception of danger is what prevents their collective mobilization. Apart from the conviction that they *should* mobilize, either on moral or scientific grounds, what does it take to maintain such continuities over space and time, across regions and identities? Inaction being also a form of action, what exactly makes these “in-between actors” exert their agency in this particular way? The lack of resistance and struggle in the face of environmental injustice cannot just be taken as the result of power differentials and manipulation by the elites. It is sometimes a strategy inspired by the rationality of the actors, precisely when they realize that the injustices that weigh on them are less prevalent than those affecting other parts of the population, who see themselves permanently downgraded in the social and power scale. It is important to understand (without necessarily being emphatic) *why* they choose not to mobilize against GM soy, and to accept the idea that it is also hard work not to resist a model about which one hear (and increasingly see) long-term health or environmental risks, but which is indispensable for the short-term security of existence, not only of the employees of the agribusinesses and their families, but also of the country in desperate need of currency.

In the same vein, the trouble the author experienced when she found herself in a harmonious, colorful and well-kept landscape, surrounded by orderly soybean plants, talking to people who have deliberately *chosen* to locate their houses near fumigation areas, i.e. to have GM soy *in their* backyard, may have been dealt with differently (i.e., on p. 89, she writes: “I was dumbfounded and confused”). In my view, rather than sweeping away otherness when it comes to perceptions of environmental injustices, staying with the trouble (Haraway, 2016) and using its agentivity as a generative force for empirical explorations could be a productive area for further research. This would allow for even more caring engagements, rendering perceptible the intimate and fragile link that exists between multiple forms of agency,

and insisting upon an active process of attunement that is never fixed once for all (Despret, 2013).

To finish, Leguizamón eloquently analyzes the agricultural boom in Argentina with a view mostly directed at addressing issues of environmental and social injustices (rural displacement, land concentration, food insecurity, deforestation, violence, and the negative health effects of toxic agrochemical exposure). Her central focus and interest in the dark side of GM soybeans and related social resistance movements will certainly appeal to the critical reader. On the other hand, the book tends to leave out the fact that in economic and political terms at least for some actors in the middle and upper parts of the synergy of power, the massive adoption of the glyphosate-tolerant soybeans was a great success, of which the consequences also need to be included in the overall analysis of the “soy-ization of Argentina” (Delvenne et al., 2013). In addition to the numerous social and environmental effects attributed to this agricultural production system analyzed here, further work would be welcome to challenge these debates by symmetrically addressing the dark and bright sides of the adoption of genetically modified soybeans, or the shades of grey in between. It would bring a unique perspective to grasp how and where the lines between the workings of various forms of power, across various scales — as well as power’s limitations — become visible in a synergy.

References

- de La Bellacasa, M. P. (2011). Matters of care in technoscience: Assembling neglected things. *Social Studies of Science*, 41(1), 85–106.
- Delvenne, P., Vasen, F., & Vara, A. M. (2013). The “soy-ization” of Argentina: The dynamics of the “globalized” privatization regime in a peripheral context. *Technology in Society*, 35(2), 153–162.
- Despret, V. (2013). From secret agents to interagency. *History and Theory*, 52(4), 29–44.
- Haraway, D. J. (2016). *Staying with the Trouble*. Duke University Press.
- Lapegna, P. (2016). *Soybeans and power: Genetically modified crops, environmental politics, and social movements in Argentina*. Oxford University Press.
- Leguizamón, A. (2020). *Seeds of power. Environmental injustice and genetically modified soybeans in Argentina*. Durham Duke University Press.

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