Rethinking Environmental Polarization and Pesticide Use in Argentina

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What is the relationship between sociopolitical polarization and environmental polarization in Argentina? On the basis of our ongoing research on farming and pesticides in the Argentine Pampas, we argue that polarized sociopolitical views do not map neatly onto environmental positions. More specifically, actors at odds in the sociopolitical field share common assumptions and support similar policies when it comes to pesticide use.

Long-established perspectives in rural studies looked closely at class ideology and interests, assuming a notion of personhood that understands subjects as rational, utilitarian actors moved by their self-seeking interests and/or captured by dominant ideologies. In the case of Argentine farmers, a widespread discourse in the social sciences and among environmental activists often portrays them in Manichean terms, making farmers using pesticides the "bad guys" for poisoning the environment and creating public health risks. This stance, we argue, misses that farmers often breathe the same air they spray, blurring the line between victim and perpetrator. Black-and-white characterizations may gloss over the fact that farmers firmly believe that there are few alternatives to using pesticides if they want to stay profitable, sustain their farms, keep their land, and reproduce their identity as farmers. We claim that a binary approach disregards too quickly the moral and subjective aspects underlying pesticide use and agrochemical exposure. We argue, then, that a polarizing approach that maligns farmers does not open much space for nuance and obfuscates our understanding of pesticide use. Analyzing the discourses of farmers "in their own terms," in contrast, reveals ambivalences and ambiguities in their understandings of pesticide use and agrochemical exposure.

In this contribution, we join researchers investigating how farmers see their activity beyond strictly economic terms (Córdoba 2018). In doing so, we aim to offer an alternative take to social sciences' predominant understandings of the "soybean boom" in Argentina (which are often fixated on suffering subjects), and redirect our gaze instead toward midsize farmers, socially embedded in the rural towns where they live. What alternative narratives emerge if the prism of "dark anthropology" (Ortner 2016) is balanced with an ethnographic disposition attentive to how people make moral sense of the universe of agrochemical-based agriculture?

Soybeans and Pesticides in Argentina

As shown by the dossier published in the Fall 2021 issue of *LASA Forum*, extractivist activities have come to dominate the economy of many Latin American countries, deepening the region's dependency on primary exports while bringing about new forms of socio-environmental destruction and dispossession. In Argentina, this regional model of "*maldesarrollo*" (Svampa and Viale 2015) is represented by the sweeping expansion of genetically modified (GM) soybeans and other agrochemical-dependent crops. The commercialization of genetically engineered herbicide-resistant soybeans in 1996 unleashed

a process of agricultural intensification that dramatically increased the use of agrochemicals in Argentina.

A quarter century after the introduction of GM crops, the social and environmental impacts created by agrochemical use are undeniable. Herbicide drifts that damage non-GM crops and contaminate the air, agricultural runoff polluting waterways, and overall worrying cancer clusters in rural towns and peri-urban populations are some of the consequences of Argentina's incorporation into the global "pesticide treadmill."[1] Several researchers have raised concerns about the consequences of widespread agrochemical use (among many others, see Domínguez and Sabatino 2010; Verzeñassi 2014; Beilin and Suryanarayanan 2017; Schmidt and López 2018; and Leguizamón 2020).

In our previous work, indeed, we tackled these issues. We wrote about the ways in which peasants affected by pesticide drifts resisted and accommodated the expansion of genetically modified crops and agrochemical exposure in Northern Argentina (Lapegna 2013, 2016) and, in the Pampas region, we focused on gender identities and the social organization of agroecological care (Kunin 2019), pesticides' risk perception and gender dynamics (Kunin and Lucero 2020), and rural high school students' exposure to pesticides (Kunin et al. 2019). Our ongoing collaborative research, in contrast, changes the focus from "suffering subjects" to more privileged actors, who nonetheless live and work in rural towns. We seek to offer a new perspective on GM crops and pesticide use in Argentina by "studying up" agricultural biotechnology and pesticides, focusing on the actors who use herbicides and benefit from soybean production (rather than only on those excluded from it).

Grietas and Continuities with Crucial Differences

Political polarization has been on the rise in Argentina. The Peronist administrations of Néstor Kirchner (2003–2007) and Cristina Fernández de Kirchner (2008–2015) rekindled economic neo-developmentalism and confrontation around "populism" in Argentina. The polarization between "Kirchneristas" and their detractors became particularly vocal, visible, and virulent in 2008. Then, agribusiness associations, farmer organizations, and people in rural towns across Argentina mobilized against an increase in soybean export taxes, with the support of media conglomerates and large portions of the urban middle classes. What became known as the conflict between the government and "*el campo*" crystallized what is popularly known in Argentina as "*la grieta*" (the crack): a metaphorical but real tension and division between pro- and anti-Kirchner positions. *La grieta* manifests both in the public sphere of national politics and the intimacy of family gatherings or workplace relationships—dynamics not that different from the *fútbol* rivalries pitting friends, acquaintances, and relatives against one another.

Yet, despite the sociopolitical chasm of *la grieta*, it would be hard to argue that there is environmental polarization in Argentina. Put differently, the diametrically opposed positions on environmental issues in Argentina do not even come close to the political polarization of the country. While environmentalism is gaining ground in Argentina, socio-environmental issues are far from being seriously incorporated into the political agenda—even when scholars and activists have been pressing the point. Journalist Darío Aranda, indeed, claims that support for soybean production in Argentina has become state policy: both neoliberal and neo-developmentalist governments supported the expansion of export-oriented agricultural production based on the "technological package" of GM seeds, agrochemicals, and large

[1] "The Pesticide Treadmill," Pesticide Action Network, https://www.panna.org/gmos-pesticides-profit/pesticide-treadmill.

machinery.[2] Kirchnerista administrations did little to alter the reliance on monocultures and agrochemicals of export-oriented agriculture. For example, during the administration of Cristina Fernández de Kirchner, the government proposed a plan to expand the area used for agriculture in 2011 (thus increasing the use of agrochemicals), promoted the installation of a Monsanto plant in Córdoba in 2012, and favored global agribusiness corporations (Lapegna 2016, 160; Lapegna 2017, 324). Former minister of science and technology Lino Barañao embodied the continuities across governments. Appointed by Cristina Kirchner in 2007, he publicly and repeatedly downplayed the toxicity of glyphosate and kept his position throughout the administration of Mauricio Macri.

There were, however, important differences between the rural policies of neoliberal governments (the Menem, De la Rúa, and Macri administrations) and those of neo-developmentalist administrations (the Kirchners and the current Fernández government). While neoliberal governments applied policies that hurt marginalized rural actors (e.g., eliminating regulations that supported smallholders in the 1990s or closing agencies and programs for rural development during the Macri administration), neo-development governments played both sides. Kirchnerista administrations favored the expansion of agribusiness but also created spaces, programs, and initiatives that had the avowed goal of supporting peasants, Indigenous peoples, small farmers, and the broadly defined category of "family farming." More recently, the Alberto Fernández administration created the first National Directorate of Agroecology, an office within the Minister of Agriculture, Fisheries, and Livestock.

Rethinking Pesticide Use in Argentina

Scholars have offered several political, economic, and institutional explanations for the support behind agrochemical-dependent agriculture in Argentina: a strategy of "export-oriented populism" (Richardson 2009), a dominant "bio-hegemony" (Newell 2009), the struggles of Kirchnerismo to stay in power (Lapegna 2017), the ideological underpinnings of neo-developmentalism (Barri and Wahren 2010), and the ability of a new agrarian entrepreneurial class to outmaneuver older farming classes (Gras and Hernández 2019) are some of them. While these analyses provide sound material and ideological explanations, they also leave important aspects out of the picture. By emphasizing class ideology and interests, these perspectives assume a notion of personhood that understands subjects as rational, unwavering utilitarian actors moved by their self-seeking interests and/or captured by dominant ideologies. While these are long-established perspectives in rural studies, we claim that they disregard too quickly the moral and subjective aspects underlying understandings of pesticide use and agrochemical exposure. How do farmers and people living in rural towns respond to the accusation that they are responsible for contaminating the air, water, and health in rural and semi-urban communities across the country? Besides "making money" or following the logic of progress, how do they think and feel about these issues? To address these questions, we draw from our ongoing collaboration on a larger project in which we apply an elemental anthropological principle, that is, to capture *in their own terms* the points of view of people using agrochemicals to understand pesticide exposure, environmental issues, and public health controversies.

Assuming a relational notion of personhood means that people who spray and people being sprayed, *fumigadores y fumigados*, are embedded in a social web of ambivalences and ambiguities. People residing in "sprayed towns" who either publicly denounce, stay silent, or hold doubts about the risks of pesticide exposure are often relatives, friends, or neighbors of the people who spray (Leguizamón 2020; Kunin 2019). In our research with the latter, we

2 Giuliana Sordo, "Entrevista a Darío Aranda: 'Las políticas extractivas van a continuar en el próximo gobierno, no importa quien gane," *La Primera Piedra*, March 18, 2015, https://www.laprimerapiedra.com.ar/2015/03/entrevista-a-dario-aranda-las-politicas-extractivas-van-a-continuar-en-el-proximo-gobierno-no-importa-quien-gane/.

noticed that they hesitate and express doubts about the risks of agrochemical exposure, torn between the constant messages of companies and public officials reassuring them that agrochemicals are safe and their concerns about applying agrochemicals where they live with their families. Pesticide-dependent agriculture results in "both, autonomy and dependence, care and disintegration. The more-than-human entanglements that are woven around this master plan are ambiguous and contradictory" (Müller 2021, 175). When taking emic, multiple, and multilayered points of view seriously and adopting an ethnographic approach that keeps romantic views, idealizations, and preconceptions in check, the resulting image is not a neatly divided, polarized picture but a fuzzy, nebulous field.

At first sight, public discourses on agrochemicals may suggest a field of clear-cut lines and definite positions. At the national scale, farmers' public discourses legitimize agrochemical use by downplaying the extent and risks of toxic exposure. But while the industry's minimization of the risk of pesticides may suggest a cynical or conspiratorial attitude, pesticides are also inserted in a narrative of imperative and sometimes even humanitarian need. Farmers usually think that they "cannot produce without pesticides" and that their production "feeds the world" to meet population growth. Pesticides are thought of as a (positive and morally charged) solution to world hunger.

The farmers we spoke to do not live in Argentina's large cities or abroad, but rather in small or medium-sized rural districts in the Pampas. "We all live off the countryside" is a common mantra in these places, and the uneven benefits of the soybean boom are often swept under the mantle of national and technological "progress." Given these material and ideological forces, it may not come as a surprise that protests against pesticides are few and far between, and that regulations aiming to curb pesticide use are seldom enforced (if at all). But protests of any kind are not habitual in these towns, where anti-anonymity sociability is prevalent (Kunin 2019), social control through gossip and rumors is strong (Kunin and Faccio 2021), social inequalities run deep, kinship ties are very important for doing business, and farmers are often prominent local figures. That is why Leguizamón (2020) talks about an "elephant in the field" in reference to the compliance and consent of local populations toward pesticide exposure.

What we are registering (which complicates a polarized approach), is that farmers keep their worries latent, their thoughts ambiguous, and their assertions ambivalent in the more intimate settings of in-depth interviews. We found three tropes that stand out. First, an ambivalence toward the risks of agrochemical exposure. Second, their own understanding of environmentalism, mainly devoted to "caretaking" of the soil, which is in turn informed by the "no-till" technique of planting seeds without plowing the land (a practice afforded by herbicide-resistant crops, since weeds are eliminated with herbicides instead of by plowing the land). Third, an assumption of pesticides as a "safety net" in a highly financialized mode of production where there is little room for productive failures or financial missteps.

First, the farmers we interviewed expressed ambivalent positions regarding the dangers of pesticide use. On one hand, they expressed mistrust toward the scientific literature showing links between herbicide exposure and cancer or other negative health impacts. They see these findings as biased or having "political" motivations intended to "demonize" them. Using their own bodies as evidence of the nonexistence of danger, they repeatedly shared that they live close to agricultural fields and that "nothing has ever happened" to them. Or they mentioned examples of people who have been working in the fields for decades and, if the claims about the toxicity of pesticides were true, "they would all be dead" by now. They also stated that agrochemicals like glyphosate are less dangerous than older herbicides like paraquat.

While adopting this somewhat dismissive stance toward the risks of pesticide exposure, some also expressed concerns about exposing their children, their pets, or their workers to

agrochemicals. Our interviewees, in other words, simultaneously expressed the existence and nonexistence of hazards associated with pesticides. They claimed that herbicides are not dangerous when properly used, while also underlining the precautions they need to take or expressing doubts about safety. This ambivalent understanding of toxic exposure is also a way of diluting the negative consequences of spraying pesticides or residing next to sprayed fields. In other words, we see these expressions as ways of making toxic exposure livable and as a means of building acceptance in their communities (for a similar situation in the city of Buenos Aires, see Auyero and Swistun 2009).

Second, many social scientists or environmental activists see farmers as unconcerned with the environment or mostly moved by "greenwashing" intentions. What we want to highlight is that the farmers we interviewed expressed their own understanding of environmentalism, mostly in relation to the health of soils. Following their own environmental imaginaries, they readily admitted that it is necessary to "take care" of the soil, seen as an asset in danger. They discussed these practices of soil care in terms of crop rotation, the incorporation of cover crops, and, when possible, reduction of agrochemical applications and use of "green label" products.

Third, farmers are often portrayed as confident, purely profit-seeking actors, who use pesticides in a Machiavellian way. We do not dispute that many Argentine farmers are well-to-do thanks to the agrarian boom. The farmers we interviewed, however, assess profitability under the light of past negative experiences, and profits assuage fears about going bankrupt or losing their land. For them, staying in business (and pesticides are a key part of that) is not only an economic issue. An agronomic failure or economic crisis would also mean to be seen as "losers" in their town, and for some of them that would also mean to be questioned by relatives for forfeiting the land patrimony bestowed to them. Farmers, instead, are proud of having outclimbed their parents on the social ladder and of weathering the 1990s, when the Argentine peso was pegged to the dollar and many farmers went bankrupt and had their land auctioned (Giarracca and Teubal 2001). Having lived through that process instilled a view of pesticides as a "safety net," a key tool in the stabilization of productive uncertainties. The package of herbicides and herbicide-tolerant seeds allows for no-till agriculture, reducing labor and simplifying management. Additionally, agrochemicals are usually bought in US dollars on credit, to be paid when the crops are sold. A weed infestation can ruin the crop, consume their income, and, potentially, drive them into debt. Pesticides thus become an imperative tool to reduce risks and keep the specter of bankruptcy at bay. The socio-natural assemblage of herbicide-resistant crops and their entangled ecological, productive, economic, and financial risks are what keep farmers awake at night, rather than environmental concerns *stricto sensu*.

These pressing issues and lines of convergence among apparently disparate phenomena may go unnoticed in some environmentalist discourses, where mentions of the materiality of agricultural production can be glaringly absent. To further complicate things, midsize farmers occupy multiple positions in globalized food systems. While farmers in the Pampas are certainly responsible for spraying people, crops, water, and animals and occupy a privileged position within Argentina's agrarian structure (e.g., in comparison to campesinos), they are also subordinate to the global agribusiness companies selling them inputs and those buying their products. And while they may occupy prominent positions as public figures in their "rur-urban" dwellings, they don't have the financial, economic, or political power of those who speak on their behalf on the national scene. By taking these constraints into account, we can be better attuned to the fact that farmers who are steeped in the system of monocrop production for export both reproduce and are trapped by the pesticide treadmill.

Argentina's agrarian boom not only provides an income to farmers; their profitability also allows them to reproduce their identity and see themselves as stewards of the land. Furthermore, the agrarian boom revitalizes the still powerful self-image of Argentina as a global power, or *el granero del mundo*. The pesticide-dependent

model of agricultural production thus allows farmers not only to keep their money in the bank but also their self-understanding as farmers. Pesticide-dependent agriculture allows Argentine farmers to maintain their position of relative privilege in their communities (and the nation) as their economic success with GM soybeans translates into social standing as successful entrepreneurs and local role models.

Conclusion

Writing about the challenges of analyzing GM crops, the anthropologist Glenn Davis Stone (2005, 208) compellingly argued that both technophile Malthusianism and un-nuanced Marxism share "an overriding commitment to an ethical black-and-white," dichotomous perspective and a tendency "to delegitimate an examination of the grays." Considering that a "complete transformation of crop biotechnology (putting the genie back in the bottle) seems impossible," a perspective attuned to gray zones "reaches for a more systemic and synthetic analysis of the sociocultural context into which genetically modified crops are being introduced" (Stone 2005, 214).

In this article, we heeded this stance and examined gray zones to problematize the relationship between sociopolitical polarization and environmental polarization; we offered a different narrative about pesticides use and agrochemical exposure, one in which ambiguities and ambivalences are not "resolved" or glossed over but rather explored in their generative capacity. We emerged from our conversations with farmers convinced that seeing them as either skillful, shrewd entrepreneurs or as careless, self-interested polluters leaves little room to incorporate the ambivalences and ambiguities that they express about monocropping and pesticides. A number of scholars (ourselves included) have paid close attention to the suffering victims of dispossession, the stoic heroes opposing those forces, and/or the evil corporations imposing them. We, in contrast, want to decamp from our echo chambers and keep "the romance of resistance" (Abu-Lughod 1990) at bay. As the humanistic social sciences have long established, understanding is not justifying or celebrating.

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