

The Gendered Dimensions of Resource Extractivism in Argentina's Soy Boom

by
Amalia Leguizamón

Analyzing resource extractivism as a gendered structure is important for understanding the complex social processes that create and perpetuate environmental injustice—both social inequality and environmental degradation—and for visualizing gendered resistances and opportunities for transformation. Applying Risman's approach to Argentina's soy model, six causal mechanisms at the institutional, individual, and interactional levels can be identified that serve either to maintain or to challenge the status quo: (1) resource distribution, (2) ideology, (3) identity work, (4) cognitive bias, (5) status expectations, and (6) state paternalism.

Analizar el extractivismo de los recursos como una estructura de género es importante para comprender los complejos procesos sociales que crean y perpetúan la injusticia ambiental—tanto la desigualdad social como la degradación ambiental—y para visualizar las resistencias de género y las oportunidades de transformación. Aplicando el enfoque de Risman al modelo de soja en la Argentina, se pueden identificar seis mecanismos causales a nivel institucional, individual y de interacción que sirven para mantener o desafiar el status quo: (1) distribución de recursos, (2) ideología, (3) trabajo de identidad, (4) perjuicio cognitivo, (5) expectativas de posición social, y (6) paternalismo estatal.

Keywords: *Argentina, Environmental justice, Gender, Extractivism, Soybeans*

The political economy of the environment in Latin America takes the form of extractivism. From a sociological perspective, this powers dynamics surrounding the control of natural resources that sustain life, the social and ecological consequences of those decisions, and the distribution of the resulting costs and benefits across society (Rudel, Roberts, and Carmin, 2011). Natural resource extraction for export—particularly of minerals, oil, and cash crops—has historically been central to Latin America's socioeconomic development. The logic of extractivism is that of a "treadmill of production" that, as it becomes more intensive, causes social and environmental decline (Schnaiberg and Gould, 1994). Leftist leaders elected in several Latin American countries around the turn of the twenty-first century have aimed to reduce the social inequalities resulting from neoliberal policies by redistributing the profits gained through extractivism. Yet, the paradigm of extraction—centered on control and domination of nature via technological innovation aimed at bringing efficiency,

Amalia Leguizamón is an assistant professor in the Department of Sociology and Core Faculty at the Stone Center for Latin American Studies at Tulane University.

modernization, and economic growth—has continued, and with it so have its negative social and ecological consequences (Gudynas, 2009).

Argentina has been at the forefront of neoliberal extractivism in Latin America (Giarracca and Teubal, 2013). No region in the country has escaped the treadmill of extraction: open-pit mining in the western Andes, hydraulic fracturing for shale gas and oil in southern Patagonia, and large-scale monocultures of genetically modified soy in the central Pampas and northern Chaco. Soybeans are the “golden egg” of the Argentine model, the key accumulation strategy for socioeconomic development under the country’s neoliberal and post-neoliberal governments (Leguizamón, 2014).

Argentina is the third-largest global grower and exporter of soybeans, which cover half of the country’s arable land and represent a third of total exports. The “soy boom” has fostered economic growth and, through taxes on exports, a reduction in poverty and inequality. However, it has also had negative social and environmental consequences, including health risks from agrochemical spraying and violent displacements of peasant populations whose land is expropriated. Critics emphasize the power imbalances this model creates, because soy exports disproportionately benefit the elite (Gras and Hernández, 2014) while the powerless bear a disproportionate share of the costs (Leguizamón, 2016b).

This article highlights gender as a key determinant of the unequal distribution of social and environmental benefits and risks under resource extractivism (Bell and Braun, 2010; Krauss, 1993). In a seminal piece, Risman (2004) argued that gender should be understood as a structuring force of social inequality just like politics and the economy. In response to her call to conceptualize gender as a social structure, I explore the gendered dimensions of large-scale soy production in Argentina. This approach sheds light on the complex social processes that create environmental injustice (both social inequality and environmental degradation), as well as on its gendered resistances and the opportunities for transformation.

Gender intersects with other structures of inequality, such as race, class, and ethnicity, to create multiple vectors of oppression and domination (Collins, 1990; Lugones, 2010). The socio-environmental movements that have emerged around the world to protest environmental injustice reflect this intersectionality: poor indigenous peoples are often at the forefront of these struggles (Martínez Alier, 2014; Toledo, Garrido, and Barrera-Basols, 2015). Moreover, women typically make up the majority of and are the leaders of such movements. For example, women are leading protests against mining in the Americas, from Appalachia (Bell, 2013) to the Andes (Jenkins, 2015). In looking at extractivism as a gendered structure, I do not consider gender the primary form of domination. Much of the literature on environmental justice, particularly in the United States, debates the relative impacts of various forms of domination (consider the emphasis on race in the environmental racism literature). Critics argue that a more fruitful approach for academic inquiry and activism is to analyze how different structures of inequality operate synergistically to exacerbate power and powerlessness (Gould, Pellow, and Schnaiberg, 2008). Exploring the synergies of power increases our analytical ability, a prerequisite for applying social theory to social change.¹

TABLE 1
Gendered Dimensions of Resource Extractivism in Argentina's Soy Boom

		<i>Dimensions of the Gender Structure</i>		
		<i>Institutional</i>	<i>Individual</i>	<i>Interactional</i>
Social Processes	(1) Distribution of resources: (M) Control over natural resources and technological innovation	(2) Ideology: (M) Techno-science (modernization = development)	(3) Identity work: (F) Collective identity of socio-environmental movement (motherhood, protectors of health and life)	(4) Cognitive bias, concern over health and environmental risks of agrochemical spraying: (M) No risk, best practice; (F) Main grievance
				(5) Status expectations: (M) Producers, breadwinners, experts; (F) Caretakers, housewives
				(6) State paternalism: (M) "Father knows best"; (M) "Father provides"

Source: Adapted from Risman (2004: 437).

Note: This table is not exhaustive but lists only those mechanisms analyzed in this article. (M) = male-dominated and associated with bio-hegemonic masculinity; (F) = female-dominated and associated with emphasized femininity.

This paper draws on archival and secondary research and on in-depth interviews with rural and peri-urban inhabitants of the Pampas region.² To identify how and why environmental injustice occurs, I analyze resource extractivism's structure along three dimensions: institutional, individual, and interactional (Table 1). Following Risman (2004), I identify six causal mechanisms that serve either to produce and reproduce inequality and injustice (the status quo) or to challenge it. This framework is similar to power structure research in political and economic sociology but looks specifically at gender relations (Connell and Messerschmidt, 2005). I focus on gendered actors and their identities, the gendered discourses they deploy, and the gendered institutions and organizations they belong to.

First, I describe the political economy of soybean production in Argentina. Against this background I focus on the male-dominated institutions with the power to control natural resources and technological innovation: agribusiness corporations and the state. These institutions promote the adoption of the technological package of genetically modified seeds using a male-dominated ideology based on the promise of increased growth, productivity, and profits. At the individual level, social structures constrain actions but also create opportunities for social change. In this section I look at the two most visible and successful movements against the soy model, the Madres de Barrio Ituzaingó Anexo (hereafter Mothers of Ituzaingó) and the Asamblea Malvinas Lucha por la Vida (Malvinas Struggle for Life Assembly—AMLV). Both are women-led movements organized around concerns over the risks to children's health posed by agrochemical drift. I then address the gendered interactions that create and maintain dominance and inequality in Argentina's soy boom. I follow gender

scholars who argue that it is critical to analyze masculinity and femininity as complementary relationships that serve to legitimate a structure of gendered inequality and domination (Connell and Messerschmidt, 2005; Schippers, 2007).

Scholars have argued that extractive economies exacerbate gender inequalities (Bell and Braun, 2010; Fabricant and Gustafson, 2014). Yet there has been little analysis of how unequal gender relations operate in agro-export contexts of South America (Ferro, 2013; Oliveira and Hecht, 2016) or how gender shapes the patterns of adoption and impact of genetically modified crops (Rauchecker and Chan, 2016; Schnurr, 2017). In response, this article theorizes and analyzes the gendered nature of the political economy and its resistances by exploring how and why gendered actors, practices, and institutions of resource extractivism produce and reproduce dominance and inequality, power and injustice in Argentina's soy agro-industry.

RESOURCE EXTRACTIVISM IN ARGENTINA: LARGE-SCALE SOY PRODUCTION FOR EXPORT

Argentina's development has historically relied on extraction and exportation of natural resources, in particular, large-scale capitalist agrarian production. In the era of neoliberal development, resource extractivism was first promoted under military rule in the late 1970s and expanded under President Carlos Menem's administration during the 1990s (Giarracca and Teubal, 2013). During the agro-export era of the late nineteenth and early twentieth centuries, when Argentina became a primary global exporter of wheat and beef grown in the Pampas, portrayals of the country as the "granary of the world" became the guiding myth of Argentine national identity (Shumway, 1991). In the late twentieth century, the extractivist model turned to "nontraditional commodities" in a global context of high commodity prices and demand, particularly from China and India, which led to booming soybean production.

Soybeans were first planted in the Pampas in the late 1960s. When the technological package of genetically modified seeds was adopted in 1996, production surged and it has continued growing steadily, from 30 hectares planted in the summer of 1969 to 20.6 million by the summer of 2015. Record production levels have produced record harvests, reaching 59 million tons of soybeans in 2016 (MAGyP, 2016). Ninety-six percent of soybean production is dedicated to the export market. In 2014, soybean exports (meal, beans, oil, and biodiesel) were valued at US\$20.6 billion, 30 percent of total exports (Simoes, 2016). Despite fluctuations in the global commodity market and adverse weather conditions, soybean production has maintained steady growth.

Néstor Kirchner was elected president of Argentina in 2003 on a post-neoliberal platform. He was succeeded by his wife, Cristina Fernández de Kirchner, in 2007 and reelected in 2012. Both were part of the "pink tide" of leftist leaders that swept the region in the early twenty-first century. They directed their countries into a form of neoextractivism that continued the neoliberal reliance on extraction and exportation of natural resources for socioeconomic development but with a key difference: the government regained control over the profits of extractivism with the goal of social redistribution to benefit the poor

(Gudynas, 2009). Under the Kirchner administrations, soybean exports were taxed at rates of 30 to 35 percent. These taxes funded a wide variety of social and infrastructure development programs, helping to legitimize the model and build its popular support.

The election of Mauricio Macri in December 2015 moved the pendulum back to the right. Macri's administration has already shown a clear intent to expand soybean-based extractivism by turning the country into an agro-industrial powerhouse, not just the "granary of the world" but the "supermarket of the world" (*La Nación*, December 14, 2015). To incentivize agricultural production, Macri has followed through on a major campaign promise to reduce agro-export taxes. For soybeans, the tax will drop by 5 percent annually. While it is too early to foresee the full implications of his economic policy, large-scale soy extractivism seems likely to continue, though its popular support and legitimacy may erode as wealth redistribution programs wane.

The further expansion of large-scale soy production hinges on the adoption of a technological package combining genetically modified soybean seeds with agrochemical spraying and no-till machinery. Genetically modified soybean seeds are herbicide-tolerant, meaning that farmers can seed directly without tilling to control weeds. Instead, they spray glyphosate-based herbicide, which kills weeds but not the genetically modified plants. The technological package offers farmers higher profits through increased scale and reduced costs (for labor and agrochemicals in particular). Profitability is a key motivation for agricultural producers to plant soy and adopt no-till farming (Trigo, 2011).

While large-scale soy agriculture has brought economic benefits, it has also had numerous negative social and ecological consequences, including deforestation, violent displacement of peasant and indigenous families from their land, and increased health risks due to agrochemical spraying, all of which have triggered socio-environmental protest movements (Cáceres, 2015). In the Pampas, these movements consist of "citizen assemblies" organized in defense of health and life following the spread of agrochemical-induced illnesses in their communities (Leguizamón, 2016b). To protect their children's health, women have put their bodies on the line to lead these protests (Aranda, 2015).

THE INSTITUTIONAL DOMAIN: BIO-HEGEMONIC MASCULINITY AND GENETICALLY MODIFIED SOY

A puzzling aspect of Argentina's soy model is the generalized, enthusiastic support it receives despite the social and environmental harm it creates. Newell (2009) coined the term "bio-hegemony" to explain how the corporate and state elite (the actors that adopt, promote, and benefit from genetic-modification biotechnology) are able to silence potential dissent and project soy extractivism as universally desirable and beneficial for society. He shows how support for biotechnology as a key accumulation strategy for Argentina has been secured through material, institutional, and discursive means.

Efforts to create bio-hegemony are relentless in the Global South and have become a major topic for scholars interested in the political economy of the environment and development (Schurman, 2017). An aspect not fully explored

in this literature, however, is how structured gendered dimensions embedded in bio-hegemony legitimate extractivism as the domination of man over nature in the pursuit of economic growth. Various material and discursive practices aim to produce and reproduce the subordination of nature to man, feminine to masculine, and women to men—what Connell and Messerschmidt (2005) term “hegemonic masculinity.” At the institutional level two social processes produce and reproduce environmental injustice by recreating gender inequality: distribution of resources and ideology. As Connell and Messerschmidt (2005) argue, these gender hierarchies are social constructions; they are not immutable but rather contextual, historical, and thus subject to change.

Controlling the distribution of material resources is a primary structural mechanism through which power is secured. From the standpoint of environmental political economy, the key question is which actors have the power to “control the institutions and organizations that produce and regulate the flows of material resources that sustain people” (Rudel, Roberts, and Carmin, 2011: 222). Newell (2009) demonstrates that in Argentina agribusiness corporations and the state are allied in a pro-biotech bloc with the material and legal power to control natural resources and guide technological innovation, including by establishing regulations that foster adoption of genetically modified seeds and classify glyphosate as not harmful to human health.

An analogous follow-up question from a gender relations perspective would be how these institutions and organizations are gendered and how they reproduce gendered inequalities (Kimmel, 2013). Politics and the economic world—the “public sphere”—are traditionally men’s place. Not surprisingly, men occupy almost all the executive positions in government and in the largest agribusinesses operating in Argentina. In government, with the exceptions of former president Cristina Fernández de Kirchner (2007–2015), former economic minister Felisa Miceli (2005–2007), and vice president Gabriela Michetti and governor of Buenos Aires province María Eugenia Vidal (both elected in 2015), since the neoliberal turn in the 1990s all executive positions³ important to biotechnology have been filled by men (a very consistent pattern since the agro-export model was established in the late 1800s).

While the women in government, particularly Cristina Fernández, have repeatedly highlighted the exceptionality of their position as female leaders in male-dominated institutions, gender scholars concur that women in positions of power are required to behave more according to the gendered (masculine) standards of the offices they hold than to their gendered (female) identity (Kimmel, 2013). A charismatic leader, Fernández has masterfully played with this tension, alternating between embodying femininity and a maternalistic ethics of care and a paternalistic attitude characteristic of many heads of state. In a famous speech she declared herself the “mother of all Argentines” while also asserting that her leadership position was akin to that of Juan Domingo Perón, an emblem of paternalist politics (*Clarín*, March 27, 2014).

Among the top 17 corporations operating across the Argentine soybean value chain—from seed and agrochemical inputs (e.g., Monsanto, Nidera) through processing and trading (e.g., Cargill, Bunge) to soybean production (e.g., Los Grobo, El Tejar, Cresud)—only 7 of the top 81 executive positions are

occupied by women.⁴ Los Grobo, one of the largest agribusinesses in Argentina and South America, is an interesting exception. After their father stepped down from the family business, Gustavo Grobocopatel became president and his two sisters assumed two of the remaining three leadership positions. Concerned over the lack of gender diversity in leadership positions and the barriers women face in reaching the executive level, Andrea Grobocopatel, director and vice president of Los Grobo, started the *Fundación Liderazgos y Organizaciones Responsables* to promote the development of professional and business women. In an interview with *La Nación* (April 30, 2016) she acknowledged that gender quotas in leadership positions are necessary because men and women have different motivations: “The engine that drives women to act is their emotional life.” Therefore, women reach different decisions; in particular, they “would not take decisions affecting people [because they] are much more careful,” she said, highlighting themes typically associated with feminine identity and expectations.

Gender roles at the production level of soy show an intensification of historical patterns of gender inequity and inequality in the region (Ferro, 2013). During the nineteenth century, European migrants settled in the Pampas and established a type of capitalist agriculture based on large-scale production for export. Known as *chacareros*, *gringos*, and *colonos*—a type closer to American farmers than to *campesinos*—they organized labor across traditional European gender lines, with men (husband/father and adult sons) responsible for the commercial farming and women for managing the home. Women did farm work when extra hands were needed, but with the introduction of mechanization in the late 1950s they were no longer needed and “completely disappeared from commercial agrarian production” (Stølen, 2004: 70, my translation). While women have equal rights to control land under Argentine inheritance laws, indirect mechanisms exclude them from control of agricultural production. In practice, males in the family tend to take over the farm while women migrate to cities to marry, study, or work (Ferro, 2013). The introduction of the technological package of genetically modified soy (which requires highly skilled labor) and the entry of financial investors into commodity production have exacerbated unequal gender patterns, leaving males in charge of agricultural production in the Pampas (Ferro, 2013; Stølen, 2015). The Pampas model of family-run entrepreneurial agriculture for export is rapidly transitioning into investment pool agribusinesses (known as *pooles de siembra*).⁵ The Pampas-style agro-export model has also subordinated subaltern peasant and indigenous communities and agro-ecological production systems oriented to the domestic market (Ferro, 2013).

Perhaps if women were to assume positions of power in agricultural production, its priorities would gradually shift toward a feminine ethics of care (Kimmel, 2013),⁶ but for now the few women in CEO positions have to compete as representatives of shareholders and therefore must reproduce bi-hegemony in order to stay in power. Grobocopatel, known as the “King of Soy,” is one of the main promoters of the agrarian “revolution” that has transformed Argentine agricultural production through constant technological innovation and expansion of the promise of genetically modified seeds to “feed the world” (Leguizamón, 2016a). At present, the mandate of soy extractivism

reflects the gendered identity of the men who control it: a rational-technical (masculine) mentality of domination and control of nature via scientific and technological innovation with the goal of increasing productivity and profits.

Ideology is a second mechanism that creates and, more significant, legitimates gendered inequality (Risman, 2004). Gramsci's (1972) concept of hegemony refers to the way ruling classes seek to maintain power by creating legitimacy. To maintain the status quo, it is crucial that the subordinated classes come to accept their situation. The greatest power comes when consensus is created around social hierarchies, whether of class, race, or gender. Thus, Gramsci emphasizes the significance of having power to manipulate cultural and symbolic practices to create consent. Newell (2009) shows that the pro-biotech bloc in Argentina has been able to promote bio-hegemony because it wields material and legal but also discursive power, especially through control of the mainstream media. Further, the hegemonic discourse of the soy model is based on the belief that constant technological innovation will naturally bring progress and development for the country (Gras and Hernández, 2016).

In equating genetically modified soy with modernization, development, and progress, bio-hegemony follows the logic of techno-science (Barri and Wahren, 2013), the Western belief that the fastest and widest possible control and appropriation of nature via scientific and technological innovation will unquestionably increase human well-being (Shiva, 1991). Feminist scholars have long denounced techno-science as a masculine logic that reproduces gender hierarchies (Harding, 2006). Lugones (2010: 745) argues that the "instrumental modern concept of nature central to capitalism" is closely tied to the modern dichotomous and hierarchical concept of gender. The desire to control a feminized and racialized nature is the epistemic and ontological premise of capitalist modernity.

Thus, paraphrasing Newell (2009) and Connell and Messerschmidt (2005), the male-dominated institutions that promote and benefit from resource extractivism in Argentina deploy bio-hegemonic masculinity—the material, institutional, and discursive practices that create and maintain patriarchal control, which, under neoliberal capitalism, has assumed this particular extractive form against women and nature with the adoption of biotechnology. Oppression also works by excluding feminized subjects from the realm of power struggles. As de la Cadena (2010) argues, Gramsci's hegemony at work is not specific to politics (as pertaining to the way those in power curb or cancel conflict) but also determines who is worthy of participating in the political sphere. Male-led and male-dominated institutions often exclude women from power in a democracy. The handful of women that may gain positions of power is more likely to reproduce bio-hegemonic masculinity than to foster progress.

As Gramsci implied, however, the need to create consent exists because underneath hegemony there is always the possibility of dissent. Hegemonic masculinities and femininities are contextual and historical and thus open to challenge and change (Connell and Messerschmidt, 2005), as women-led socio-environmental movements in Argentina illustrate.

IDENTITY WORK: MOTHERS ORGANIZE FOR HEALTH AND LIFE

The Mothers of Ituzaingó and the AMLV are two of the most important movements in the country against large-scale soy production. The sites of struggle for these organizations are, respectively, the neighborhood of Ituzaingó Anexo and the town of Malvinas Argentinas. Located 20 miles apart, both are working-class enclaves in the industrial belt surrounding Córdoba, the capital of Córdoba province. Córdoba province has the second-largest economy in the country, relying primarily on agro-industry and car manufacturing, and is the second-largest grower of genetically modified soybeans in the Pampas region. Córdoba city, in the heart of the province, is the second-largest urban center in Argentina. Its economy is diversified across services and manufacturing, with the surrounding areas dominated by soy farms. Many residents in the industrial suburbs of Córdoba city are regularly exposed to toxins from industrial facilities (e.g., car factories, bioethanol plants) and agrochemical spraying from neighboring farms.

Across South America, the use of glyphosate-based herbicides has increased dramatically with the expansion of herbicide-resistant genetically modified soy monocultures (Catacora-Vargas et al., 2012). The emergence of glyphosate-resistant weeds has prompted farmers to apply greater volumes of glyphosate combined with more toxic agrochemicals, such as 2,4-D, dicamba, and endosulfan (Binimelis, Pengue, and Monterroso, 2009). In 2016, agrochemical and fertilizer use in Argentina rose by 50 percent from the previous year, reaching 3.9 million tons (Infocampo, 2017). In 2014, 88,000 tons of glyphosate were sprayed over 20 million hectares of genetically modified soy (Benbrook, 2016). Within Argentina, physicians have documented increased rates of miscarriages and congenital birth defects among mothers with a history of direct exposure to pesticides (REDUAS, 2010). Moreover, the costs of pesticide drift (the unintentional diffusion and potential negative effects of agrochemical spraying) are disproportionately borne by the poor, farmworkers, peasant and indigenous families, women, and children (Harrison, 2011; Lapegna, 2016).

The Mothers of Ituzaingó were among the first to organize against agrochemical spraying in Argentina and have since become a model for other groups organizing against it (GRR, 2006; REDUAS, 2017). The group formed in early 2002, when 16 working-class women with no formal organizing experience united to examine why so many family and community members, young and old, were sick and dying. They knew that the water was polluted, probably by the local car factory or the electric power plant. They wondered if the crop dusters spraying agrochemicals over the soy fields down the street—fields where children played—were also to blame, observing that people commonly suffered from headaches, coughing, and skin rashes after spraying. With marches and picketing, they pressured the authorities to test the water and run blood studies. The results confirmed their suspicions: there were higher than average residues of agrochemical and industrial pollutants in the water and in their bodies. They mapped more than 200 cases of cancer, respiratory and skin diseases, miscarriages, and birth defects in a neighborhood of 5,000 (Carrizo and Berger, 2009). In 2012, in alliance with academics and scientists, they won a historic lawsuit against a soy producer and a crop duster for willful

environmental pollution, the first of its kind in Latin America (Arancibia, 2013). Yet, 15 years into their struggle, they continue demanding that authorities provide the promised medical treatment to those affected in their neighborhood, which was long ago declared a health emergency (*La Nueva Mañana*, September 27, 2017).

According to the 2010 census, Malvinas is the poorest city in the province; of its 12,187 inhabitants, 25.7 percent are unable to fulfill their basic needs, two-thirds are unemployed or underemployed, and 70.4 percent have no health insurance. Local doctors have identified among its residents a host of illnesses characteristic of pesticide drift: lung disease, dermatitis, tumors, cancers, congenital malformations in children, and the highest rate of miscarriages in the country (22 per 100) (Ruderman et al., 2013). Yet, in Malvinas, as in most soy towns in Argentina, residents did not identify agrochemical pollution as a grievance worth mobilizing for—until Monsanto arrived in town. In June 2012 President Fernández announced Monsanto's plans to build Latin America's second-largest genetically modified seed factory in Malvinas. Less than half a mile from the public school, the factory would have had 240 silos operating day and night, potentially spewing toxic fumes into the community. Concerned about their children's health, a coalition of neighbors organized as the AMLV in mid-2012 to halt the construction of the plant pending environmental impact assessments. Under the rallying cry "A Spring without Monsanto," protesters blockaded the road to the construction site in September 2013, eventually creating a permanent occupation that effectively halted Monsanto's construction plans for over three years. In early 2017, Monsanto sold its land and left town (*La Voz del Interior*, April 23, 2017). The struggle of the AMLV is a symbolic David-over-Goliath story told among the many anti-Monsanto movements around the world (Sitrin, 2015).

The Mothers of Ituzaingó and the AMLV, like socio-environmental movements around the world, are mostly composed of and led by women. Their main motivation for protesting the soy industry is concern for the health of community members, children in particular, echoing global calls to protect health and life against the social and environmental hazards of large development projects (Bell, 2013; Jenkins, 2015; Martínez Alier, 2014; Toledo, Garrido, and Barrera-Basols, 2015). Health concerns are a common grievance among direct sufferers of agrochemical spraying, whether they mobilize or not (Lapegna, 2016). In interviews, activists singled out their identity as women, as mothers and grandmothers, as a major catalyst for mobilization, referring to women's "instinct" to protect their children. In their understanding, when their children are sick, it is mothers' "duty" to protect them.

"Why women only?" I asked the Mothers when I interviewed them in August 2015. "I don't know why," one replied,

but it's always the women. When you watch the news about a community claim, who is the one talking? A woman. Always. I've been paying attention now, when there is a claim, even if so small as a demand for a light bulb, it is a woman who is at the lead. Not to mention a child, the death of a child. It's always women. Women are more able to express what is going on, what the needs are. Men . . . yes, they are able to speak up, but women have something more special. Something special!

A second activist continued the thought: “It’s because of being a mother! The woman is mother, nurse, teacher, doctor . . . everything! Because when you have a child, you know before the doctor if he is running a fever, what’s hurting, what’s going on with him.” These experiences reflect how women, so often at the heart of communities struck by the poverty and precarious consequences of neoliberal restructuring, have become central actors in the struggles for social and environmental justice in Latin America and across the Global South. Subaltern women, excluded from traditional sources of privilege and power and usually presented as poor victims, are leading revolts from below in a marked feminization of resistance (Motta, 2013; Motta and Seppälä, 2016).

At the individual level, identity work is a third mechanism that shapes and transforms gendered social structures that may superficially appear static. Poor and working-class women activists of Barrio Ituzaingó and Malvinas Argentinas have created a shared identity around motherhood that allows them to challenge the existing paternalistic structure. Motherhood catalyzes opposition to genetically modified soy around themes traditionally associated with women’s expectations and identities. This is not simply identity-based politics or narrow protection of the private but rather a challenge to private-public dichotomies through a politicization of motherhood (Mason-Deese, 2016; Motta and Seppälä, 2016). For the Mothers of Ituzaingó, choosing to identify themselves as “mothers” is clearly a political act (Carrizo and Berger, 2009; Torrado, 2016). It is a direct reference to the Mothers of the Plaza de Mayo, their “role models,” as they told me, whom they also resemble in their protest performances.⁷ Most important, identifying themselves as mothers gives them both legitimacy and protection from those who may want to question (or silence) their activism; in their words, “No one could tell you, ‘Who authorized you [to protest]?!’ The fact of being a mother already authorized you to speak up. No one could question you, if my son is sick, if I want to denounce [what happened to] him, [or] take him wherever I want” (quoted in Carrizo and Berger, 2009: 241, my translation).

Womanhood and motherhood thus become catalysts and justifications for activism. Women activists defend their right to protect their children and, by extension, the community and the environment (see Bell, 2013). As a female AMLV leader told me, “[We have to understand that] environmentalism is not a romanticism but a common good. It is a matter of survival.” The struggle for health and life is a struggle for clean water, clean air, access to health care, safe jobs—in short, for social and environmental justice.

By politicizing the personal, women activists challenge traditional divisions between public and private spheres. Previously excluded from political debates, feminized and poor subjects take center stage as political actors who challenge extractivism and the macro-structures of power by promoting an ethics of care for family, community, and environment. Womanhood, motherhood, family, and community thereby become a “terrain of resistance” (Motta, 2013: 44). By raising awareness of the health hazards of the genetically modified agricultural model and demanding that protection of health and life take precedence over production, growth, and profitability, women activists are challenging bio-hegemonic masculinity. Gendered interactions within the political economy of soybeans in Argentina can shed further light on the relationship between male and female actors.

GENDERED INTERACTIONS

The third dimension that structures gender inequality is gender-based cultural expectations attached to men's and women's interactions. Gendered interactions are "the means by which status differences shape expectations and the ways in which in-group and out-group membership influence behavior" (Risman, 2004: 436). Certain interactional-level social processes help to explain why the logic and actors for and against extractivism are divided along gender lines, recreating gendered outcomes and environmental injustice: a cognitive bias in relation to the perceived risks of agrochemical spraying, different statuses and role expectations for men ("producers," "breadwinners," "experts") versus women ("caretakers," "mothers," "housewives"), and state paternalism that legitimates extractivism on a national level.

A salient finding of my interviews with people who lived or worked on or near large farms and thus were at greater risk of pesticide drift was that women were far more likely than men to express concerns over potential health hazards. Men were more likely to be skeptical of possible risks and to describe agrochemical spraying (especially glyphosate) as harmless. This gendered cognitive bias cut across class: male rural workers were more likely to support agrochemical use, while the middle- and upper-class wives of soybean producers were more likely to question its safety. (I did not encounter women with decision-making power over agricultural production—a reflection of how male-dominated this sphere is.)

Cognitive bias is the result of different status expectations for men and women (Risman, 2004). In line with traditional gender roles, the male agriculturalists I interviewed defined themselves as "producers" and "experts." They identified the benefits of large-scale farming in bio-hegemonic masculine terms: increasing efficiency and profits and creating jobs. All the female rural inhabitants I interviewed, whether or not they benefited directly from agro-industrial production, embraced the traditional female role of caretaker. While motherhood is an identity shared by poor and working-class women who do not benefit directly from the soy model and who organized against it, even women who do benefit, either directly (household income comes from farming) or indirectly (their husbands work in agriculture or are business owners who benefit from prosperity in rural towns), often expressed concern about the potential health risks of agrochemical use, in particular for their children, family members, and neighbors.

Gender scholars use the concept of "emphasized femininity" in opposition to hegemonic masculinity to refer to the practices women engage in to construct gender inequality vis-à-vis men, as wives, daughters, etc. (Connell and Messerschmidt, 2005; Schippers, 2007). Emphasized femininity focuses on the interplay between masculinities and femininities and especially on the ways women comply with the gender hierarchy. By deploying motherhood and their duty as caregivers to legitimate their right to protest against agrochemical spraying, the Pampas's women place themselves in a bind: they challenge bio-hegemonic masculinity by performing emphasized femininity. In other words, by embracing motherhood as a practice of emphasized femininity women fulfill their role expectations, but by questioning and protesting the status quo

they challenge them. Hence, they break from traditional gender roles by conforming to them, potentially a reason their efforts have so far been insufficient to transform the gendered structure of extractivism.

Men continue to demonstrate masculinity by wielding power over women through stereotypical gendered interactions. For example, the Mothers of Ituzaingó recalled gendered insults such as being called “crazy” and “irrational.” At meetings with male public health officials, they were reprimanded for questioning “expert” authority and called “uneducated housewives” (Carrizo and Berger, 2009: 243). In Malvinas Argentinas, the protests against the Monsanto plant pitted neighbors against each other. Many male residents supported construction on the basis of the promise of much-needed jobs and countered female activists by citing their role as breadwinners for their families. A female AMLV leader said that she often replied to those men, “You give them bread, I save their lives!” This legitimized her activism but reinforced stereotypical gendered roles.

The final important mechanism reproducing environmental injustice in Argentine soy production is state paternalism. The state has projected a “father knows best” attitude by passing laws and regulations that promote the large-scale soy model without input from civil society, beginning with the approval of genetically modified seeds for commercial use in 1996 (Verbitsky, 2009). A main contention of AMLV activists is that Monsanto received approval to start construction without the required prior consent from the community. In general, and at all levels, the government has established itself as the expert authority that determines risk, demanding trust and acquiescence from the population. Most significant in this regard, government agencies continue to classify glyphosate-based herbicides as harmless if used according to best practices.

Paternalism of the “father provides” type became more prevalent under the Kirchner administrations through their emphasis on directing the profits of extractivism to government antipoverty interventions. During these administrations, the 30–35 percent federal tax on soy exports funded a series of social welfare programs, such as Plan de Jefes y Jefas de Hogar (Plan for Male and Female-Headed Households), Plan Familias (Families Plan), and Asignación Universal por Hijo (Universal Child Allowance). While no one doubts the importance of these programs in a context of high poverty and unemployment, critics argue that they did nothing to promote paid employment. Instead, they served to reinforce women’s traditional gender roles as housewives and mothers (Lopreite, 2015). In general, cash transfer programs, compared with social programs focusing on income and job creation, reinforce citizens’ dependency on the state. Paternalism is at the core of the collective memory of the Peronist-style politics that were revived under the Kirchners (see Auyero, 1999). Thus, redistribution legitimates the gendered natural resource extraction model while increasing dependency on the state and, in consequence, fosters quiescence and discourages mobilization.

CONCLUSION

Gender is a key structuring force of environmental injustice and its resistances in soybean-based resource extractivism in Argentina. In this article I have

explored certain institutional, individual, and interactional social processes in order to conceptualize and analyze the gendered (and classed) nature of the political economy and forms of resistance to it.

The male-led and male-dominated institutions that control natural resources and technological innovation produce and reproduce bio-hegemonic masculinity. Political and economic elites have garnered public consent for soy extractivism based on a rational-technical mentality of domination and control over women and nature. While touted as promising modernization and development, genetically modified crops (and, one could argue, technological innovation to speed extractivism in general) actually become a tool of power that promotes quiescence and consent in the face of environmental injustice by subordinating and exploiting feminized (and racialized) subjects and nature.

Poor and working-class women, traditionally excluded from the political realm, have taken center stage to challenge bio-hegemonic masculinity. Female leaders in Barrio Ituzaingó and Malvinas Argentinas have politicized motherhood, challenging the traditional divisions between public and private spheres. By organizing to demand an ethics of care for family, community, and the environment, women activists have challenged the capitalist political economy and patriarchy.

Deploying motherhood traps women activists in a contradiction, however. They challenge bio-hegemonic masculinity by performing emphasized femininity—recreating hierarchical gender relations. Political and economic elites respond with traditional gendered insults and practices to silence and discipline them. There is an inherently gendered dimension to political-economic relations, but because of its hierarchical nature it constrains even as it drives resistance.

In the two decades since genetically modified seeds were adopted in Argentina, the soy model has created economic growth but also extensive social and ecological harm. The costs and benefits of the model have been very unequally distributed, increasing profits for elites by pushing the externalized costs of production downstream and downwind into poor and working-class communities and over the lives and territories of indigenous peoples. Gender, class, and racial analyses of the political economy and its resistance are urgently needed. Only by understanding the multiple axes of domination and inequality at play in resource extractivism can we identify opportunities to rethink and enact socio-environmental relations that prioritize care over profits, life over a political economy of destruction.

NOTES

1. My analysis focuses on gender and, at times, on the way gender intersects with class to create injustice and mobilization. Because there is no substantial indigenous-peasant population in the region of study, the Pampas, I have not looked at the nuances of Argentines' race/ethnic hierarchies in depth. For information on the way indigenous-peasant people resist and accommodate to genetically modified soybean production in northern Argentina, see Lapegna (2016).

2. The Pampas, where more than 80 percent of Argentina's soybeans are grown, has historically been Argentina's agro-export region. It encompasses the provinces of Buenos Aires, La Pampa, Córdoba, Santa Fe, and Entre Ríos. Interviews took place in 2011–2012 and 2015. I conducted 45

interviews with rural workers, small, medium-sized, and large soy producers, rural contractors, agribusinesses employees and CEOs, members of the Madres de Barrio Ituzaingó and Asamblea Malvinas Lucha por la Vida, researchers of the Consejo Nacional de Investigaciones Científicas y Técnicas, and rural inhabitants who do not profit directly from soy production. Interviews quoted with members of the two women's organizations took place in August 2015.

3. The presidency, the vice presidency, the governorships of provinces in the Pampas region, the ministers of agroindustry (until 2009 of agriculture) and the economy, and, in 2016, the leaders of the agencies responsible for regulating biotechnology, the Servicio Nacional de Sanidad y Calidad Agroalimentaria, the Instituto Nacional de Tecnología Agropecuaria, and the Comisión Nacional Asesora de Biotecnología Agropecuaria.

4. The top 17 agribusinesses are from Regunaga (2010). Executives' names are from Dow Jones Factiva (accessed July 19–20, 2016).

5. Los Grobo is a good example of the transition of a European immigrant family farm to a nonfamily agribusiness trading in the global financial market (see Leguizamón, 2016a).

6. A feminine ethics of care emphasizes context, unequal power relations, and affect. Recent scholarship calls for applying this ethics of care to the appraisal and regulation of agricultural biotechnology (see Preston and Wickson, 2016).

7. On the nineteenth of every month, the Mothers of Ituzaingó, their allies, and their sick children and family members march in Córdoba's courthouse square with their mouths covered by surgical masks, evoking the Mothers of the Plaza de Mayo with their headscarves.

REFERENCES

- Arancibia, Florencia
2013 "Challenging the bioeconomy: the dynamics of collective action in Argentina." *Technology in Society* 35 (2): 79–92.
- Aranda, Darío
2015 *Tierra arrasada: Petróleo, soja, pasteras y megaminería*. Buenos Aires: Editorial Sudamericana.
- Auyero, Javier
1999 "Re-membering Peronism: an ethnographic account of the relational character of political memory." *Qualitative Sociology* 22: 331–351.
- Barri, Fernando and Juan Wahren
2013 "El modelo del 'agronegocio' en la Argentina: el paradigma cientifista-tecnológico," pp. 73–96 in Norma Giarracca and Miguel Teubal (eds.), *Actividades extractivas en expansión: ¿Reprimarización de la economía argentina?* Buenos Aires: Antropofagia.
- Bell, Shannon
2013 *Our Roots Run Deep as Ironweed: Appalachian Women and the Fight for Environmental Justice*. Urbana: University of Illinois Press.
- Bell, Shannon and Yvonne Braun
2010 "Coal, identity, and the gendering of environmental justice activism in central Appalachia." *Gender and Society* 24:794–813.
- Benbrook, Charles
2016 "Trends in glyphosate herbicide use in the United States and globally." *Environmental Sciences Europe* 28 (3). doi:10.1186/s12302-016-0070-0.
- Binimelis, R., W. Pengue, and I. Monterroso
2009 "'Transgenic treadmill': responses to the emergence and spread of glyphosate-resistant Johnsongrass in Argentina." *Geoforum* 40: 623–633.
- Cáceres, Daniel
2015 "Accumulation by dispossession and socio-environmental conflicts caused by the expansion of agribusiness in Argentina." *Journal of Agrarian Change* 15 (1): 116–147.
- Carrizo, Cecilia and Mauricio Berger
2009 *Estado incivil y ciudadanos sin estado: Paradojas del ejercicio de derechos en cuestiones ambientales*. Unquillo, Córdoba: Narvaja Editor.
- Catacora-Vargas, G., P. Galeano, S. Agapito-Tenfen, D. Aranda, T. Palau, and R. Nodari
2012 *Soybean Production in the Southern Cone of the Americas: Update on Land and Pesticide Use*. Cochabamba, Bolivia: Virmegraf.

- Collins, Patricia Hill
1990 *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. New York: Routledge.
- Connell, R. W. and James Messerschmidt
2005 "Hegemonic masculinity: rethinking the concept." *Gender and Society* 19: 829–859.
- de la Cadena, Marisol
2010 "Indigenous cosmopolitics in the Andes: conceptual reflections beyond 'politics.'" *Cultural Anthropology* 25: 334–370.
- Fabricant, Nicole and Bret Gustafson
2014 "Moving beyond the extractivism debate, imagining new social economies." *NACLA Report on the Americas* 47 (4): 40–45.
- Ferro, Silvia
2013 *Género y propiedad rural: República Argentina*. 2d edition. Buenos Aires: MAGyP.
- Giarracca, Norma and Miguel Teubal (eds.).
2013 *Actividades extractivas en expansión: ¿Reprimarización de la economía argentina?* Buenos Aires: Antropofagia.
- Gould, Kenneth A., David N. Pellow, and Allan Schnaiberg
2008 *The Treadmill of Production: Injustice and Unsustainability in the Global Economy*. Boulder: Paradigm.
- Gramsci, Antonio
1972 *Selections from the Prison Notebooks*. New York: International.
- Gras, Carla and Valeria Hernández
2014 "Agribusiness and large-scale farming: capitalist globalisation in Argentine agriculture." *Canadian Journal of Development Studies* 35: 339–357.
2016 "Hegemony, technological innovation, and corporate identities: 50 years of agricultural revolutions in Argentina." *Journal of Agrarian Change* 16: 675–683.
- GRR (Grupo de Reflexión Rural)
2006 "Pueblos fumigados: informe sobre la problemática del uso de plaguicidas en las principales provincias sojeras de la Argentina." <http://www.grupodereflexionrural.com/trabajos/Plaguicidas%20en%20la%20Argentina.pdf> (accessed October 4, 2016).
- Gudynas, Eduardo
2009 "Diez tesis urgentes sobre el nuevo extractivismo," pp. 187–225 in Jürgen Schuldt (ed.), *Extractivismo, política y sociedad*. Quito: Centro Andino de Acción Popular.
- Harding, Sandra
2006 *Science and Social Inequality: Feminist and Postcolonial Issues*. Urbana: University of Illinois Press.
- Harrison, Jill
2011 *Pesticide Drift and the Pursuit of Environmental Justice*. Cambridge: MIT Press.
- Infocampo
2017 "El consumo de agroquímicos y fertilizantes creció 47,1% en 2016." January 13. <http://www.infocampo.com.ar/el-consumo-de-agroquimicos-y-fertilizantes-crecio-471-en-2016/> (accessed October 5, 2017).
- Jenkins, Katy
2015 "Unearthing women's anti-mining activism in the Andes: Pachamama and the 'mad old women.'" *Antipode* 47: 442–460.
- Kimmel, Michael
2013 *The Gendered Society*. New York: Oxford University Press.
- Krauss, Celene
1993 "Women and toxic waste protests: race, class and gender as resources of resistance." *Qualitative Sociology* 16 (3): 247–262.
- Lapegna, Pablo
2016 *Soybeans and Power: Genetically Modified Crops, Environmental Politics, and Social Movements in Argentina*. New York: Oxford University Press.
- Leguizamón, Amalia
2014 "Modifying Argentina: GM soy and socio-environmental change." *Geoforum* 53: 149–160.
2016a "Disappearing nature? Agribusiness, biotechnology, and distance in Argentine soybean production." *Journal of Peasant Studies* 43: 313–330.

- 2016b "Environmental injustice in Argentina: struggles against genetically modified soy." *Journal of Agrarian Change* 16: 684–692.
- Lopreite, Debora
2015 "Gender policies in Argentina after neoliberalism: opportunities and obstacles for women's rights." *Latin American Perspectives* 42 (1): 64–73.
- Lugones, María
2010 "Toward a decolonial feminism." *Hypatia* 25: 742–759.
- MAGyP (Ministerio de Agroindustria)
2016 "Datos abiertos de agroindustria." <https://datos.magyp.gob.ar/> (accessed October 4, 2016).
- Martínez Alier, Joan
2014 "The environmentalism of the poor." *Geoforum* 54: 239–241.
- Mason-Deese, Liz
2016 "Unemployed workers' movements and the territory of social reproduction." *Journal of Resistance Studies* 2 (2): 65–99.
- Motta, Sara C.
2013 "'We are the ones we have been waiting for': the feminization of resistance in Venezuela." *Latin American Perspectives* 40 (4): 35–54.
- Motta, Sara C. and Tiina Seppälä
2016 "Feminized resistances." *Journal of Resistance Studies* 2 (2): 5–32.
- Newell, Peter
2009 "Bio-hegemony: the political economy of agricultural biotechnology in Argentina." *Journal of Latin American Studies* 41: 27–57.
- Oliveira, Gustavo and Susanna Hecht
2016 "Sacred groves, sacrifice zones and soy production: globalization, intensification and neo-nature in South America." *Journal of Peasant Studies* 43 (2): 251–285.
- Preston, Christopher and Fern Wickson
2016 "Broadening the lens for the governance of emerging technologies: care ethics and agricultural biotechnology." *Technology in Society* 45: 48–57.
- Rauchecker, Markus and Jennifer Chan (eds.).
2016 *Sustentabilidad desde abajo: Luchas desde el género y la etnicidad*. Buenos Aires: CLACSO.
- REDUAS (Red Universitaria de Ambiente y Salud)
2010 *Informe Primer Encuentro Nacional de Médicos de Pueblos Fumigados*. <http://www.reduas.com.ar/informe-encuentro-medicos-pueblos-fumigados/> (accessed October 5, 2017).
2017 "Agronegocio, entre Barrio Ituzaingó y Barrio San Antonio." September 9. <http://reduas.com.ar/agronegocio-entre-bo-ituzaingo-y-bo-san-antonio/> (accessed October 5, 2017).
- Regunaga, Marcelo
2010 *Implications of the Organization of the Commodity Production and Processing Industry: The Soybean Chain in Argentina*. Washington, DC: World Bank, Latin America and the Caribbean Region.
- Risman, Barbara
2004 "Gender as a social structure theory wrestling with activism." *Gender and Society* 18: 429–450.
- Rudel, Thomas K., J. Timmons Roberts, and JoAnn Carmin
2011 "Political economy of the environment." *Annual Review of Sociology* 37: 221–238.
- Ruderman, L., B. Cabrera Fasolis, G. Dozzo, C. Nota, and M. Avila Vazquez
2013 "Análisis de la salud colectiva ambiental de Malvinas Argentinas-Córdoba." REDUAS. <http://www.reduas.com.ar/wp-content/uploads/downloads/2013/02/Informe-Malvinas-corregido1.pdf> (accessed October 5, 2017).
- Schippers, Mimi
2007 "Recovering the feminine other: masculinity, femininity, and gender hegemony." *Theory and Society* 36 (1): 85–102.
- Schnaiberg, Allan and Kenneth Gould
1994 *Environment and Society: The Enduring Conflict*. New York: St. Martin's Press.
- Schnurr, Matthew
2017 "Can genetically modified crops help the poor? Incomplete answers to a flawed question." *Canadian Journal of Development Studies* 38 (1): 125–128.

Schurman, Rachel

2017 "Building an alliance for biotechnology in Africa." *Journal of Agrarian Change* 17: 441–458.

Shiva, Vandana

1991 *The Violence of the Green Revolution: Third World Agriculture, Ecology, and Politics*. London: Zed Books.

Shumway, Nicolas

1991 *The Invention of Argentina*. Berkeley: University of California Press.

Simoës, Alexander

2016 "The Observatory of Economic Complexity." <http://atlas.media.mit.edu/> (accessed October 4, 2016).

Sitrin, Marina

2015 "If we can stop Monsanto, we can change the world." March 1. <https://www.telesurtv.net> (accessed October 5, 2017).

Stølen, Kristi

2004 *La decencia de la desigualdad: Género y poder en el campo argentino*. Buenos Aires: Antropofagia.

2015 "Agricultural change in Argentina: impacts of the gene modified soybean revolution," pp. 149–161 in Arve Hansen and Ulrikke Wethal (eds.), *Emerging Economies and Challenges to Sustainability*. New York: Routledge.

Toledo, Víctor, David Garrido, and Narciso Barrera-Basols

2015 "The struggle for life: socio-environmental conflicts in Mexico." *Latin American Perspectives* 42 (5): 133–147.

Torrado, Marla

2016 "Madres en contra de la soja: planeamiento, salud y resistencia en Córdoba, Argentina," pp. 169–190 in Markus Rauchecker and Jennifer Chan (eds.), *Sustentabilidad desde abajo: Luchas desde el género y la etnicidad*. Buenos Aires: CLACSO.

Trigo, Eduardo

2011 *Fifteen Years of Genetically Modified Crops in Argentine Agriculture*. Buenos Aires: ArgenBio.

Verbitsky, Horacio

2009 "Verano del '96." *Página/12*, April 26.