

RESEARCH ARTICLE

Between maintenance and transformation: Reading for difference in agricultural extension

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Agricultural extension has long been the subject of scholarly critiques for its hierarchical approach to knowledge transfer and its complicity in promoting agricultural intensification and farm sector consolidation. Here, however, we suggest that there are already-existing examples of different kinds of agricultural extension practices, ones that challenge the capitalist—understood here as synonymous with racial capitalist—paradigm that dominates in California’s agricultural landscapes and elsewhere. We discuss one such example, providing a case study of Diana’s efforts to support Spanish-speaking, small-scale, Latine farmers in California. Drawing from feminist political economic theory, we argue that extension is a site of heterogeneity, where existing power asymmetries are both maintained and transformed. Diana’s efforts to transform such power asymmetries illustrate the labor that some extensionists mobilize to support small-scale Latine farmers and other farmers of color in the context of U.S. agri-capitalism. We highlight 4 ways in which Diana’s labor disrupts extension norms, including (1) filling gaps in state programs with invisible labor, (2) building mutual trust through social relationships beyond work, (3) blurring distinctions between extension work and farm work, and (4) broadening definitions of “farmers” beyond business ownership and land tenure. In doing so, we advocate for a critical understanding of heterogeneity among extension practices, as extensionists both contribute to and challenge racial-economic inequalities in the agri-food system. With this approach, we hope to identify and better understand how contestations of dominant power arrangements can and do occur in extension contexts in the hopes of supporting these efforts.

Keywords: Agriculture, Extension, Diverse economies, Farmers, Race, Inequality

Introduction

It was midday on a sunny February day as I (Aysha) drove out of Salinas, California, into the hills just south of the city. As I arrived at the farm, I realized just how strong the wind was—probably too strong, I thought. Diana,¹ my coworker at a local government agency, had invited me on a farm visit, where they² planned to assist a farmer in evaluating the efficiency of the farmer’s sprinkler system. Although I had never done this before, I understood that it was not a good idea to irrigate with sprinklers in strong wind and that an evaluation would be logistically difficult and would leave us soaking wet and cold. However, when I met with Diana, they said they wanted to proceed with the evaluation. Scheduling this farm visit had been incredibly difficult, they explained, as the farmer, Manuel, was

juggling multiple responsibilities: caring for their children, growing crops on a separate parcel located on the other side of town, and working an additional job to bring in extra income. Although Manuel had contacted Diana several weeks prior to ask for irrigation support and they had attempted multiple previous visits, Manuel had had to cancel them all due to their hectic schedule. Diana was therefore determined to go through with the sprinkler system evaluation come what may and had spent the morning coordinating with collaborating agricultural extension personnel and gathering all the necessary equipment.

Half an hour after our arrival, however, Manuel had not yet shown up, nor did they answer their phone. After over an hour of waiting, Diana finally received an apologetic phone call from Manuel explaining that their childcare support had fallen through, and they would need to reschedule. To me, Diana’s reaction was surprisingly mild given the amount of effort they had put into planning this visit. Diana asked Manuel if we could simply proceed with the evaluation, as we were already at the farm and had all the necessary equipment. Although Manuel consented, the effort was ultimately futile. Manuel shared their lease with other small-scale farmers because the parcel would have been too large and expensive for them to farm on their own, and one of these neighboring farmers

1. All names provided are pseudonyms. Diana will likely still be recognizable to people who know them; however, they commented on earlier drafts of this article and have approved the final draft.

2. Throughout this article, we use they/them/their as default pronouns.

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was using the irrigation system that day. We were unable to irrigate at the same time and ultimately resolved to reschedule once again.

This mundane event—the inability to meet up with a farmer and complete a straightforward irrigation system evaluation—is typical in Diana’s world. As an agricultural extensionist who primarily works with a community of Spanish-speaking, small-scale, Latine³ immigrant farmers in a highly industrialized agricultural landscape, Diana regularly collaborates with people who navigate busy schedules and multiple challenges at the intersections of race, class, and citizenship. Diana, too, must practice flexibility and creativity in order to support these farmers’ small-scale alternatives to the large-scale industrial farming operations that dominate California’s Central Coast region.

This article considers the labor that it takes to do agricultural extension differently—to work with small-scale farmers of color rather than white, U.S.-born people who run capital intensive farm businesses—and the kinds of ethical commitments that this work requires. What does it take to support farmers who do not have time to meet with the extensionists with whom they hope to work? Those farmers who are ineligible for state funding programs designed to incentivize ecological farming practices? Those for whom the bureaucratic nature of the U.S. agricultural industry makes farm business ownership largely inaccessible?

Agricultural extension has long been the subject of scholarly critiques for its hierarchical approach to knowledge transfer and its complicity in promoting agricultural intensification and farm sector consolidation. Here, however, we suggest that there are already-existing examples of different kinds of agricultural extension practices, ones that challenge the capitalist—understood here as synonymous with racial capitalist (Robinson, 2020)—paradigm that dominates in California’s agricultural landscapes and elsewhere. We discuss one such example, providing a case study of Diana’s efforts to support Spanish-speaking, small-scale, Latine farmers in California. Drawing from feminist political economic theory, we argue that extension is a site of heterogeneity, where the existing power asymmetries are both maintained and transformed. Diana’s efforts to transform such power asymmetries illustrate the labor that some extensionists mobilize to support small-scale Latine farmers and other farmers of color in the context of U.S. agri-capitalism. We highlight 4 ways in which Diana’s labor disrupts extension norms, including (1) filling gaps in state programs with invisible labor, (2) building mutual trust through social relationships beyond work, (3) blurring distinctions between extension work and farm work, and (4) broadening definitions of “farmers” beyond business ownership and land tenure. In doing so, we advocate for a critical understanding of heterogeneity among extension practices, as

extensionists both contribute to and challenge racial-economic inequalities in the agri-food system. With this approach, we hope to identify and better understand how contestations of dominant power arrangements can and do occur in extension contexts in the hopes of supporting these efforts.

Reading for difference within agricultural extension

The term “agricultural extension” is commonly used to refer to the movement of agricultural scientific information from universities and other research institutions to diverse publics (Warner, 2007). Within U.S. contexts, agricultural extension typically refers to the public Cooperative Extension Service, formed in 1914 to extend agricultural research produced at land-grant universities to rural communities. Yet the term is used around the world to refer to a variety of public, private, nongovernmental organization, and volunteer efforts to provide informational and material assistance to a range of people growing food and caring for land and water. In this article, we use a relatively narrow understanding of the term to focus on public extension activities in U.S. contexts—including but not limited to the Cooperative Extension Service—with the understanding that many critiques of the Cooperative Extension Service are also relevant to government-led extension settings at large.

In U.S. contexts, scholars from rural sociology and related fields have critiqued public extension for contributing to corporate consolidation within agricultural industries (Hightower, 1973), reinforcing hierarchies between expert and local knowledges (Kloppenborg, 1991), contributing to racial and gender injustice (Domosh, 2015), and being complicit in U.S. imperialism and settler colonialism (Wang, 2020). Such critiques often revolve around the concept of the “transfer of technology,” which lies at the heart of U.S. public extension work and describes the role of extensionists within the hierarchical scientific institutional landscapes of industrial agriculture (Röling, 1988; Warner, 2008). As scholars and activists have challenged this relatively top-down approach to sharing agricultural innovations, they have also theorized alternative approaches that emphasize collaborative knowledge sharing practices (e.g., Chambers et al., 1989; Chambers, 2014). Notably, these scholars and activists often advocate agroecology as a model of agricultural practice that prioritizes Indigenous knowledges and ecological principles (Altieri, 2002) and which necessitates more participatory and inclusive forms of extension work (Warner, 2007, 2008).

We assert that the kinds of practices highlighted in this article constitute another way to “do” extension work beyond a top-down transfer of techno-managerial expertise, which centers certain forms of knowledge and knowledge holders as sources of agroecological advancement. When agricultural “problems” and “solutions” are couched in narrow, technical terms, they are rendered more identifiable, measurable, and therefore solvable (Latour, 1999). This elevates Western forms of environmental knowledge production (e.g., quantitative, scientific approaches), while

3. We use the term “Latine” throughout this article as a gender neutral version of Latina/o that is easy to pronounce in Spanish, as opposed to the somewhat popular term “Latinx.”

marginalizing knowledges derived from lived experiences, cultural traditions, and community practices. Churcher (2022) reminds us that knowledge sharing is predicated on feelings of trust, esteem, respect, and concern that shape our conceptions of ourselves as epistemic subjects and in turn impact “our ability to meaningfully participate in practices of inquiry, communication and deliberation” (p. 896). Diana’s efforts disrupt this asymmetry of recognition of nondominant practices and knowledges in part through their affective practices that communicate how they include marginalized social actors in networks of respect and esteem. Such efforts at epistemic inclusion are “embodied interventions” that promote the idea of the “knowing self” in relationship with and attached to others, “in contrast to mainstream imaginings of knowing subjects as detached, disembodied, and dispassionate” (Churcher, 2022, p. 902).

In this article, we aim to contribute to theorizations of a more collaborative form of extension practice, one which is better able to work with small-scale farms and immigrant farmers of color. Here, we engage especially with political economic analyses that explore how extension reinforces—or, possibly, challenges—power asymmetries in agricultural landscapes. This approach is particularly relevant to our geographic context, given the highly capitalist formation of California agriculture and of U.S. agriculture more broadly.

Public agricultural extension: Maintaining or transforming the status quo?

Sociologists of agriculture have long critiqued government-backed research and extension programs for their roles in furthering the industrialization of agriculture and, with it, the marginalization of small farmers and farmworkers within U.S. agriculture (Hightower, 1973). These critiques demonstrate how, as the U.S. public research and extension system expanded over the course of the 20th century, it came to revolve around a “productivist ideology,” in which it was assumed that the constant pursuit of increased productivity via adoption of new technologies was broadly beneficial to all parties (Buttel, 2005, p. 277). In reality, however, this ideological orientation was established by a coalition of elite actors, including land-grant administrators, federal agricultural agencies, agribusinesses, and farm commodity groups representing large growers (Buttel, 2005), and the agricultural intensification it helped fuel was not equally beneficial for all. For instance, the mechanization research which produced mechanical harvesters for the benefit of large-scale, capital-intensive growers, also replaced the labor of low-income, predominantly Latine farmworkers (Baur and Iles, 2023). Ever increasing yields, meanwhile, placed farmers on a “technology treadmill,” in which falling crop prices force them to continuously adopt new yield-increasing technologies and inputs, which in turn drives up production costs to levels that become difficult to manage without the benefit of economies of scale (Cochrane, 1979). Under this dominant model, extensionists are charged with communicating promising new technologies to farmers in the hopes that they are

adopted and eventually become widely diffused, an approach that privileges the generally wealthier and more educated farmers who are more likely to be the much celebrated “early adopters” of technology (Stephenson, 2003). Schooled in this relatively top-down approach to knowledge transfer, extensionists have not always been capable of appreciating the value of Indigenous epistemologies (Collins and Mueller, 2016) or of farmers’ local knowledge and practices (Kloppenborg, 1991). Their mission has generally been to push farmers to modernize rather than to meet them where they are and solve the problems they want to solve.

Important to our consideration of political economic critiques of extension is the understanding that capitalism is racial capitalism—that constructions of race and class are intertwined and that economic inequality in the agri-food system is racial-economic inequality (Robinson, 2020). This understanding suggests that the critiques discussed above, while typically focusing primarily on class constructions and relations in agri-food contexts, are deeply related to the processes of racial formation and subordination. In this regard, extensionists’ contributions to farm sector consolidation and marginalization of small farmers and farmworkers are largely synonymous with marginalization of people of color.

Conversely, although they rarely use the language of racial capitalism, many scholars have critiqued extension initiatives for their discriminatory practices and epistemic violence against various groups of people, especially based on racial difference. For example, extension scholarship has explored how anti-Black racism is reproduced through extension initiatives and how Black farmers and extensionists have challenged related processes (e.g., Crosby, 1983; Whyne, 1998; Reid, 2003, 2007; Harris, 2008a, 2008b). When land grant universities were initially established by the Morrill Act of 1862 as federally funded hubs of agricultural research and extension, these institutions extended the project of U.S. settler colonialism through land theft and displacement of Indigenous peoples (Lee, 2020; Stein, 2020) and exacerbated preexisting racial-economic inequalities by predominantly serving white farmers (Whyne, 1998; Lee and Keys, 2013). Although Black land-grant universities were established by the Morrill Act of 1890, the Smith-Lever Act of 1914—which formally created the Cooperative Extension Service—provided support only to (predominantly white) 1862 institutions and not to 1890 institutions (Lee and Keys, 2013). While funding for public extension as a whole has been cut dramatically in recent decades due to the trend toward privatization (Wang, 2014), there remain widespread and well-documented disparities in funding allocated to predominantly white land-grant institutions versus Historically Black Colleges and Universities and Tribal Colleges and Universities (Lee and Keys, 2013).

Read through the lens of racial capitalism (Robinson, 2020), it is easy to understand that anti-Black discrimination via extension institutions would have enormous economic implications for Black farmers and the communities that rely on them. In such contexts, Black farmers and extensionists developed—and continue to

develop—alternative strategies for creating and sharing agricultural knowledge (e.g., Crosby, 1983; Reid, 2007; White, 2017, 2018; McCutcheon, 2019). Among these many initiatives, George Washington Carver's efforts to develop the Tuskegee Institute's Agricultural Experiment Station and associated extension programs provide notable evidence that resistance to dominant extension practices is neither new nor merely oppositional and often occurs within the context of formal extension institutions (White, 2018). Meanwhile, Indigenous peoples continue to resist the racialized colonial violence embedded in extension initiatives, sometimes seeking to leverage formal extension programs to maintain their own cultures (Firkus, 2010). Several scholars point toward these legacies to suggest a more hopeful understanding of public extension, one that has potential for supporting social and ecological well-being despite structural constraints (e.g., Ostrom, 2020; Copeland, 2022).

In considering how extensionists contribute to—or, possibly, challenge—racial-economic hierarchies in California's agri-food system, Henke (2008) theorizes extension as the “repair” work needed not only to solve problems facing the agricultural industry but also to mediate relations of power within the industry. Importantly, they distinguish between 2 types of repair strategies: maintenance and transformation. This distinction is ultimately between the kind of political work that seeks to maintain dominant power relations and the kind that seeks to transform these relations. Unsurprisingly, both Henke (2008) and Guthman (2019) find that the University of California Cooperative Extension (UCCE) initiatives often function to maintain dominant power relations in California's agricultural industry. For example, Henke illustrates how farm advisors work closely with farm business owners and are therefore invested in supporting their business interests, rather than in protecting land/water, supporting labor interests, or otherwise promoting transformative socioenvironmental change. Henke (2008) also discusses possibilities for repair that are instead invested in transformation of California's agricultural industry, citing activists' calls for improving farm working conditions and breaking up larger farms into smaller ones (p. 68). For Henke and Guthman, however, this kind of work appears largely beyond the scope of extensionists' contributions. Although their analyses echo a variety of the critiques of extension mentioned above, we find Henke's notion of repair particularly useful because it illustrates how extension typically does maintenance work while also articulating possibilities for transformative work. This opening to radical alternatives offers opportunities to connect critiques of extension with multi- and trans-disciplinary interests in identifying and creating alternatives to dominant (agri-)capitalist power relations.

Diverse economies: Documenting alternatives to agri-capitalism

Our interest in theorizing and developing more ethical extension practices is greatly enhanced by the large body of scholarship on identifying and creating alternatives to

dominant power relations. Within this literature, one of the most influential theoretical approaches is the “diverse economies” approach developed by feminist scholar J. K. Gibson-Graham. Gibson-Graham (1997) builds on Resnick and Wolff's (1989) anti-essentialist analysis of Marxian political economy to critique the all-encompassing framing of capitalism which they argue has become too much the focus of structural analyses. Central to their argument is the concept of performativity, with which they assert that such structural analyses can perform dominance and thereby serve to further marginalize the many noncapitalist practices already in existence. They subsequently develop the diverse economies research program, which is concerned not with documenting capitalist processes but with exploring a “politics of possibility in the here and now” (Gibson-Graham, 2006, p. xxvi). By documenting diverse economic practices and thereby performing the economy differently, Gibson-Graham (2008) asserts that academics can contribute to the legitimization and materialization of noncapitalist practices. Such practices are not inconsequential; rather, feminist analyses have long demonstrated the economic importance of nonmarket transactions like gift giving, gleaning, hunting, and gathering, as well as unpaid labor like family care and volunteering (Waring, 1988).

Following Gibson-Graham's logic, extension activities might be critically examined not only for their maintenance of dominant economic arrangements but also for their embodiment of alternative economic practices. For example, to support the diverse economies project, Gibson-Graham develops the methodological practice of “reading for difference,” which attends to noncapitalist practices to illuminate diverse possibilities. Important to our analysis is their assertion that the practice of reading for difference “opens up the performance of dominance to research and questioning” (2008, p. 624). They write:

Diversity exists not only in the domain of non-capitalist activity. As much of mainstream economic geography illustrates, capitalist enterprise is itself a site of difference than can be performatively enhanced or suppressed through research. Reading for difference in the realm of capitalist business can even produce insight into the potential contributions of private corporations to building other possible worlds. (Gibson-Graham, 2008, pp. 624–625)

In relation to extension literatures, this type of analysis suggests that “transformative” extension (Henke, 2008) is indeed possible and that elements of it may already exist within mainstream institutions.

Since the original development of the diverse economies project, Gibson-Graham and a range of interlocutors have clarified the analytic aims and political potential of this approach. Scholars have pointed out, for instance, that “alternative” economic practice is not synonymous with “good” and that nonmarket, noncapitalist activities can still be highly exploitative (e.g., slavery, feudal relations) (e.g., Amin et al., 2003; Samers, 2005; Schreven

et al., 2008; Jonas, 2010). In response to such critiques, Gibson-Graham (2008, p. 630) clarifies that “we are not interested in performing difference per se, nor are we necessarily interested only in the growth of ‘alternative’ economic activities. Our political and strategic concern is to build community economies.” The use of the term “community” has itself been the source of considerable debate, as inequality can persist in community despite the positive ideals commonly associated with the term. Moreover, the term often refers implicitly to local issues while neglecting global processes and can homogenize or oversimplify local heterogeneity (Gritzas and Kavoulakos, 2016). Gibson-Graham addresses these concerns by proposing an anti-essentialist notion of community and explores various ethical concerns around which community economies might be built (Gibson-Graham et al., 2013; Community Economies Collective, 2023). Given that the diverse economies approach does not prescribe a set of ethical commitments for alternative economic practices, the challenge for scholars taking up this approach is to continue exploring and identifying diverse ethical possibilities.

Important to our analysis is Gibson-Graham’s (2006) understanding of the economy as “a site of decision, of ethical praxis, instead of as the ultimate reality/container/constraint” (p. 88). This way of thinking lends itself to an understanding of the moral economy (Thompson, 1971; Scott, 1977) of extension, whereby moral, ethical, and political commitments shape extensionists’ activities and decision-making despite the structural limitations of extension organizations. Such framing is consistent with Gibson-Graham et al.’s (2013) consideration of how to “take back work” from the realm of exclusively capitalist activity. In this line of analysis, extension work—like all professional activities—can be understood as a site where ethical commitments must be negotiated and where there is the possibility for activities and relationships to exist beyond what is strictly necessary for the job.

Our exploration of ethical economic practices in the context of agricultural extension dovetails with the sub-area of agri-food scholarship that considers alternatives to highly industrialized forms of agricultural production (Gritzas and Kavoulakos, 2016; Sarmiento, 2017; Rosol, 2020). Given that what makes an agri-food system “alternative” has long and often been debated (e.g., Whatmore et al., 2003; Watts et al., 2005), agri-food scholars have often engaged with the diverse economies approach to expand and refine their considerations of alterity. Scholars have explicitly leveraged the diverse economies approach to document a range of existing alternative economic practices in agri-food systems, examining topics such as the 100 Mile Diet (Harris, 2009), buying groups and food cooperatives (Little et al., 2010), community supported agriculture (CSA) initiatives in the United States (Jarosz, 2011) and Australia (Cameron, 2015), autonomous food spaces (Wilson, 2013), food banks in the United Kingdom (Cloke et al., 2017), food sharing in Berlin (Morrow, 2019), unpaid work in urban agriculture (Drake, 2019), and home gardening in Czechia (Sovová et al., 2021). This

article aims to contribute to this literature, which has yet to consider agricultural extension as a site of alternative economic practice.

We want to clarify here that, just as we read political economic critiques of extension with the understanding that capitalism is racial capitalism, we read the diverse economies approach with a similar understanding that alternative economic practices are inherently raced (Bledsoe et al., 2022). For example, Bledsoe et al. (2022) argue that scholarship focused on Black-led food and farming initiatives shows how Black communities often practice cooperative economics as survival strategies amid racial-economic oppression. In this sense, the economic practices of racialized communities can be understood as always already alternative to the dominant agri-capitalist paradigm, or at least partially so. This understanding is particularly powerful in the context of the wide range of scholarship documenting the efforts of communities of color to grow and share food in U.S. contexts (e.g., Alkon and Agyeman, 2011; White, 2011; Ramírez, 2015; White, 2018; McCutcheon, 2019; Reese, 2019; Garth and Reese, 2020), as these efforts might also be understood as alternative economic practices. In this article, we extend this logic to suggest that extensionists’ efforts to support small-scale farmers of color can be at least partially alternative to agri-capitalist practices.

In the remainder of this article, we contribute to the diverse economies project by reading for difference among public extension activities in the United States, documenting a case of one extensionist’s alternative economic practices throughout their work with a community of Spanish-speaking, small-scale, Latine farmers in California. Our findings highlight 4 of these practices, including (1) filling gaps in state programs with invisible labor, (2) building mutual trust through social relationships beyond work, (3) blurring distinctions between extension work and farm work, and (4) broadening definitions of “farmers” beyond business ownership and land tenure. In our discussion, we return to Henke’s (2008) notion of repair, exploring how extensionists are involved in both maintaining and transforming dominant power relations. Ultimately, we advocate for a critical understanding of heterogeneity among extension practices, whereby attention to extensionists’ diverse economic practices can highlight opportunities for challenging racial-economic inequalities in agri-food systems.

Methodology and methods

Drawing from ethnographic data collected by Aysha from 2019 to 2023, we develop a single case study (Yin, 2009) to examine the efforts of one extensionist (Diana Walsh) to support farmers in California’s Central Coast region. This work is part of a larger research project focused on the struggles and successes of a prominent community of Spanish-speaking, small-scale, Latine farmers in this region and the extensionists who work with them, including Diana. As part of this larger research project, Aysha conducted 48 months of ethnographic research (February 2019–January 2023) with farmers and extensionists,

conducting participant observation (Bernard, 2017) and writing over 1,400 pages of field notes (Emerson et al., 2011).⁴

Ethnographic data collection activities began with a focus on the community of Spanish-speaking, small-scale, Latine farm owner-operators in California's Central Coast, whose regional prominence is largely due to the presence of the Agriculture and Land-Based Training Association (ALBA) in Salinas, CA.⁵ ALBA (2023) is a 501(c)3 nonprofit organization with a mission to "create opportunities for low-income field laborers through land-based training in organic farm management, helping them advance their careers or pursue the dream of farm ownership." ALBA offers 2 primary programs for beginning farmers: the Farmer Education Course, an experiential job training program; and the Organic Farm Incubator, which leases subsidized land and equipment to 36–40 graduates of the educational course annually. Almost all of the farmers who participate in these programs are either immigrants from Mexico or are U.S.-born people with Mexican ancestry. According to ALBA staff, most participants have spent years or decades working in the regional agricultural industry on field crews, in packing houses, or otherwise as laborers on large-scale, industrial agricultural operations. While in the incubator program, these farm business owners and operators receive support from a team of nonprofit employees and their collaborators, including staff from a variety of public and other nonprofit organizations who conduct work under the

4. The approach to ethnography utilized in this article is informed by feminist methodologies that locate activism at the center of their research programs (e.g., Harding, 1987; Reinharz and Davidman, 1992; DeVault, 1996). These approaches challenge the presumed distance within the social sciences between the researcher and the researched and suggest that a researcher's political commitments can be a generative starting point for developing understanding. Such approaches align with a wider range of critical ethnographers that have called for an explicitly political approach to research, variously using terms such as "engaged," "activist," or "militant" ethnography to emphasize the researcher's closeness with and ethical commitments to the research subjects and subject matter (e.g., Scheper-Hughes, 1995; Lyon-Callo, 2004; Sanford and Angel-Ajani, 2006; Speed, 2006; Juris, 2007; Hale, 2008; Graeber, 2009). TallBear (2014), for instance, critiques the concept of "reciprocity" in research relations, which, although typically used to emphasize good relations, can continue to uphold a problematic distance between the researcher and the researched. Accordingly, ethnographic methods discussed here have involved deep engagement with the community of people who might be considered "research subjects"—farmers and extensionists in California's Central Coast—to the extent that Aysha has been employed as a public extensionist since August 2021. As such, they have become an inextricable part of this community. We make no attempt toward scientific "objectivity" in the normative sense; instead, we research and write with care for the subject (Schuurman and Pratt, 2002).

5. According to the California Certified Organic Farmers certification entity, 80%–90% of all Spanish-preference organic farmers in the northern Central Coast region started at Agriculture and Land-Based Training Association (ALBA), and most small-scale farmers in this region are organic-certified in order to be competitive in the marketplace (ALBA staff, personal communication, 18/05/2022).

umbrella of "agricultural extension." Diana Walsh is one such extensionist. Many of these extensionists, including Diana, continue to support farmers as they go on to steward agricultural lands outside of the ALBA incubator, where farmers face many challenges in securing land tenure and otherwise establishing sustainable farming operations (Calo and De Master, 2016).

Following an initial introduction to ALBA, Aysha began conducting participant observation in this setting by working alongside the community of ALBA farmers and associated extensionists in a variety of capacities. From February 2019 to August 2021, their work involved collaborating with ALBA staff as a graduate student researcher on a grant-funded project to qualitatively document organic farming practices, supporting farmers' applications for COVID-19 pandemic-relief funding, participating in work trades with farmers in exchange for produce, and working with a group of farmers to start a small-scale produce distribution business. It was through these efforts that Aysha met Diana Walsh, a soil scientist employed by a local Resource Conservation District (RCD), a nonregulatory unit of local government that supports land managers with voluntary conservation of soil, water, and wildlife. Farmers regularly expressed their appreciation for Diana's thoughtful and intimate approach to extension. In August 2021, Aysha began working alongside Diana at the RCD as a paid employee for 24 hours per week to support their efforts to assist ALBA farmers with on-farm conservation practices.

Given that data collected for this case study were part of a broader research project, we developed this case by conducting a first pass review of all field notes to identify portions of each text where Diana was present or mentioned. We then used an inductive and qualitative coding procedure to allow categories to emerge from the data (Saldaña, 2021). Using Dedoose software, we coded and recoded field notes to consolidate data. Codes were then synthesized into categories with shared characteristics. Concurrently, we wrote analytic memos as reflections meant to build a better understanding of codes and categories. Memos were structured to reflect on coding decisions and category construction. Once categories were developed, we used memos to develop deeper meanings of categories and to generate connections between the data and novel or existing theoretical frameworks (Charmaz, 2014). Key themes discussed in this article emerged through this process.

For example, one code that we developed in this process was "having meals with farmers," which was eventually grouped into the broader category of "spending leisure/unpaid time with farmers." Analytic memos related to this code and category noted (lack of) distinctions between Diana's paid work, unpaid work, and leisure activities, and gradually related these data to feminist theories of labor. In these memos, we used feminist theories of labor to explore the self-exploitative elements of Diana's approach as well as the potential for a more collaborative, feminist, nourishing form of extension work. Following our own interest in the latter, we identified "reading for difference" (Gibson-Graham, 2008) as

a compelling theoretical framework and eventually interpreted “spending leisure/unpaid time with farmers” as a way of “building mutual trust through social relationships beyond work” (see “Practice 2” in the following).

Given our concern with alternative economic practices in the context of racial capitalism, it is important to note that the extensionist that we center in this article—Diana—is a white, U.S.-born woman. This is a risky approach, as it risks centering white and U.S.-born dominance within efforts to challenge racial-economic hierarchies and thereby limiting the transformative capacity of such efforts. Yet we center this white, U.S.-born woman with the understanding that extensionists—especially those who are white and U.S.-born—very commonly contribute to maintaining power asymmetries in agri-food systems (e.g., Henke, 2008), including maintaining racial-economic hierarchies. Our aim here is not to praise this extensionist for their efforts to support immigrant farmers of color, but to note how Diana’s alternative practices highlight the general failure of the state to support these farmers and to ask how such alternative practices might be strengthened and encouraged to proliferate.

Our analysis is primarily attentive to inequalities associated with race, class, gender, and citizenship. This intersectional approach is important when considering the extension work of a white, U.S.-born woman: to recognize their privileges as well as the structural challenges they face as a woman in an agricultural industry largely dominated by men. There are, of course, many other axes of social difference that are important to consider in the struggle against inequalities in agri-food systems (e.g., sexual orientation, cis/trans gender identity) (e.g., Wypler, 2019; Hoffmeyer, 2021). Here, we emphasize inequalities associated with race, class, gender, and citizenship because of the prominence of these categories within agricultural working-class movements in our region.

A case study of alternative extension practices

Small-scale Latine farmers in California’s Central Coast region navigate enormous structural barriers to creating and sustaining economically and ecologically viable farms. In this context, we identify 4 alternative economic practices that Diana uses in order to help farmers access the material assistance that they need to sustain their farms. Findings are discussed here in first-person prose to reflect portions of Aysha’s field notes.

Practice 1: Filling gaps in state programs with invisible labor

Perhaps the most obvious way in which Diana strategically navigates professional extension contexts to support small-scale Latine farmers is by noticing the failure of state programs to serve these farmers and by attempting to improve these programs. State-led efforts to support U.S.-based farmers of color include various funding opportunities that seek to support conservation practices by addressing access to land and capital. These efforts are limited in their capacity to support farmers given the racial capitalist formation of the United States; however,

small-scale Latine farmers in our region do sometimes take advantage of these efforts to successfully run their farm businesses. Many of the public agencies and non-profit organizations in the region that are attempting to support these farmers focus on connecting them with funding programs. Yet farmers encounter many challenges when attempting to participate in these programs. In such situations, Diana often works as an intermediary.

For example, sometimes, Spanish-speaking farm owner operators in our area enter into contracts with the Natural Resources Conservation Services (NRCS) through their Environmental Quality Incentives Program (EQIP) to receive payment for the implementation of various conservation practices on their farms. NRCS is an agency of the U.S. Department of Agriculture (USDA) that assists land managers with conservation practices. The concept behind the EQIP program is to provide financial assistance for certain practices according to specific guidelines for each practice. NRCS typically has very detailed requirements for each practice, and the farmer is only able to receive reimbursement for the practice that they have implemented once NRCS staff confirm that these requirements have been met. These requirements, however, are not available in written form in Spanish. Spanish-speaking farmers must therefore rely on careful communication and follow-up with NRCS staff in order to understand and meet the requirements.

In one rather unfortunate case, a farmer named Magdalena had a contract with NRCS to install a high tunnel (an unheated, plastic-covered hoop house designed to extend the growing season) on their farm, among other practices. Magdalena had contacted a vendor to purchase plastic for the high tunnel and the vendor had recommended a specific kind of plastic. This vendor was familiar with NRCS practice standards and, to their understanding, the recommended plastic was made to NRCS standards. Later, after Magdalena had purchased and installed the plastic based on the vendor’s recommendation, local NRCS staff checked Magdalena’s materials purchases and found that the plastic did not, in fact, meet the requirements for the EQIP practice. NRCS staff followed up about this issue with Diana, who has a close relationship with Magdalena, with the concern that their instructions were getting “lost in translation” due to the participating NRCS staff member’s limited knowledge of Spanish language.

This failure of state services was poised to have potentially serious consequences for Magdalena, as the miscommunication would, at minimum result in delayed reimbursement—or worse, Diana feared, NRCS might not be able to reimburse the farmer at all, and the farmer would unexpectedly find themselves in debt for a very expensive purchase. Diana saw this shortcoming of state programs and chose to act, stressing to NRCS personnel that this was not a “loss of translation” but rather a failure of process and “lack of translation.” In doing so, they used their position of authority to condemn the inadequacy of the status quo and advocate for more fully serving Spanish-speaking farmers. Diana’s follow-up response to this situation involved conducting multiple farm visits and

phone calls with Magdalena and attending several meetings with NRCS staff to facilitate better communication between parties. To Diana, this is simply the kind of close work that is required to support farmers whose first language is not English and for whom the bureaucratic processes of public agricultural service providers are quite unfamiliar and inaccessible.

The kind of extra gap-filling work that Diana performs in this and similar contexts is not part of their official job description; rather, it is something that Diana does just because they recognize the need. Given that Diana's employment primarily relies on grant funding from state or federal governments, their work is largely defined by grant agreements with deliverables consisting of quantitative measurements of farmers served and farming practices implemented. Extra efforts to ensure that farmers are receiving the material assistance they need to maintain viable farm businesses are not made explicit in Diana's job description. These efforts illustrate what some feminist scholars have described as "invisible labor," which refers to "activities that occur within the context of paid employment that workers perform in response to requirements (either implicit or explicit) from employers and that are crucial for workers to generate income, to obtain or retain their jobs, and to further their careers, yet are often overlooked, ignored, and/or devalued by employers, consumers, workers, and ultimately the legal system itself" (Crain et al., 2016, p. 6). This kind of labor is inherently raced and gendered and is related to feminist scholars' broader interest in the hidden, unvalued, and undervalued labor conducted by women and people of color that is at the root of social reproduction. In the context of Diana's work, this invisible labor is not only necessary for them to do their job effectively but also for them to do their job in a way that is qualitatively meaningful. That is, this labor provides qualitative depth to the quantitative output required in her position, ensuring that small-scale Latine farmers are actually receiving material assistance from the state rather than simply doing lip service to grant deliverables.

Another example of Diana's efforts to make up for the inadequacies of state programs can be found in the ways that they attempt to connect farmers with the Farm Service Agency (FSA), an agency of the USDA, despite the major cultural differences between FSA and the regional community of small-scale Latine farmers. To be eligible for financial assistance from the federal government, farmers must first work with FSA to establish the legitimacy of their farm businesses and ascertain their eligibility. Although this can be an important avenue for accessing support, it is a notoriously intimidating bureaucratic hoop for this demographic of farmers, as Latine immigrant farmers often do not qualify for government assistance and have many reasons to distrust the U.S. government. Diana again fills this service gap with extensive invisible labor: They repeatedly clarify, with both farmers and FSA staff, that citizenship is not a requirement of FSA eligibility; they regularly distribute information about FSA programs along with FSA contact information; and when Latine farmers are still too

intimidated to reach out on their own, Diana reassures them and often makes direct introductions to her personal contacts among FSA staff.

In emergency situations, Diana redoubles her efforts to help farmers access FSA services. In early 2023, major precipitation events and massive flooding destroyed the farms and livelihoods of many small-scale Latine farmers in the region. This was both devastating and unsurprising, as these are some of the lowest income farmers in our region and they are typically farming on the most marginal agricultural lands, with steep slopes prone to erosion or with low-lying fields prone to flooding. As farmers began frantically contacting them for emergency assistance, Diana and other local extensionists directed farmers toward the FSA, which is the organization that receives federal funding for natural disaster relief and distributes it to farmers. Emergency funding opportunities had not yet been formally announced by FSA; however, Diana and other extensionists hoped that FSA staff would be able to field phone calls from farmers and begin developing a list of farmers to contact once funding became available. Yet FSA staff were constrained by the organization's bureaucratic process and were not able to begin meeting with farmers without a formally established funding source. Diana and other local extensionists responded to farmers' panic and need for assistance by organizing an impromptu meeting at a USDA Service Center where both the local RCD (Diana's employer) and FSA have their offices. Although no FSA staff were able to join the meeting, Diana used the space to share her understanding of FSA programs with farmers and to help them complete basic forms, which would speed up the FSA eligibility process once emergency funds became available. Following the meeting, Diana personally shared these forms and farmers' contact information with FSA staff. Again, in a situation in which farmers were being failed by state services, Diana expended extra effort and demonstrated flexibility and creativity in to help connect farmers with the necessary resources.

While connecting farmers with state programs may appear to be a very basic component of regional agricultural extension work, Diana's efforts illustrate that facilitating such connections requires an immense amount of time and energy for these farmers to experience any real benefit. Their work demonstrates an element of noncapitalist, alternative economic practice that involves performing the invisible labor necessary to ensure materially beneficial outcomes of extension activities, particularly for farmers who fall outside the dominant demographic of farmers served by state programs (i.e., English-speaking, U.S.-born white men running relatively large-scale farming operations). Diana's work goes above and beyond simply checking the boxes of their job requirements, which are largely defined by grant deliverables rather than by material changes in the work and lives of farmers. Rather, Diana takes notice when state programs fall short of serving the people that they ought to be serving and attempts to make up for these shortcomings.

Practice 2: Building mutual trust through social relationships beyond work

In addition to performing the invisible labor necessary to ensuring the beneficial outcomes of extension activities, Diana engages in social relationships with farmers beyond the workplace. Although outside of a work context, these relationships nonetheless inform the quality of Diana's professional relationships with farmers. In particular, these social relationships are essential to building mutual trust with farmers, which is a necessary part of extension work, especially when collaborating with small-scale farmers of color.

Prior to beginning professional work with Diana, I worked with farmers at the ALBA incubator in multiple capacities and learned from them about the different extensionists in their worlds. When farmers spoke with me about Diana, one farmer described them as, “la de buen corazón” (“the one with the good heart”), and several others added other terms of endearment. Throughout my work with Diana, I found that their willingness to soften the division between professional and personal life has allowed them to develop close connections and often friendships with farmers. Such activities have earned lasting respect from many farmers who appreciate the fullness with which Diana enters into relationship with them.

One prominent example of Diana's commitment to extraprofessional relationships with farmers has been their support for one farmer's modified CSA project. The farmer, Yuriela, runs a berry and mixed vegetable farm on about 10 acres in northern Monterey County. In 2020, Yuriela began working together with another farmer as well as with a small, volunteer-run nonprofit organization to develop a modified CSA initiative. In this approach, the nonprofit organization manages an online marketplace, where the 2 farmers list their available produce and customers place weekly orders. The farmers then fill the orders each week by packing produce into boxes and delivering the boxes to customer pick-up sites throughout the region. When Diana learned of this project through professional work with Yuriela, they discovered that all of the customer pick-up sites were to be located in the San Francisco Bay Area, with some sites located over 2 hours driving distance away from the farms. In response to this discovery, Diana proposed the idea to host a pickup site at their own house in a nearby city only 20 minutes away, at least until enough interest was generated that they could hand the host job off to a neighbor. They also reached out to friends and other people in their community and posted in online forums to spread the word about the initiative. To cap it off, Diana also joined the CSA as a customer.

Although Diana's work to expand the CSA may appear to be a conflict of interest, as it was supporting just one of the many farmers that they worked with, Diana saw this work as beneficial for herself and their community as well as for the farmer. Another CSA delivering to their neighborhood had been shut down, and a farmer's market had been attempted without lasting success. Accordingly, Diana's effort illustrates unique alignment between their own needs and those of the farmers. Yet Diana also

describes the impact that it had on their professional work, as their involvement in Yuriela's project as a pickup site host allowed them to have insight into the CSA-related concerns of consumers living and working outside of the farming community. Such insight has guided their consideration of the various farm management and marketing strategies available to farmers and partially informs their ongoing extension work.

In addition to providing extraprofessional support for Yuriela's CSA project, Diana engages in more quotidian social relationships such as lingering before or after a field visit to share a meal or to discuss pursuits that extend well beyond the scope of agricultural activities. My first explicit discussion with Diana about these social activities occurred in October 2021, on a day when Diana and I planned to meet at ALBA to discuss winter conservation practices with a few of the farmers there.

I went to the ALBA incubator before Diana, agreeing to begin discussions with farmers while Diana finished sending some emails. I arrived in the late morning at one farmer's parcel, parked my car, and began to unload some supplies. Just as I arrived, Luisa, the neighboring farmer, waved to me and yelled, “Vente a comer!” I called back that I could not justify eating yet, as I had not yet done any work, but they insisted. I work with Luisa regularly and often suspect that they wait for me to show up just so they have an excuse to break for lunch. I accepted their invitation and met up with them and their brother at the edge of their farm field under a row of trees, where the two of them had arranged some seats and a simple meal of rice and boiled eggs with salsa. Luisa started up their portable propane stove and heated some tortillas as well.

We were midway through our food when Luisa pointed out Diana's truck rolling slowly up the road on the opposite side of the field. I was a bit embarrassed to be caught snacking when I had told Diana that I would get a head start on discussions with farmers before they arrived, and so was relieved to see a big smile on Diana's face as they walked over to where we sat. Luisa invited them to eat as well, and Diana happily accepted.

When Diana arrived, I had just asked after one of Luisa's children, and Luisa had been telling me about how much their child was enjoying folklórico dance classes and how they wished that there were classes available for adults. Diana now chimed in that they participated in a Danza Azteca group that met weekly on Tuesdays and suggested that Luisa attend the classes with them. Luisa began to gush about how much they wanted to attend, but said that they were also terrified. With their brother's help, Luisa explained their fear by sharing a story from their childhood in Oaxaca, Mexico.

Luisa told us that, when they were growing up in a small, rural town in Oaxaca, their parents did not permit them to dance in public. Yet they wanted to, intensely. For Carnival each year, they would attend town gatherings where many people—all men—wore extravagant costumes with masks that hid their faces. These costume-wearers would dance for hours and for years Luisa watched and wished that they could participate. When Luisa told their

parents about this desire, however, their mother told them that they could not participate in the dancing because they were a girl. Luisa explained to us how, naturally, they and their friends—also girls—had rebelliously dressed up in costume with masks and had danced alongside the men, thinking that no one would know who they were. Yet somehow Luisa's mother had found out about this and had punished them severely. To this day, Luisa still feels too traumatized by that experience to dance in the way that they want to dance. To dance Danza Azteca in public, Luisa said, is one of their biggest goals in life because it is a practice of freeing themselves from the psychological limitations they experience.

Following a rich conversation about dance, culture, freedom, and the lived experience of being a woman, Diana convinced Luisa and I to attend the local Danza Azteca group's meeting the following Tuesday. When we eventually parted ways to return to our respective work activities, I clarified with Diana that this type of meal and conversation with Luisa and their brother should not be considered part of my work week, and that I should plan to work later that day to make up for lost time. Diana smiled and shook their head. "That's always the question, isn't it?" they said.

Diana went on to discuss how my predecessor, a Central American man who—according to Diana—was well-loved by this community of farmers, used to spend hours "building relationships" with farmers. To Diana, this approach was also, of course, a large part of the reason that farmers liked this extensionist so much. During our lunch, Luisa herself said that they were glad we accepted their invitation to eat together because, when we decline, they get the sense that we do not want to "convivir" ("live together") with them. Farmers sometimes confide in us their reservations about other extensionists who seem to be interested only in working together and not in spending leisure time together. In response to my concern about how to delineate my working hours, Diana did eventually confirm that we could not be paid for this time; they also insisted that, in their experience, spending leisure time together is an important part of doing their job well, despite the lack of monetary compensation.

Over the course of our work together, I have observed how Diana often accepts invitations to dine with farmers or attend evening gatherings outside of a work context, blurring their personal and professional worlds. I myself received an invitation to one farmer's Día de los Muertos celebration in 2022, which was clearly unrelated to my work activities but which Diana encouraged me to attend. Diana does not bill our workplace for these activities, yet naturally these are essential to building mutual trust with farmers, which is important for our jobs.

Diana's cultivation of social relationships beyond professional contexts illustrates their willingness to blur distinctions between personal and professional life. This approach can be understood as an alternative economic practice as it engages relationships beyond those strictly necessary for Diana to maintain their job. Yet it is also fundamental to Diana's professional work, as these social relationships carry over into professional contexts, where

farmers are excited to work with Diana and are willing to reach out to them when in need of assistance. In this sense, building mutual trust through social relationships beyond work allows Diana to better collaborate with small-scale Latine farmers in the region.

Practice 3: Blurring distinctions between extension work and farm work

Limited social and financial capital often mean that small-scale Latine farmers in our region are forced onto the more marginal croplands that are notoriously difficult to farm. Many farmers who we work with find themselves on steeply sloped hills, in floodplains, on poor quality soil, or with poor irrigation water quality. In these situations, ecological farming practices that can maintain or improve the agroecosystem are particularly important for farm viability as well as for the local nonhuman community; however, farmers often do not have the capacity to implement these practices themselves. Although it is uncommon for extensionists to engage directly in on-farm work, Diana herself sometimes helps to implement such practices when they have the capacity. Their work demonstrates a practice of challenging the dominant organization of labor in this agri-capitalist landscape, where extension work and farm work are typically distinct and performed by different people.

For example, in late fall and early winter, Diana gives particular assistance to farmers growing strawberries in the hilly areas of northern Monterey County to prepare for impending rains. In California's Central Coast, commercial strawberries are typically planted in late fall and grown in black plastic with bare furrows in between each strawberry bed. At scale, the effect is particularly ugly and ecologically unsustainable: Driving through northern Monterey County, hillsides appear covered in black plastic with just a hint of vegetative life appearing as strawberry plants sprouting out of holes in the plastic covering. This poses major erosion control problems in the winter, as the plastic creates huge impermeable areas and forces winter rainfall into narrow furrows between strawberry beds. On hillsides, such erosion can be especially dangerous and economically disastrous.

At 8:05 AM on a sunny morning in October 2021, I pulled off the road onto dusty farmland. I was late, but the farmer, Ana, was nowhere to be seen. Ana's new strawberry beds were made and forming long, straight lines perpendicular to a fairly steep slope. Diana was already testing out a set of mechanical seeders at the edge of this field, which we had planned to loan to Ana so that they could plant mustard in the furrows between their strawberry beds. The concept behind this practice comes from a local USDA Agricultural Research Service researcher who has developed a technique of using mustard plantings in between strawberry beds to provide erosion control during the winter rains (Brennan and Smith, 2018). Like other "cover crop" practices designed to protect soil against erosion, the living roots help both to hold soil in place and to increase water infiltration into the soil via improved soil structure.

I walked over to Diana without haste, wondering where Ana might be. I figured that Diana and I would introduce Ana to the mechanical seeders, discuss this particular conservation agriculture practice, and leave them with enough seed to cover these few acres. Diana surprised me: “Good morning! Ana isn’t coming, [they have] to make a delivery. We can just do the planting ourselves and I will follow up with [them] on the phone afterwards.”

Over the next few hours, Diana and I wrestled with the mechanical seeders, trudged through the clayey soil, and planted a couple acres of cover crop seed. I was quite surprised to be doing such hands-on work. I had never heard of extensionists or similarly positioned people actually working in the fields alongside farmers, never mind *instead* of the farmers. Indeed, I have heard many farmers criticize extensionists because, as one farmer put it, “no saben como trabajar” (“they don’t know how to work”), suggesting that real agricultural work involves physical labor on farms. Yet Diana insists on a form of extension that involves entering farms and implementing conservation practices ourselves, sometimes even without the farmer’s presence (if we have the farmer’s permission). This is relatively unique for extensionists in our region, as it would be impractical for 1 or 2 people to provide such hands-on technical assistance for the dominant community of large-scale industrial agricultural operations. Yet Diana believes that this is often what is necessary for the practice to actually be implemented among small-scale Latine farmers given their busy schedules and limited crews and supplies.

Throughout the late months of 2021 and 2022, Diana led a mustard cover crop planting program in which our team conducted outreach each year in early fall and attempted to plant mustard seed on as many Latine-run small-scale farms as possible. They used grant funding to buy the mustard seed, borrowed the planting equipment, planted the cover crop, and conducted regular follow-ups with farmers to discuss the intention of the practice and to hear their observations about its efficacy on their farms.

Another example of Diana contributing on-farm labor is their approach to soil sampling. They recommend annual soil sampling for farmers in our area, so that farmers can use analyses to inform their nutrient applications and other management practices. This involves walking an agricultural field in a zigzag pattern and using a soil probe to collect 15–20 soil cores per sample area, then placing a composite sample in a plastic bag, filling out a simple form as provided by the laboratory of choice, and delivering or mailing the sample and form to the laboratory. Annual soil sampling is also now required by the local organic certifier, so Diana’s long-standing recommendation and associated trainings have the added benefit of having prepared farmers for this new requirement. Regardless of a farmer’s willingness and capacity to conduct soil sampling on their own, it would generally be necessary for Diana to be involved in interpreting soil test results, as they are provided in English and often contain scientific jargon. Yet, in response to farmers’ repeated requests for sampling assistance, Diana has taken to conducting soil sampling herself. Although it is ideal for

farmers to be present for the sampling event so that they can learn more about the sampling process, Diana is often willing to take soil samples and deliver them to the laboratory herself in urgent situations. Such situations include times when a farmer is considering leasing a new parcel, is late in complying with the organic certifier’s soil sampling requirement, or is otherwise occupied with their busy work schedule. Follow up always involves distribution of a soil sampling equipment to farmers—including a soil probe and often do-it-yourself kits for testing soil nitrate levels—as well as extended discussions about evaluation methods and test interpretation.

Diana’s approach demonstrates an effort to break down the expert-farmer dichotomy that distinguishes extensionists’ knowledges and actions from farmers’ knowledges and actions and which has been the focus of many critiques of extension (e.g., Marcus, 1985; Chambers et al., 1989; Kloppenburg, 1991; Chambers, 2014). While these critiques typically argue against this dichotomy by asserting that farmers’ knowledges should be considered expert in their own right, Diana illustrates the potential for extensionists to break this dichotomy down in the opposite direction as well: by doing the on-farm work typically associated with the farmer. We interpret Diana’s approach as a challenge to the dominant organization of labor in the agri-capitalist landscape, where extension and farm labor activities are distinct.

Practice 4: Broadening definitions of “farmers” beyond business ownership and land tenure

Given the high cost of regional agricultural land, the highly competitive agricultural industry, and the bureaucratic nature of farming in the United States, Latine farmers—especially those interested in farming at a relatively small scale—are often unable to own land, secure long-term land tenure, or even establish farm businesses. Furthermore, although ALBA is a resource for regional Spanish-speaking, small-scale farmers, ALBA typically does not have capacity to provide much assistance for farmers who fall outside the categories of current ALBA program participants and alumni. When such farmers contact ALBA staff, they are sometimes referred to Diana or to other extensionists in our area. In these situations, we are often amazed to hear about the creative strategies that resource-constrained farmers use to grow food and care for land in the midst of such a highly competitive and expensive agricultural region. Diana often meets these strategies with similar creativity to support farmers regardless of the unconventional nature of their situation.

In spring of 2022, I accompanied Diana on a relatively unusual farm visit to San Lucas, CA, to visit a farmer who had been referred to us by ALBA staff. The Salinas Valley was a familiar array of neatly organized green and brown geometric shapes tessellating out from the highway toward the mountains to both the northeast and southwest. I sat in the passenger seat of Diana’s truck, observing the typical scenes of this industrial agricultural landscape as we drove. It was quite a haul to get there; although we try to collaborate with small-scale Latine farmers throughout the area, we rarely go this far south. This is partially

because farms in the southern part of the county are larger, leaving few options for leasing small-acreage parcels. It is also partially because small-scale Latine farmers in the region often prefer mixed vegetable and berry production, which is more common in the northern part of the county, while the southern part of the county is better suited to wine grape production. It was odd, then, that ALBA staff had recently connected Diana with a farmer named Miguel who, through a phone conversation, indicated that they would be starting a farm close to San Lucas.

As we drove, I asked Diana about the farmer we were going to visit. They shook their head and smiled the exasperated smile that I have found to be characteristic of Diana during our visits with farmers who are in more challenging economic or ecological contexts. Diana explained that, when they and Miguel had talked on the phone, Miguel had explained that they would be trucking water to their farm for vegetable production and wanted some advice regarding the feasibility of this operation. Diana paused in the retelling for dramatic effect. "Trucking?" I clarified. This seemed to both of us to be an absurd proposition. Given the Mediterranean climate and seasonal drought, commercial vegetable production in our area requires a large amount of water for irrigation on the order of 50,000 gallons per acre per week during the growing season.

Miguel suggested that we meet at their house in a nearby city and follow them to the farm site as there would be no cell phone service at the site. This again was odd, as there is cell phone service throughout much of the valley floor. We exited the highway and met Miguel at their house in a residential neighborhood and then followed their truck back onto the highway. Although they exited toward farming operations, their car did not stop; rather, they kept driving out toward the hills on the east side of the valley, following a winding road surrounded by blossoming elderberries and native grasses. We were soon out of sight of the industrial agricultural operations. As we drove away from the valley floor, Diana's expression of surprise gradually grew more pronounced and we exchanged confused looks until, finally, Miguel turned off the road onto an overgrown dirt pathway. The pathway led into a clearing surrounded by small hills covered in trees and bushes—land without existing infrastructure that was clearly previously uncultivated.

We spoke with Miguel, and although I knew Diana was surprised by the idea that this site would be considered for a commercial farming operation, they did not let their surprise show. Given that I was new to this job, I simply followed their lead. Diana first discussed the problems of soil fertility and water access with the farmer. Miguel was serious about cultivating 5 acres of mixed vegetables for sale, and although they realized that the rocky soil and lack of water infrastructure posed challenges, they had a plan for addressing both issues. First, Miguel hoped to till and add compost to the soil. Diana pragmatically suggested that we take soil samples to better understand the kinds of fertility-related challenges they would be facing, and we would send these to the laboratory and interpret

the results for them at no cost. Together, we used shovels to dig into the hard earth and collected composite samples. Next, Miguel explained their plan for accessing water. Back down the winding road, they said the landowner had arranged a place where they could fill up small tanks of water at no additional cost and transport them via truck back to the farm site. After asking more questions and expressing some skepticism, Diana suggested that we take a look at the water source, so that we could take a water sample to test for irrigation quality and evaluate feasibility of transporting the water.

We got back in our cars and caravanned down the road into the town of San Lucas, about 15–20 min away. On the far side of town, we encountered a chained gate, which Miguel opened. Inside, a variety of cows, goats, sheep, and a few dogs roamed in partially fenced areas. We did not see other humans but, behind the other animals, found the spigot which Miguel hoped to use for water for their farm. In the car, Diana's incredulous expression was now mingled with considerable concern. The distance between the water source and the proposed farm site would likely be an enormous barrier to developing a farm. Yet Diana did not dismiss the situation as impossible, nor were they dishonest with Miguel. They took time to go through the calculations with Miguel, estimating how many tanks of water they would need on the proposed farm property, how many tanks they would need to fill and transport, how many trips back and forth to the water source this would require, how much diesel fuel they would need to use for transportation purposes, and how much all of this would cost. Once Diana determined and illustrated that it would be reasonable for someone to have a full-time job simply transporting water to the farm, they and Miguel discussed the possibility of planting less acreage or growing drought-tolerant crops to reduce water needs.

Although the operation proposed by Miguel was relatively unusual to me and Diana, it was not difficult for us to empathize with Miguel. On the drive back to our office, we discussed how low-income people in our region must think creatively about land access and farm development. The hilly areas on each side of the valley offer space for dreaming, and Miguel is certainly not the only small-scale Latine farmer in our networks to consider near-impossible schemes for accessing land and water in this expensive area. Yet, as with much of California, the reality of accessing water for irrigation is quite a complex and expensive undertaking (e.g., Worster, 1992; Reisner, 1993; Arax, 2019; Pisani, 2021). The rocky soil at Miguel's proposed farm site posed additional challenges. Still, Diana demonstrates how extensionists can support this kind of creativity by thinking alongside farmers about how they might develop alternatives to the dominant industrial agricultural paradigm. This kind of work can easily be considered within the scope of extension positions, yet requires creativity on the part of the extensionist to take such alternative farming efforts seriously.

The kind of creativity that Diana demonstrates with Miguel is particularly potent for extensionists as it offers opportunities to expand the definition of who is served by agricultural extension programs. State programs offering

financial and technical assistance often require farmers to own legal businesses in order to qualify for assistance, and some conservation incentives programs—like NRCS' EQIP and the California Department of Food and Agriculture's Healthy Soils Program—require farmers to have a certain amount of land tenure security before providing payments. Yet neither business ownership nor land tenure status are of concern to Diana. Various agri-food scholars have similarly emphasized the importance of discursive framings of “farmers” that move beyond capitalist relationships with land and food. For example, in their historical documentation of southern rural resistance and Black farmers' participation in the food system, Monica White uses the term “farmers” to refer to “all those who worked the land, regardless of their landownership status” (White, 2018, p. 4) or, for that matter, business ownership status. White's analysis includes sharecroppers, tenant farmers, and landowners as well as those who were enslaved in rural places and subsistence farmers, such as women gardeners. Broad use of the term “farmer” to include myriad relationships with land, food, and capital helps to extend farm research and extension beyond land or farm business ownership and toward multiple forms of agency within the food system. This conceptual reframing can allow extensionists to support a more diverse array of people, especially those with less access to capital.

Diana's support for a range of people growing food and caring for land is particularly apparent in their recent effort to develop an extension program serving urban “farmers,” broadly defined. Beginning in 2019, Diana took the lead of an active initiative to develop a volunteer-run urban garden establishment and maintenance program in their hometown. Since then, they have worked with a variety of organizational partners and neighborhood families to establish and maintain urban gardens in their town's public parks. With Diana's leadership, 20+ individual volunteers have regularly participated in garden workdays every Saturday since April 2020, collectively managing gardens in 8 different public parks and a total of nearly 1 acre of urban space. Many of the participants are otherwise involved in food-producing urban gardens and have expressed interest in receiving support or additional/ancillary food production garden initiatives in public spaces in Seaside. While Diana's involvement in this effort has taken place outside of the context of their professional role as an extensionist, they see opportunities for their professional work to shift toward assisting these farmers and are currently seeking out funding to support this work. This work would broaden their professional work, de-emphasizing farm owner-operators and supporting a wider variety of people growing food.

Diana's approach to extension demonstrates a willingness to support farmers regardless of their business-ownership and land-tenure status. Their approach differs notably from the criteria of state programs that understand “farmers” as “farm business owners,” typically with landownership status or long-term land tenure. Accordingly, we understand Diana's approach as one that challenges dominant agri-capitalist framings of who is or should be the target audience of extension activities. Their

approach also involves creativity as they attempt to support farmers' dreams, even if it means believing in the seemingly impossible (i.e., unprofitable).

Between maintenance and transformation: Extension as “a site of decision”

Our findings highlight the enormous efforts, creative workarounds, and sustained collaborations that are needed to circumvent the structural violence experienced by small-scale Latine farmers in the California agricultural landscape. They illustrate both how the structure of extension can serve to maintain racial-economic inequalities in agriculture and how some extensionists work to contest these inequalities. To reiterate, in Diana's case, these practices include: (1) filling gaps in state programs with invisible labor, (2) building mutual trust through social relationships beyond work, (3) blurring distinctions between extension work and farm work, and (4) broadening definitions of “farmers” beyond business ownership and land tenure.

In reading for difference among Diana's extension practices, we return to Henke's (2008) understanding of extensionists' efforts to maintain versus transform dominant power relations in the agri-food system. In their study of UCCE farm advisors, Henke (2008) finds that UCCE “has often served to preserve and maintain the power structure of the local social and material ecology” due to its “mandate to improve the productivity of agricultural communities” (p. 16). In doing so, Henke theorizes extension as a mechanism of “repair,” whereby political economic power is maintained for the benefit of large-scale agribusinesses. This understanding is consistent with many political economic critiques of extension, which highlight the ways in which extension often facilitates corporate consolidation and accumulation of wealth for a few at the expense of many (e.g., Hightower, 1973). Yet Henke's analysis is particularly relevant to efforts to identify and create alternatives to dominant power relations because it distinguishes between 2 types of repair strategies: maintenance and transformation. While maintenance can be understood as a strategy for keeping dominant power asymmetries intact, transformation is a more radical approach that challenges these power asymmetries. Although they find that extensionists largely perform maintenance repair, Henke also articulates possibilities for transformative repair that are invested in challenging the political economic power of California's agricultural industry. This opening toward radical alternatives is paralleled by other hopeful analyses of extension (e.g., Ostrom, 2020; Copeland, 2022) and is promising for those interested in diverse economies, as it suggests that alternative forms of agricultural extension are possible, and that they have the potential to challenge dominant power relations in the agri-food system.

Combining Henke's (2008) and others' (e.g., Ostrom, 2020; Copeland, 2022) hopeful understandings of extension with Gibson-Graham's (2008) diverse economies approach, we find that Diana's extension practices highlight diverse possibilities for extension as maintenance *and* transformative repair. On the one hand, Diana's

strategic navigation of professional extension contexts illuminates just how frequently the political economic structures of extension organizations may themselves reproduce racial-economic inequalities. While filling gaps in state programs with invisible labor, Diana's work demonstrates how these state programs are largely unable to effectively connect small-scale Latine farmers with the material assistance they need to establish and run their farms. Diana's efforts to build mutual trust through social relationships beyond work contexts highlight the failure of extension organizations to fund the relationship-building work necessary to cultivating effective professional relationships between farmers and extensionists. Additionally, Diana's on-farm labor illustrates how professional boundaries typically established between extension work and farm work can limit extensionists' abilities to carry out the labor that is needed to actualize implementation of on-farm conservation practices. Finally, Diana's strategic understanding of "farmers" beyond narrowly defined relationships with land and capital show how more limited framings of who is and isn't a farmer (e.g., those definitions mobilized by the USDA) can limit support for a wide range of people growing food and caring for land and water. Accordingly, our findings gesture toward multiple ways in which extension initiatives maintain power asymmetries in the agri-food system due to their limited abilities to provide material assistance to small-scale Latine farmers. On the other hand, our findings also clearly highlight the heterogeneity of extension initiatives, as individual extensionists like Diana make a range of efforts to collaborate with small-scale Latine farmers despite the fact that their professional contexts are not structured for them to do so.

Diana's work is consistent with Gibson-Graham's understanding of the economy as "a site of decision, of ethical praxis, instead of as the ultimate reality/container/constraint" (2006, p. 88). We find that their professional work is a "site of decision," where they attempt to conduct transformative rather than maintenance work by contributing to Latine farmers' efforts to create and sustain small-scale farms. Diana shows how agricultural extension might be considered and practiced beyond explicit professional commitments, as their social relationships with farmers outside of work contexts clearly show a commitment to more-than-capitalist relationality. Furthermore, their efforts to make up for the shortcomings of state programs, their willingness to perform on-farm labor when farmers are unable or unavailable to do so, and their support for farmers regardless of their business ownership or land tenure status are not necessary for their continued employment. For example, Diana does not need to so thoroughly ensure that Spanish-speaking, small-scale, Latine farmers benefit from state programs; it would be perfectly acceptable professionally for Diana to simply distribute information about state programs and leave farmers to follow-up with program staff on their own. Their labor demonstrates a commitment to supporting this community of farmers that goes beyond their own need for continued employment. This kind of ethical approach to challenging racial-economic inequality is

indeed possible within extension contexts, although it is certainly not prioritized or adequately rewarded by the public extension system.

Understanding extension as a site of decision has important implications for the sharing of diverse agricultural knowledges and, accordingly, for the proliferation of diverse forms of agriculture. Critiques of public extension initiatives in the United States have highlighted the primary role of extensionists as "practitioner bureaucrats" (A lles, personal communication, 25/08/2023), emphasizing their efforts to extend technological innovations developed at land grant universities and other research institutions to the so-called public, typically for the benefit of white landowners and industrialized farming operations (Hightower, 1973). Such analyses have, appropriately, been accompanied by calls for more collaborative knowledge sharing practices that prioritize knowledges of poor farmers and the agricultural working class (Warner, 2007, 2008). Our findings illustrate several ways in which more collaborative knowledge sharing practices can and do already exist within formal extension initiatives. In these settings, Diana and, likely, other individuals mobilize ethical commitments that demonstrate care for the humans and nonhumans involved in creating and sustaining small-scale, ecologically diverse farms.

Although extension can be considered a site of decision for all practitioners regardless of their situated locations in regional socioecological hierarchies, it is important to consider the role that extensionists' racial, gender, and other positionings play in their ethical commitments to challenging racial-economic inequalities in the agri-food system. In Diana's case, on the one hand, much of the transformative repair work that they do is work that is inherently feminized—work that goes unrecognized, unvalued, or undervalued when women perform it because of essentialized notions of women as inherently caring and nurturing. This is particularly true in the context of the invisible labor (Crain et al., 2016) that Diana performs as they care considerably about the material outcomes of extension work for small-scale Latine farmers in the region. In this sense, it is important to emphasize that Diana's work should not simply be praised for challenging racial-economic oppression in the agri-food system; rather, it should be valued, as well as understood as highlighting the need for structural change within extension organizations. On the other hand, as a white, U.S.-born woman, it is important for Diana and similarly positioned extensionists to reflexively examine their own racial and citizenship privilege and the ways in which they approach work with farmers of color. There are many examples where white-led efforts to challenge racial-economic inequalities in agri-food systems are fraught with "the intention to do good on behalf of others" and have "the markings of colonial projects, in that [they seek] to improve the other while eliding the historical developments that produced these material and cultural distinctions in the first place" (Guthman, 2008, p. 436). Relatedly, feminist scholars have critiqued empathy in solidarity encounters for reinforcing power asymmetries, as empathy is usually only given by relatively privileged

people to those with less power or resources and perceived to be in need of help (e.g., Hemmings, 2012). In this regard, extensionists' efforts to challenge racial-economic inequalities should be carefully examined for the ways in which they may reproduce hierarchies through these same efforts. While this kind of close examination is beyond the scope of this article, we encourage other extension scholars and practitioners to more deeply consider these dynamics and will do so in our ongoing work.

Conclusion

In this article, we have sought to respond to critiques of agricultural extension that focus on extension's complicity in producing and reproducing racial-economic inequalities in the interest of identifying alternative, more ethical approaches to extension. To do so, we have drawn on Henke's (2008) understanding of extensionists' potential to maintain as well as transform dominant relations of power within agri-food systems. Additionally, we leverage feminist political economic theory and, in particular, the diverse economies approach developed by J. K. Gibson-Graham and their collaborators. Using the methodological practice of reading for difference (Gibson-Graham, 2008), we provided a case of one extensionist's alternative economic practices throughout their work in California's agricultural landscapes. Our findings highlight 4 such practices that this extensionist uses in their extension work, including (1) filling gaps in state programs with invisible labor, (2) building mutual trust through social relationships beyond work, (3) blurring distinctions between extension work and farm work, and (4) broadening definitions of "farmers" beyond business ownership and land tenure. We considered how these practices gesture to the political economic limitations of extension work while illustrating possibilities for extensionists to challenge racial-economic hierarchies in agri-food systems. Such attention to economic heterogeneity suggests that extensionists' work can be both a response to job requirements and a site of decision, where ethical practices might exist beyond strictly professional commitments. We hope that, in developing this critical understanding of economic heterogeneity among extension practices, we have provided some conceptual groundwork for extension scholars and practitioners to contribute to transformation of dominant agri-capitalist power relations.

Would it be possible, given the right conditions, for the types of transformative extension practices mobilized by Diana to be adopted more broadly? It would first be necessary to provide more funding and institutional support to Black and Indigenous extensionists and to extensionists of color who, due to their lived experiences, often bring to their work a better understanding than their white colleagues of how to challenge racial-economic inequalities in the food system. This includes increasing funding for Historically Black Colleges and Universities and Tribal Colleges and Universities to erase the disparities between those institutions and predominantly white land-grant universities (Lee and Keys, 2013). Additionally, at

predominantly white land-grant universities and other public extension organizations, this necessitates greater hiring and retention of Black and Indigenous extensionists and extensionists of color.

Furthermore, a clear opportunity for promoting transformative extension practices stems from the formal education requirements of extension professionals, as extensionists at U.S. institutions are typically required to have graduate degrees in scientific disciplines and to participate in professional development opportunities hosted by scientific institutions. As feminist, critical race, and Indigenous science studies scholars continue to examine and critique the dominant knowledge production practices within the sciences, integration of such critiques into more formal scientific trainings offers opportunities for extensionists and others to develop more feminist, anti-racist, and anti-colonial practices. For example, Aysha, as a fairly unorthodox extensionist trained as a humanistic social scientist as well as an applied agricultural scientist, brings an interest in and basic sense of feminist, anti-racist, and anti-colonial scholarship and activism to their professional work. Together, Aysha and Diana discuss topics from prominent feminist, critical race, and Indigenous scholarship and social movements, typically in informal and unpaid settings, often with farmers and other extension personnel. These discussions inform ongoing collaborative actions.

Throughout their work together, Aysha observes that Diana's concept of extension work varies day by day: Sometimes, Diana uses the language of "burnout" and "self-exploitation"; sometimes, they use the language of "love" and "reciprocity"; sometimes, they use the language of "activism" and "food sovereignty." All of these concepts are legible to a feminist analysis of extension labor, where work that contributes to a more collaborative form of extension is simultaneously unpaid, undervalued, and nourishing.

Data accessibility statement

Standard human subject confidentiality applies to the data produced for this study, including field notes from participant observation. Deidentified portions of the data that support the findings of this study are available from the corresponding author upon request.

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Competing interests

The authors have declared that no competing interests exist.

Author contributions

Contributed to conception and design: KAP, MF, FL.

Contributed to acquisition of data: KAP.

Contributed to analysis and interpretation of data: KAP.

Drafted and/or revised the article: KAP, MF, FL.

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Knowledge Domain: Sustainability Transitions

Part of an Elementa Special Feature: Ways of Knowing and Being for Agroecology Transitions

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