Margarita Ortiz Garcia speaks to the camera in the final scene of *Mujeres del Mismo Valor* (*Women of Equal Worth*), a video recorded in 1999. Earlier the video identified Ortiz as the President of a women’s group in the Mixteca Alta region of the southern Mexican state of Oaxaca. She had observed that her husband was not around, and her children complained when her organizational activities delayed her arrival home. In the final scene, however, Ortiz shares a more upbeat observation: “Already we’re leaving behind fear, timidity; it’s getting a little better. But now that I’m participating, my legs…” Here she starts laughing, and finishes her thought rather breathless from laughter, “…my legs are trembling. And that’s all I can say. Gracias.”\(^1\) Afterward, the video’s credits begin to roll over an image of a man and a woman standing together behind large bags of coffee beans. Ortiz’s final comments hint at both the pain and pleasure she and other women living in rural Mexico might experience through new forms of political and economic participation. Together her words and actions suggest how awkward Ortiz finds participating, although it’s not clear if she’s referring to her experience of participating in the video interview, organizational activities, and/or home. What Ortiz says and the ways she communicates with the camera also can be seen as evidence that someone asked Ortiz questions; someone (else?) recorded her response and (others?) later edited this scene together with other footage. Out of these technology-mediated engagements emerged *Mujeres del Mismo Valor*, a 27-minute video about women’s organized participation in a statewide coffee cooperative comprised of mostly Indigenous farmers.

In this article, I examine *Mujeres del Mismo Valor* as an archive. Recent research on archives demonstrates that they are not only sources of historical documents and artifacts. They also embody efforts to impose order, dictate action, and enhance or abrogate agency through the creation of material sites and performance of knowledge systems. Archives emerge out of a process of organization that consists of, and is constitutive of, collection and collation.\(^2\) Historically “Indigenous peoples were the subjects of the record and not the owners.” More recently Indigenous movements for self-determination have seen colonial archives as valuable sources “for the reassertion of cultural identities and rights through the renegotiation of histories.”\(^3\) In addition to reclaiming archival knowledge, Indigenous cultural activists have used relatively new visual technologies, such as video, to decolonize archival documentation.

But videos are not only collected in archives; they also constitute archives. Video-mediated documentation entails an organizational geography of production distinguished by particular representational practices. For instance, in 1977 Mexico’s *Instituto Nacional Indigenista* (INI—the National Institute for Indigenous Affairs) created an *Archivo Etnográfico Audiovisual* (Ethnographic...
Audiovisual Archive). The archive’s film and video collections ranged from early 1950s cinematic features with famous Mexican actors to more recent materials made by media professionals who set out to record traditions practiced in Indigenous communities. Little more than a decade after the founding of the Archivo Etnográfico Audiovisual, a more participatory approach to producing videos about Indigenous peoples emerged out of INI programming in the southern Mexican state of Oaxaca. In this article, I study the video Mujeres del Mismo Valor as a visual archive that provides insight into this and subsequent shifts in authority and knowledge.

To begin, I draw on recent scholarship about the geographies of science to understand the archiving practices that shaped this particular video. Examining Mujeres del Mismo Valor as a site of knowledge production, I locate the video within a historical geography of the heterogeneous coalitions and representational practices that shaped it. This helps me highlight the critical praxis of Josefina Aranda Beazaury, a Mexican anthropologist who mobilizes the scholarly concept of gender to not only research but also transform Indigenous women’s participation in globalized economies. Second, I interpret Mujeres del Mismo Valor as a site of archived audiovisual imagery. I utilize my understanding of Aranda’s work to explore the video’s content and see what the video’s viewers might learn about the people, places, and practices it represents. The video allows for the creation of knowledge about the lives and livelihoods of Indigenous women living in a particular coffee-growing region of Oaxaca, Mexico during a specific moment in time. It narrates a hopeful, yet honest, politics of possibility wherein Indigenous women exercise greater organizational influence, but also grapple with exacerbated workloads and social disapproval.

I intend this article to narrate a similar sort of story. Keen to contribute to the decolonization of knowledge about Indigenous women, I aim to popularize Mujeres del Mismo Valor as a postcolonial archive that visually intervenes in colonialist and androcentric geographical imaginations of indigeneity. This is, however, no ‘charmed’ story about heroic women entrepreneurs finding success on the multicultural margins of Mexico at the turn of the century. Instead of assuming direct access to protagonists and clear channels of communication, I ask how the margins are mediated, not just by video, but also by academic advocacy. And as an academic advocate of the inclusive methodologies of Indigenous video, I encourage you, dear reader, to also become a viewer. Mujeres del Mismo Valor is available online at http://mmv.ojodeaguacomunicacion.org.

Locating Science

Research on the geographies of science emerged out of a mutual interest in locating science that was shared by mostly British historians of geography and historians of science during the 1980s. No longer was science assumed to be the same in all places; instead ‘constructivist’ scholars assumed that scientific truth, trust, and practice were contingently and socially constructed in place. Researchers began to study how particular sites, communities, and regions have shaped knowledge production practices at specific moments in time. A historical geographical perspective reveals the making, moving, and modification of scientific concepts and practices; it also “demonstrate[s] the geographies that science makes.” Consider, for example, how well geography has served empire militarily, economically, and ideologically by helping to establish and justify hierarchies of power and cultural hegemony. To understand the way in which Mujeres del Mismo Valor reconfigures the social hierarchies of scientific knowledge production, it is necessary to first examine how these hierarchies operate, and some of the reasons why they should be reconfigured.
Research concerned with “the cultural geography of inclusion and exclusion in science” asks who gets recognized as an author-ity, and examines how expertise and experience get exercised and transformed over time and space. Designations of authorship, and the multi-sited cultural politics that underwrite them, matter for understanding how scientific concepts, sites and practices are experienced and understood differently by different social groups. Researchers have inquired after these assertions and activities through examination of documents—the legible results of writing. Increasingly they also examine modes and means of textual learning, citing and reading, as well as audience receptions of specific texts and textual practices. Students of authorial agency also try to listen to the different kinds of talk that historically have contoured scientific practice and pedagogy. Recent work shows the importance of investigating both professional and more popular sites of scientific speech as sites of scientific proscription, contestation and reconciliation. Study of past sites and related organizational and representational practices draws out the delights, demands, and contested mores of the collective physical activities and common communication strategies that constitute science.

Historical examination of the locality and vocality of science also illuminates the profound impacts that individual personalities can exert on the geographies of science. And at the same time it reveals how scientific knowledge is inevitably co-produced, despite conventions of single authorship and hero worship. The personal and yet relational lessons drawn from science studies stimulate greater recognition of the ways in which today’s researchers intervene in the construction of the scientific spaces they set out to study, be these spaces constitutive of ‘the field’ or an archive. Scholarship on how science, society, and technology co-constitute one another—also known as science and technology studies (STS)—reveals the impossibility of non-normative knowledge claims, or apolitical technologies. Such theoretical mindfulness has prompted the suggestion that STS scholars take a stand and serve as public intellectuals who address, and try to redress, the social and political economic inequalities shaping access to, and benefit from, the clinical and engineering applications and commercial profits generated by today’s technoscientific enterprises. Calling for such normative measures requires a ‘reconstructivist’ approach that “tackle[s] the problems of how to reconstruct technoscience to promote a more democratic, environmentally sustainable, socially just or otherwise preferable civilization.”

My favorite normative reconstruction to emerge out of the study of locality and technoscience entails the assertion that historians of science “should be prepared to take stock of the nature, content, and role of indigenous knowledge systems.” This re-visioning of science requires “considering both Western science and indigenous knowledge systems as forms of local knowledge and practice.” It also suggests “such projects must allow the voice of the colonized and subjugated cultures to be heard in their own terms.” Making scientific inquiry polyvocal helps dismantle the hierarchies of knowledge that have historically configured the production of authoritative knowledge—not to mention ignorance—about Indigenous geographies. Particularly useful for this pressing task of decolonizing technoscience is a postcolonial approach to understanding and producing knowledge. Postcolonial STS rejects the binary bound by scientific authority and Indigenous authenticity, along with related assumptions about science as an isolated European eruption now capable of universal replication. Instead it emphasizes a long history of interaction and uneven exchange that continues unabated in the colonial present.

Seen from the postcolonial perspective, scientific enterprise looks different. From this angle observers can, for instance, better witness how “the practices of science and indigenous knowledge are thoroughly entangled and mutually constitutive rather than dichotomous.” To see these entanglements more clearly, some proponents of postcolonial STS draw on feminist methodologies to normatively suggest “starting thought from the lives of people upon whose exploitation the legitimacy of the dominant system depends.” When the standpoints of vulnerable
populations shape the pursuit of knowledge about natural and social processes, science gets better because it “can bring into focus questions and issues that were not visible, ‘important,’ or legitimate within dominant institutions, their conceptual frameworks, culture, and practices.”

Asking how and why different knowledge production practices might mingle (or not) is a useful strategy for responding to recent calls in geography for “an activist orientation in research, a concern with the protection and advancement of Indigenous peoples’ rights—including the advocacy of Indigenous rights in various national and international forums.”

Studying the intersection (and disconnect) among differently practiced sciences provides a basis for challenging the inequalities shaping the production of knowledge about Indigenous geographies.

To examine—and hopefully help reconfigure—the institutional and intellectual unevenness contouring authoritative geographical knowledge about Indigenous peoples, places, and practices, I focus my research on the access and use of video technologies. New digital and broadband technologies “open up the discursive space for communicating indigenous perspectives through technological performances and representations that are much more sympathetic to their cultural values. Because these technologies are not so narrowly textual...they provide means to articulate complex expressions of historical and political thinking that were previously denied by the cultural conservatism or perhaps ethnocentrism, of histories wedded to the written word.”

I am especially interested in the narrative powers enabled (and deterred) with the ‘less textual’ visual technology of video. So, alongside interpretation of a video’s content, I study the far-flung, transnational and collaborative—but highly sporadic—geographies that make Indigenous videos possible.

In this article I explore how Josefina Aranda worked—as an academic advocate—to redress Indigenous women’s marginalization from the production of authoritative knowledge about their lives and livelihoods. This story contributes to the exploration of the historical geographies of science by looking beyond the Euro-American biological and geographical sciences that have been at the center of much of the previous work done in this area. It also recasts—albeit partially—issues of authorship and authority in the production of knowledge about Indigenous geographies. Instead of a ‘hard’ science undertaken with colonialist practices of representation as a top-down authoritative project, I examine a more woman-centered social science informed by bottom-up cultural critiques. From this analytical angle, I identify Josefina Aranda as a practitioner of an activist branch of applied anthropology that has thrived in Oaxaca, Mexico. I also argue that Mujeres del Mismo Valor serves as a postcolonial archive because of the inclusive technoscientific methodologies employed to create it.

Introducing Indigenous Video in Oaxaca, Mexico

Home to sixteen different ethnolinguistic groups; Oaxaca is Mexico’s most culturally diverse state. Although evidence of the Indigenous population’s sometimes successful negotiations with the legal system and local elites can be found in colonial archives, Indigenous individuals were rarely in a position to contribute directly to the archiving of daily life and important events in Oaxaca. A colonialist ‘visual economy’ designed to impose order on unknown people and places filtered and filed away evidence of Indigenous action and agency. This way of seeing continued with state practices of documentation in post-Revolutionary Mexico. In some ways these representational strategies have not been abandoned, but in other ways ‘internal colonialism’ has been discredited as a national project in Mexico. In this section, I very briefly outline these tensions and describe how they shaped the mobilization of video in Oaxaca for the creation of Indigenous visualizations that might altercate colonialist practices of representing indigeneity.
During the first half of the twentieth century, the professionalization of anthropology in Mexico coincided with the formulation of a national identity based on the idea of mestizaje. Scholars and pundits who articulated this notion of bio-cultural mixture assumed indigeneity was destined for evolutionary extinction. State agencies, such as the Instituto Nacional Indigenista (INI), which was established in 1948 within the Secretariat of Public Education, sought to accelerate this process. Anthropologists employed in this and other bureaus tackled their mission with indigenismo, a policy and practice dedicated to the acculturation and economic incorporation of Indigenous peoples. By the end of the 1960s, however, some Mexican anthropologists had begun to challenge this focus on cultural assimilation that so well served the state. Under the influence of political economy, many anthropologists turned their attention away from cultural assimilation to socio-economic inequality, peasant households and related issues such as migration and urbanization. Nonetheless throughout the 1980s most anthropologically trained researchers continued to work in state agencies, especially those tasked with Mexico’s agricultural adjustments to the neoliberal era. And a number of them continued to compose scholarship and policy that considered cultural differences a liability because they fostered exploitation.

Others, however, drew on more culturally nuanced understandings of class and conflict. Over the course of the 1980s, they reformulated Indigenous cultural difference as a politicized ethnicity that required the concepts of autonomy, self-determination, community, and self-government to understand. As these ‘ethnicists’ examined the cultural politics of socio-economic change—both historical and contemporary, they met with, listened to, and learned from the individuals and organizations comprising transnational and regional Indigenous movements. In dialogue these different actors formulated a framework for identifying and describing Indigenous rights, not only in academic publications, but also in more popular outlets. Anthropologists worked hard to articulate and apply their and their Indigenous colleagues’ arguments, and in many ways they succeeded. The scholarly terms with which cultural anthropologists discuss indigeneity “now circulate outside the academic confines of institutional anthropology.”

For instance, anthropological thought and action contributed to the amending of the Mexican constitution in 1992 to recognize a pluricultural nation. And although recognition on paper cannot be equated with prompt or progressive transformations, these intellectual currents—especially when mediated by visual media—helped set the stage for widespread public support of the Zapatista uprising at the start of 1994.

Of particular note is the work of anthropologists in Oaxaca, where the state constitution had been modified even earlier in 1989 “to include explicit recognition of the rights of indigenous peoples.” Several researchers working and living in this state were pivotal to the formulation and popularization of scholarship that helped to pave the path to juridical reforms. These academic advocates promoted and sought to practice “a process of internal decolonization in which anthropology plays an important role in attenuating—or even someday hopefully eliminating—the economic inequality and political exclusion that have characterized Oaxacan society for the past two hundred years.” To decolonize their discipline they worked to reform government institutions and/or utilize transnational connections to create agencies more attuned to indigeneity and the demands of Indigenous movements. And to enable greater Indigenous self-representation, they aimed to make the analytical and technological tools of research and reflection more accessible. These scholarly efforts contributed to Oaxaca’s growing number of academically trained and institutionally employed Indigenous anthropologists.

Oaxaca is also where the INI launched its first Indigenous video initiatives. There in the mid-1980s media makers within INI’s Archivo Etnográfico Audiovisual orchestrated the first workshops in an Indigenous community that led to a participatory video production. A media transference program and related series of video production workshops for members
of Indigenous organizations followed in 1989. These workshops unfolded in INI installations near the state capital of Oaxaca, where about five years later INI established a Centro de Video Indígena (CVI). The CVI employed a small staff that offered technical assistance; it also housed equipment, as well as many of the Indigenous media makers who came to use it. Research on the video making practices and productions related to the INI workshops and/or the CVI in Oaxaca demonstrates how these co-produced visualizations are shaped not only by Indigenous media makers’ visions, but also by state efforts to depoliticize indigeneity and the aesthetics of more radical Latin American documentary traditions. Despite or perhaps because of these endless negotiations, Indigenous video production helps to decolonize the geopolitics of representation by amplifying historically marginalized voices.

Elsewhere I have argued that Indigenous video production in Oaxaca can be understood as a multi-sited postcolonial technoscience characterized by hybrid practices of knowledge production. Indigenous videos arise out of specific organizational geographies and representational practices that are almost always negotiated and performed by a heterogeneous group of people. Indigenous individuals variously committed to cultural and political activism at community, regional, and/or transnational levels network with diverse allies, many of whom are scientific researchers and/or media makers. They also intersect with the support and expectations of the institutions, foundations, and/or state agencies that often enable the production and viewing of videos that get edited, titled, and packaged. This kind of technology-mediated and collaborative production of knowledge about Indigenous geographies embodies a new sort of author-ity. The material geographies of Indigenous videos are particularly postcolonial for two interwoven reasons. The first is the way that the coalitions shaping these videos seek to move beyond colonialist narratives of indigeneity by amplifying historically marginalized voices. The second postcolonial pattern characterizing Indigenous video productions is the way they continue to be shaped by the not-yet-decolonized institutional and intellectual traditions of scientific research, state programming and transnational funding.

In the next section I explore how and why the Indigenous video Mujeres del Mismo Valor visualizes some of the women who participate in a statewide coffee cooperative. While evidence of Indigenous women’s agency can be found on the margins of colonial and state archives, they have historically been hard to see. Indeed, until the 1970s researchers rarely saw women outside of their invisible roles in domestic households. Now they are more visible as individual and collective actors participating in, for example, the history of Mexican agriculture, revolution, and migration. Current social science and development practitioners increasingly represent Indigenous women as a population that is especially vulnerable to poverty, violence, and environmental devastation. Additionally, new media—and feminist research strategies—provide means for Indigenous and other historically marginalized women to better articulate their experiences. Such collaborative co-productions can create postcolonial archives that better incorporate newly heeded voices into national and organizational projects. Since the 1990s, Oaxaca has been a prominent site of such interventions. The following section tells a story about a particular anthropologist who turned to video in order to work along similar lines.

Situating Mujeres del Mismo Valor

The protagonist in this story about a video is social anthropologist Josefina Aranda, who has long been a faculty member and more recently an administrator and candidate for rector at the Universidad Autónoma “Benito Juárez” de Oaxaca (UABJO) in the capital city of Oaxaca. This is not, however, an up-close examination of Aranda’s personality, personal life, or positions at
UABJO. Nor does it feature close readings of her scholarly texts. Rather I consider the sites of production where she worked, where I look to see her ‘beyond-the-text’ representational practices. Because I want to understand how Aranda’s academic advocacy contributed to the production of *Mujeres del Mismo Valor*, I focus on where, with whom, and—when possible—how she undertook professional and organizational activities.

Not long after Aranda earned her undergraduate degree in social anthropology in 1981, she co-authored an article that argued that women’s socio-economic disadvantages underwrote the “comparative advantages” of agri-business in Mexico. Two years later, Aranda had her master’s degree from the *Escuela Nacional de Antropología e Historia* and her position at the UABJO. Between 1983 and 1985 Aranda studied marriage and the political economy of household production of woven textiles in an Indigenous community in the central valley region of Oaxaca. She promptly published her work on the gendered division of labor in the second issue of a brand new journal titled *Etnias*, which was published by the recently established *Centro de las Culturas Oaxaqueñas* (CECOAX). Dedicated to the pursuit of *etnodesarrollo*—productive and cultural activities that strengthen Indigenous ways of life, CECOAX entangled four state and federal institutions tasked with development, education, and/or research. Aranda’s scholarship on Indigenous families in weaving communities also appeared in a special issue of a Mexican sociology journal that brought together Oaxaca-centered studies of ethnicity, government policy, and work relations. The two publication outlets featuring Aranda’s research neatly illustrate how her interests intersect with those of the international community of social anthropologists in Oaxaca that was identified and described in the preface to this story. But her work also differed from the academic advocacy undertaken by her (mostly male) colleagues. Into this scholarly milieu, Aranda and others introduced a focus on women. Through the Third UN Conference on Women in Nairobi in 1985, at the end of the UN Decade for Women, Aranda connected with other researchers concerned with the livelihoods of women working in the agricultural sector. She went on to edit a volume featuring their work on the impacts of structural adjustments on agrarian policy and the lives of Mexican women. In 1988 Aranda was involved with the first Encounter of Women from Peasant Organizations in Oaxaca, an event that was organized by women’s units of three regional organizations operating in Indigenous regions of the state.

As a scholar, Aranda has examined and drawn on Indigenous women’s experiences to critique Mexican policies that target rural women. She has written about how international banks and aid agencies, and—by extension—the Mexican state have come to identify women as a flexible labor force. Now seen as vectors of development, women are tasked with the socio-economic improvement of their families. As an academic advocate, Aranda has argued that although such programming can create conditions for some women to start formally organizing around production projects, agrarian policy targeting women consistently fails because it does not take into account *campesinas* (peasant women) at any stage of decision-making. Targeting women guarantees only occasional, insufficient, and difficult-to-access support for women to undertake largely unsustainable and all too often unprofitable ventures. Meanwhile expectations that women remain fully responsible for social reproduction have meant that production projects tend to exacerbate women’s already demanding workloads.

As the 1980s came to a close, Aranda concentrated her analytical gaze on the production of coffee, one of Mexico’s principal agricultural products. She saw the coffee production system in southern Mexico as distinctly Indigenous, largely because Indigenous farmers with small plots of land (less than five hectares) worked 80 percent of the area characterized by coffee production. Since the 1970s coffee growers had depended on the Inmecafé, a national coffee institute that subsidized the production and marketing of coffee. But this state support fell apart in 1989 when Inmecafé was abruptly dismantled as part of Mexico’s neoliberal economic restructuring
of agriculture, a process hastened when price agreements and production quotas managed by the International Coffee Organization collapsed and the global market price of coffee sunk precipitously. In Oaxaca these two transformations resulted in a 60 percent drop in coffee prices between 1989 and 1994, which affected at least 55,000 coffee-producing households.\textsuperscript{62}

In response to this crisis, Aranda and others established the \textit{Coordinadora Estatal de Productores de Café de Oaxaca} (CEPCO).\textsuperscript{63} Independent from federal or state government control, this statewide organization united more than 18,000 coffee producers, participating in more than 40 regional organizations, many distinguished by experienced leadership. It also fielded a team of advisors, such as Aranda, who maintained far flung contacts and profound knowledge of public policy. More than twenty years later, CEPCO continues to operate, albeit with about 4,000 fewer associates. Indeed this umbrella organization has expanded its operations to include ownership of two processing facilities, micro credit programs, four cafes in the capital city, and a credit union. It has equipped member organizations with the skills, knowledge, and confidence that allow coffee growers to identify, enter, and better negotiate new markets such as organic and fair-trade markets.\textsuperscript{64} According to Aranda, a key reason for CEPCO’s success is its adoption of the community organization and leadership practices characterizing the communities where most coffee growers live, especially the selection of leaders during open assemblies and decision-making by consensus.\textsuperscript{65} In other words, similar to other anthropologists working in Oaxaca at the end of the twentieth century, Aranda identified Indigenous governance as an ideal template for the statewide coffee cooperative that she helped to design and administer. At the same time, however, her focus on gender highlighted and helped to challenge exclusionary aspects of the organizational practices that characterize many rural communities in Indigenous regions.

During the crisis that began in 1989 and lingered until 1994, coffee-growing families could no longer pay for hired help. This intensified the participation of women and children in unpaid work, including more mechanical tasks from which women were traditionally excluded. It also fueled massive emigration from coffee growing regions as families pursued alternative survival strategies. These shifts created a growing number of female-headed households producing coffee. Under Aranda’s guidance CEPCO sought from the start to educate its membership, especially its mostly male leaders, about gendered inequalities and the pressing need for women’s full participation in the organization. Three years after its formation in 1992, the cooperative established a women’s commission that brought together eight groups of women from five different regional organizations. In 1995 CEPCO hosted a symposium that united these women, and some men, for collective reflection and planning. Aranda’s publications discuss conversations that took place at this and similar subsequent events. They provide evidence that reveals the challenges Indigenous women have faced as they learned to organize in new ways, and identifies the many obstacles the many obstacles to fuller participation that the members of CEPCO’s women’s commission continue to face.\textsuperscript{66}

When Aranda received a grant from the John D. and Catherine T. McArthur Foundation in 1998, she used some of the funding to co-produce a video showcasing the experiences of women involved with CEPCO. For this project, which resulted in \textit{Mujeres del Mismo Valor}, she worked with a small media NGO that—at that time—was called \textit{Comunicación Indígena} (COMIN).\textsuperscript{67} The Italian-Canadian director of COMIN, Guillermo Monteforte, had been the founding director of INI’s \textit{Centro de Video Indígena} (CVI) in the capital city of Oaxaca. Prior to that position, he had worked in INI’s \textit{Archivo Etnográfico Audiovisual}, and had helped to design and run INI’s audiovisual technologies transference program.\textsuperscript{68} Monteforte assembled an international and pluricultural team to make \textit{Mujeres del Mismo Valor}. The credits at the end of the video indicate that Aranda was the executive producer and eight other people were directly involved in its recording, editing, and post-production. Five of them—three men and two women—had
received audiovisual training and support through INI’s CVI. The three other contributors were Monteforte and two American women, who—like Monteforte—were professional media makers that did not self-identify as Indigenous.

Although, to my knowledge, Aranda has never discussed her research methodologies in print, the allies she chose to work with and the actions they undertook together demonstrate a distinctly feminist praxis. Indeed, Aranda’s gendered analysis of agrarian policy during the 1980s—when Mexico gave up all pretense of agrarian reform favoring peasant families, exemplifies three key elements characterizing a feminist approach to locating globalization. First, her research demonstrates how the so-called informal and formal spheres of economic activity inexorably intertwine as Indigenous households, communities, and individuals respond to the latest crisis sparked by global economic restructuring. Second, she studies the processes transforming Mexico’s agricultural sector from the standpoint of marginalized people, most especially Indigenous women of coffee producing families. And third, Aranda’s efforts to make space for women in an emergent statewide coffee cooperative appear to stem from a determination to reconfigure gendered social hierarchies.

Furthermore, the team that assembled around the making Mujeres del Mismo Valor can be understood as a coalition committed to decolonizing as well as gendering the production of authoritative knowledge about the Indigenous geographies of coffee production in Oaxaca. This heterogeneous group’s collaborative visualization of Indigenous women—mediated by the less-textual nature of video—provides an alternative means of communication and dialogue that make less privileged women visible in ways that might be more meaningful for the represented women than textual publications, no matter how popular. Knowing this, however, requires further study of the video’s reception among the participants, which is not my objective here. Instead, in the following section I interpret the video as a visual archive of changing relationships in the production of knowledge about Indigenous geographies.

Learning from Mujeres del Mismo Valor

Over the course of the video Mujeres del Mismo Valor we hear from fifteen individuals who are introduced with textual renderings of their names and affiliations. All but one are associated with Mixteca Alta del Pacifico (MAP), a sociedad cooperativa, which is a social organization that coalesces in solidarity around the acquisition and provision of goods and services. Two of the MAP members are men, one is the cooperative’s former President and the other is the current President. The remaining twelve members of MAP we see in the video are women. Two of them belong to CEPCO’s Women’s Commission (as does the lone named individual who does not belong to MAP, but rather a similar organization in a different region of Oaxaca).

In addition to introducing people and their organizations, Mujeres del Mismo Valor takes viewers to several places to see these actors work. The first is a painted concrete block building that houses MAP. Writing on its wall locates the cooperative in the community of Miramar, which is in the municipality of Yucuhiti, which belongs to the district of Tlaxiaco, (Figure 1) part of a region in Oaxaca called the Mixteca Alta. Subsequent scenes recorded in four different communities where MAP associates live offer viewers a glimpse of where and how the women of MAP work. For example, some of the women of MAP are interviewed in three sites where they collectively run enterprises such as a supply store, a ‘traditional health’ clinic with pharmacy, and a gasoline-fueled corn mill. But not all of the MAP members’ activities are clearly commercial. Scenes from a couple of community assemblies demonstrate how some of the same women who have entered new spaces of entrepreneurial participation have also begun to participate in local governance.
The video does not only visualize the organizational, agricultural, and commercial practices of the MAP women. Footage of the Second Encounter of Women Coffee Growers, which was convened by CEPCO’s Women’s Commission in the capital city, suggests how MAP activities take women from their homes and communities to the capital city about four to seven hours away (depending on precise point of origin, the weather and road conditions). In such forums they share their experiences, learn from others, and then return home with useful knowledge, greater confidence, and new skills. Scenes of this event also hint at the outreach strategies through which some of these valuable attributes are acquired and/or fortified. In addition to attending a large assembly to hear speakers, groups of women speak to one another during smaller breakout sessions, some of which feature hands-on activities. For instance, a group of women seated around a large piece of paper on the floor enjoy using markers to draw images that suggest how life has changed since they began to participate more broadly in organizational activities and community affairs. These images are then mobilized to powerful visual effect. At one point, for example, the camera shows us a drawing of a slouching woman next to the written word ‘before,’ and then a drawing of a smiling woman with combed hair standing tall next to the word ‘after.’ Several similar sketches appear throughout the video, signaling transitions and illustrating how women’s organizational participation has transformed lives, families, and relationships.

A central theme running through the experiences, emotions, and opinions archived in Mujeres del Mismo Valor is the changing position of women in coffee growing communities and organizations. For instance, a health promoter discussing women’s growing involvement notes that it was initially hard because the women didn’t attend meetings, even after they became part of projects; instead their sons and husbands went. But, she says, “since organizing, we have noticed that yes, our participation equals that of our husbands. And we’re glad to be organized because we can tackle any project; but one person alone can’t.” Later one woman observes that
before, the men “didn’t think of us.” Another recalls men asking, “When did you ever see a group of women working?” She then goes on to state that “now, because they see it, they believe it, and even respect it.”

A couple of the women make a point of recognizing their spouses for the greater participation of women. One woman talking about her involvement with a pig project says, “We women formed a group thanks to our husbands.” The men participating in MAP came home from a CEPCO event “and they told us we could also do it.” And she goes on: “Why not? It helped us a lot with our families. Our husbands helped us a lot.” A different woman explains that men now take women into account; indeed, sometimes they even thank them. Increasingly it’s recognized that women “don’t drink, they don’t waste money, and sometimes the men, not all—some of them, drink; they waste money and don’t pay bills. So the nice thing is that we already see an improvement in our lives.” Then back at the headquarters of MAP, the current President pushes these claims further when he states, “We see that women are stricter, fairer, that they’re able. In other words, a woman can be a town official.” He too extends organizational and commercial participation into local governance.

Many of the women who talk during *Mujeres del Mismo Valor* also emphasize the difficulties inherent to the shifting social grounds shaped by these new spaces of participation. One observes “we have many more obligations than the men because we are the first to get up and the last to go to bed, because we have to tend to our children, take them to school and all that.” During one of the several interviews that appear to have been recorded during CEPCO’s Second Encounter, we hear a woman recounting a general assembly convened in a community by an organizational leader. He proposed women’s projects, but the other men simply couldn’t conceive of anything women did that merited funding. “I didn’t want to get into it,” she says, “because really, I didn’t want problems.” But in the end she was encouraged by other women to take the risk. And her participation in the CEPCO meeting suggests that she not only spoke, but also successfully earned the support of the other women and became a leader herself.

But entering leadership roles is not easy. One woman details how she and others were called streetwalkers—often by other women—because they traveled to meetings. Some jealous husbands got drunk and beat their wives. “But thank God,” she states, “everything got better.” But things are far from perfect. Back at a breakout session of the Second Encounter, a woman speaks adamantly. “And there are problems, yes, criticism, gossip, selfishness.” A different woman says, “I was going to give up being on the this steering committee, and have someone else do it instead.” But she found no one else would assume the task for fear of criticism. Although, she adds with a wry grin, they certainly were willing to criticize her!

In addition to learning about the challenges women face, viewers can see how CEPCO outreach aims to inspire supportive solidarity when an older woman who represents MAP on CEPCO’s Women’s Commission addresses a small group. Sitting on the edge of her seat, she says, “What I’ve been doing is collect[ing] nametags [at workshops and conferences]. They give me the nametag. I go and I hang it up. I go the next time and this time with clips—I hang one from the other.” As she speaks, the camera pans down a chain of nametags from various events; it lingers on the one from an occasion hosted by the Zapatistas. She says, “I have a row hanging there. Then my husband, when he sees that, he says, ‘Look at all the events you’ve been to.” As this scene ends, she firmly declares that everyone should collect nametags.

*Mujeres del Mismo Valor* offers a glimpse of women’s growing participation in the spaces of convergence linked to CEPCO. The video shows viewers that Indigenous women often undertake unconventional gender roles under duress, more in pursuit of survival rather than personal emancipation. The experiences and emotions that the women share in *Mujeres del Mismo Valor* also underscore the women’s relational sense of identity. The women who speak
in this video articulate a strong sense of complementarity wherein both Indigenous women and men contribute—ideally in an equal fashion—to communal as well as household or individual welfare. Refusing to lose sight of cultural marginalization while addressing political economic and social inequalities means that “[r]eforming gender relations requires cultural change, a collaborative project of women and men against patriarchy and colonialism and not a struggle against men.” In short, men are not always the enemy, but rather just one of many all too often difficult collaborators with whom one needs to better communicate.

Viewers of Mujeres del Mismo Valor can also catch a glimpse of the ways in which feminist praxis extends into Indigenous organizations. The video provides evidence of how feminist scholars and other proponents of decolonizing knowledge production have helped to create forums for culturally specific recognition and renegotiation of gendered roles, obligations, and tasks. Out of these organizational engagements Indigenous women emerge as new political actors who struggle to rework some cultural traditions at the same time they fight to defend others. Mujeres del Mismo Valor archives these entangled efforts.

Discussion

The video Mujeres del Mismo Valor is a technoscientific representation of Indigenous women. With the theoretical tools of an activist-oriented social anthropology, this video visualizes Indigenous women exercising agency in previously unseen ways. It also helps to reconfigure the hierarchies that have historically distinguished the production of knowledge about Indigenous geographies. By centering the voices, bodies, activities and agency of Indigenous women, Mujeres del Mismo Valor partially de-centers Aranda’s scholarship by making it more polyvocal. While this can be seen as a new kind of scientific enterprise, this is not a complete or unprecedented disruption. Aranda’s influence remains visible. The women in Mujeres del Mismo Valor are positioned to embody the gendered impacts of global economic restructuring. Such a scholarly practice resembles this article’s positioning of Aranda as a feminist researcher who is particularly mindful of cultural differences. The categories shaping the analysis are not necessarily those favored by the subjects of study.

Mujeres del Mismo Valor operates as a less textual archive shaped by a particularly postcolonial visual economy. Instead of a colonialist fascination with fixity and the determination of order, the video favors a more processual way of seeing indigeneity that highlights gendered relationships and heralds transformation. At the same time it makes a gendered duality visible, the video pushes the categories of complementarity and analysis into play. Its visuality materializes the formerly ghostly figures of Indigenous women as social actors intimately connected to cups of coffee consumed in places far from the Mixteca region of Oaxaca. This kind of postcolonial archive can have a visceral affect on viewers.

Conclusions

Examining Mujeres del Mismo Valor as an archive offers geographic lessons about the successes and trials experienced by Indigenous women in Oaxaca who have begun to participate more broadly in their communities and coffee cooperatives. Additionally, approaching this video from the perspective of the geographies of science provides leverage for seeing who else is involved in these changing relationships. Not only are family and organizational members enabling and complicating transformations in the lives and livelihoods of Indigenous women, but
so too are the academic advocates and media professionals who—in solidarity—dedicate their time, energy and know-how to formulating and facilitating change while also fostering the sense of continuity that is so central to indigeneity. This article’s examination of academic advocacy in Oaxaca, Mexico expands the study of the geographies of science by asking how social scientists help augment the agency of Indigenous knowledge producers. The point of asking how Aranda does this is not to diminish the achievements of Indigenous actors. Rather the goal has been to highlight, and learn from, how one researcher has grappled with the task of making scholarly insights more meaningful for more people by co-producing knowledge in which many “speak.”

Video is particularly useful for a more polyvocal documentation of individuals’, households’, and communities’ responses to change. Indigenous scholars, activists, and media makers use video to create visual archives of postcolonial technoscientific knowledge about Indigenous geographies that challenge persistent forms of colonialist science (both natural and social). Yet Indigenous videos like Mujeres del Mismo Valor do not directly broadcast autonomous voices speaking from Indigenous communities. Rather they allow viewers to witness co-constructed and co-authored (and co-authorized) visualizations that represent collaborative and dialogic projects. The entanglements archived in video productions do not overcome all inequalities; indeed, ample hierarchies in mobility and uneven access to technologies remain, although they have not been the focus of the story told here. Nonetheless, videos created by coalitions that congeal around the political kinship of indigeneity can help decolonize the cultural geographies of technoscience.

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NOTES

1 Here I augment the subtitles featured in the English version of Mujeres del Mismo Valor with Margarita’s spoken expression of thanks, which is not translated. I follow the same translation strategy in subsequent quotations from the video.

2 Claire Dwyer and Gail Davies, “Qualitative Methods III: Animating the Archives, Artful Interventions, and Online Environments,” Progress in Human Geography 34 (2010): 88-97; Elizabeth Gagen, Hayden Lorimer, and Alex Vasudevan, Practicing the Archive: Reflections on Method and Practice in Historical Geography (London: Historical Geography Research Group, Royal Geographical Society — Institute of British Geographers, 2007); Carl Griffin and Adrian Evans, “On Historical Geographies of Embodied Practice and Performance,” Historical Geography 36 (2008): 5-16; Carolyn Hamilton, Verne Harris, Jane Taylor, Michele Pickover, Graeme Reid and Razia Saleh, eds., Refiguring the Archive (Boston: Kluwer Academic Publishers, 2002); Joan Schwartz,


5 The two-part analysis of this video draws on the widely practiced visual methodologies for exploring a visual text as a site of production and as a site of image found in Gillian Rose, Visual Methodologies: An Introduction to Researching with Visual Materials (Los Angeles: Sage, 2012).


7 In her book Along the Archival Grain: Epistemic Anxieties and Colonial Common Sense (Princeton, NJ: Princeton University Press, 2008), Ann Laura Stoler uses the term ‘charmed stories’ to identify an approach to telling archival stories that relies too heavily on good-bad binaries to examine colonial power relations. As Emilie Cameron argues, the problem with such stories is “that they blind us to understanding our own implication in the ongoing racialized and colonial geographies.” Emilie Cameron, “New Geographies of Story and Storytelling,” Progress in Human Geography, published online (6 Feb 2012 doi: 10.1177/0309132511435000): 15.

8 For a cogent critique of such a vision, see Margath Walker, Susan Roberts, John Paul Jones, and Oliver Fröhling, “Neoliberal Development through Technical Assistance: Constructing Communities of Entrepreneurial Subjects in Oaxaca, Mexico,” GeoForum 39 (2008): 527-542.

9 The scholarship reviewed here does not restrict science to the realm of hypothesis testing. Instead it defines science more generally, as systematic and collective kinds of inquiry that are designed to produce authoritative knowledge about humans and the world around us.


20 The word technoscience emphasizes how technology mediates scientific endeavors. For a discussion about why research on science and technology should address inequality, see the collection of essays introduced by Peter Senker, “Editorial,” *Science, Technology, & Human Values* 28 (2003), 5-14, especially Wiebe Bijker, “The Need for Public Intellectuals: A Space for STS,” 443-450.


37 Nahmad, “Mexico,” 143.


39 Nahmad, “Mexico,” 142 and 144.

40 Sometimes these kinds of reforms came at high cost. For example, Salomón Nahmad was jailed while attempting to undertake reforms as the director of INI. He discusses this experience and the events leading up to it in an interview with Margarita Dalton, “Encierro Intelectual: Entrevista con Salomón Nahmad,” *Desacatos* 9 (2002): 163-176.


Smith, “Locating Post-Colonial Technoscience.”


In many ways the far-flung, transnational and collaborative, but discontinuous, geographies of Indigenous video resemble those distinguishing ‘participatory ethnomapping,’ counter-mapping, or participatory mapping now unfolding in some Indigenous and Afro-Latino regions of Latin America. Both kinds of visual technology-mediated collaboration aim to enable and promote the self-representation of Indigenous peoples, places, and practices. Both map and video projects arise out of timely interventions by community and organizational members, academics and/or activists—again, some of whom self-identify as Indigenous, others who do not. They also draw on state, international, and/or transnational aid to mobilize relatively new visual technologies and/or hire media or mapping professionals. See, for example, the special Issue on ‘Maps of, by, and for the Peoples of Latin America’ edited by Peter Herlihy and Gregory Knapp in Human


53 For example, in July of 1993, a three-day Latin American summit titled “La condición de la mujer indígena y sus derechos fundamentales” (The condition of the Indigenous woman and her fundamental rights) unfolded in the capital city of Oaxaca with the support of INI, the state
government of Oaxaca, and SEDESOL—Mexico’s Ministry of Social Development. This event featured roundtable discussions following speaker panels that included anthropologists and other academics, Indigenous individuals and representatives of Indigenous organizations, lawyers, and medical professionals. Speakers’ talks are collected in Patricia Galeana, (ed.), *La Condición de la Mujer Indígena y sus Derechos Fundamentales* (Mexico City: Federación Mexicana de Universitarias, 1997). This book’s publication was made possible with support from Mexico’s National Human Rights Commission, the Universidad Nacional Autónoma de Mexico, and the Ministry of Interior.


55 Josefina Aranda, “La Relación Matrimonial en los Valles Centrales,” *Etnias* 2 (1985): 8-13. Editorials in the first two issues of *Etnias* detail this organization’s membership: CECOAX was comprised of the Coordinadora Estatal de Oaxaca del Instituto Nacional Indigenista, the Unidad Regional Oaxaca de la Dirección General de Culturas Populares—a part of the Secretaria de Educación Pública, El Centro Regional de Oaxaca del Instituto Nacional de Antropología e Historia, and the Department of Educación Indígena of Oaxaca de la Dirección General de Educación Indígena—which also part of the Public Education Secretariat.


59 Aranda notes that 120 Indigenous women from 40 different groups participated in this event. Josefina Aranda, “Peasants Identify Their Feminine Perspective” *Voices of Mexico* 16 (1991): 8-13. This journal is an English language outlet featuring reports and interviews related to Mexican science, culture, politics, and economics, which is published by the Universidad Nacional Autónoma de México for readers in the US and Canada.


61 Josefina Aranada, “La Experiencia Organizativa de las Mujeres Cafetaleras,” *Acervos* 27 (2004): 59. Additional criteria by which Aranda assesses coffee production on small farms in southern Mexico as Indigenous include the use of more environmentally sustainable practices. Coffee was initially grown on plantations, but by the 1920s the rural labor force had appropriated the plants, and now it is a cash crop that supplemented the household incomes of *campesino* (peasant) families pursuing multiple subsistence strategies. Coffee growing communities are located in regions characterized by the lowest level of state investment, the poorest infrastructure, and the worst provision of educational, medical, communication, and transportation services; in Mexico these are the places where most speakers of an Indigenous language live. Furthermore, these coffee producers possess a strong communitarian spirit that shapes their labor and organizational practices. A similar argument is found in Josefina Aranda, “Camino Andado, Retos y Propuestas: La Coordinadora Estatal de Productores de Café de Oaxaca,” *Cuadernos del Sur* 2 (1992): 100-104; Josefina Aranda, “Peasant Farmers in the Global Economy: The State Coalition of Coffee Producers of Oaxaca,” in Timothy Wise, Hilda Salazar, and Laura Carlsen, (eds.), *Confronting Globalization: Economic Integration and Popular Resistance in Mexico* (Bloomfield, CT: Kumarian Press, 2003), 149-170.


This media NGO eventually changed its name to Ojo de Agua Comunicación. To learn more about this organization see [http://www.ojodeaguacomunicacion.org/](http://www.ojodeaguacomunicacion.org/) as well as the sources cited in endnotes 41 and 43.

Monteforte was an ideal partner for Aranda. Before working with her, Monteforte had collaborated with two other anthropologists to make the video *Espíritu del Agua* (*Spirit of Water*), which focused on a women’s collective based in communities of African descent on the Pacific coast of Oaxaca. He had also worked with mostly women’s weaving collectives—and their allies—to make a video titled *Mujeres, Textiles, Esperanzas* (*Women, Textiles, Hopes*). To learn more about Guillermo Monteforte see endnote above, as well as the following websites: [http://mediaartists.org/content.php?sec=artist&sub=detail&artist_id=609](http://mediaartists.org/content.php?sec=artist&sub=detail&artist_id=609).

Remember, you too can learn from this video. It is available at [http://mmv.ojodeaguacomunicacion.org](http://mmv.ojodeaguacomunicacion.org).

To learn more about the legal entity known as a sociedad cooperative in Mexico, see [http://www.imdecoop.coop/informacion.php](http://www.imdecoop.coop/informacion.php).

In Mexico states are divided into municipios, or municipalities, which are roughly equivalent to counties in the U.S.A. There are 570 municipios in Oaxaca, which is more than double the number of any other Mexican state (the next highest number is Puebla with 217). Because of this administrative challenge, Oaxaca is divided into thirty *distritos*, or districts. The Oaxaca government identifies seven regions in the state. One of them is the Mixteca, which a large region that spills over the borders between Oaxaca, Puebla, and Guerrero. In turn, the Mixteca is in turn divided into three different areas: Mixteca Baja, Mixteca de la Costa, and Mixteca Alta.

These communities are San José Zaragoz, Guadalupe Miramar, San Lucas Yosoncaje, and Zaragoza Itunduhia.


Schiwy, *Indianizing Film*, 132.


I hope something similar will occur with my scholarship. It can be more polyvocal if you too listen to and learn from the women showcased in *Mujeres del Mismo Valor*.
