REMEMBERING THE UNITED STATES-MEXICO BEEF: HOW AFTOSA AND FIAO BECOME TOOLS OF RESISTING THE INDUSTRIALIZATION OF ARTISANAL MEXICAN CHEESE

by

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An Undergraduate Departmental Honors Thesis Project

Submitted to the Department of History

University of California, Los Angeles

March 21, 2025

Introduction

Mauro Miranda is a cattle rancher on "Rancho las Tres Gotas" in Guerrero and has maintained his herd for over 20 years.[1] A rural artisanal cheesemaker, he generously offered to show me his milking process. We hopped in his red Nissan hardbody pick-up truck and started navigating the sharp turns and narrow streets of Oxtotitlan. After a few minutes of driving, I noticed we gained elevation and the cliffs that overlooked the pueblo felt like they were within arm's reach. Then, he downshifted, made a left onto the main road, and headed downhill. After shifted into neutral, he turned off the truck, stuck his keys in his pocket, and laughed as we rolled down the winding road, coming to an abrupt stop on the road's shoulder. He turned to me, smiled, and explained, "Para ahorrar gasolina." He opened the gate and shouted "Vaca! Vaca! Vaca!" and to my surprise, cows began strutting up the steep and rocky terrain. Everything was so different from the ranches that I've seen in Michoacan, which were relatively flat, muddy, and had ear-tagged Holstein cattle–the typical black and white dairy cow. This ranch was different.

Having been the primary caretaker of this herd for so long, not only did Mauro know every cow by name, but he knew their history and could trace each cow back generations. Despite not having ear tags or a number identification system, he pointed out every cow and he easily remembered where they came from and what they've been through. He began calling the cattle,

[1] This project includes materials that have been collected through the support of the Mellon Mays Undergraduate Fellowship (MMUF) program at UCLA. A previous version was presented at the MMUF Western Regional Conference in November 2024, where I received notes and suggestions. I wanted to express my gratitude to those who have helped me along the way, especially to those who provided oral histories on my trip to Mexico.

one-by-one, and leading them to a separate corral where their calves patiently waited their entrance.

However, Tortuga, the first cow that entered the corral, did not have a calf waiting for her. Unfortunately, she had lost her calf only three days before my visit, but Mauro insisted that she needed to be milked to alleviate the pressure in her teats. After Mauro milked Tortuga, he said, “soy del antigua” and dumped the bucket of creamy, yellow-tinted milk on her back because he believed the colostrum would return nutrients back through her skin. After Tortuga, he called in Pulcera, a white short-horned cow that nursed her calf and had assumed the role of feeding another one whose mother had an infected udder. Because Pulcera was feeding two calves, she could not be milked so he called in the next one. Coca, a European cross, got her name when she was a few days old. She was thought to be sick with bloat but was fed a “coca de medio litro” and quickly recovered. Mauro milked two teats and left the others for Coca’s calf, who eagerly drank from them.

Next, Giraffa, a light brown cow with dark brown horns came strutting in the corral. Mauro told me that this cow’s mother had a huge neck and passed it down to her, so he named her Giraffa. After he was done milking, her calf drank from her teats as Mauro poured about two liters of milk into a 10-liter stainless-steel milk vat. After milking a few more cows, he shouted “Pansona! Pansona!”. A pure breed Brown Swiss cow, came walking in. I noticed a difference between her and the other cows. First off, she lacked horns, and she was visibly larger than the others. Also, her udders hung lower, and she walked as if they got in the way. Mauro milked her the same way as the others, leaving two teats for her calf, but this time he dumped about five liters into the vat. I acknowledged her massive milk yield, and he told me that her mother would

easily fill two to three buckets. I assumed that her name, Pansona, was given to her because she was considerably thicker than the others, but I learned something that would change the trajectory of my research.

When she was a calf, Pansona became sick with bloat and her belly swelled with trapped gases. She eventually stopped moving and the pueblo's veterinarian was certain she was going to die. The veterinarian implied that the Brown Swiss breed was more susceptible to disease and illness than Corriente or Criollo Mexicano stock, which were adept to surviving the harshness of Guerrero's heat. In a last-ditch effort, Mauro prayed at the church and promised he would give the cow as a *limosna* (alms) if she was saved. Within two days of his prayer, Pansona had recovered and was as healthy as can be. On September 26, Mauro donated Pansona to the church, during the festival meant to honor Oxtotitlán's venerated patron saint, Señor Santiago Apóstol and purchased her back a few days later. When I visited the church, I learned about the region's history of cattle raising, their resistance to a growing industry, and how they fought back in a period that threatened their socio-cultural practice.

Since antiquity, food has been an integral part of society because it correlates with survival, community, family, and tradition. In the last decade of the 15th century, the "age of discovery" prompted the largest exchange of disease, technology, food, and culture between the New and Old World[2]. Among this exchange, food is an often-overlooked area of study that warrants an investigation to better understand how people adapted, cultures shifted, national identities

[2] Nathan Nunn and Nancy Qian, "The Columbian Exchange: A History of Disease, Food, and Ideas." *The Journal of Economic Perspectives* 24, no. 2 (2010): 163.

emerged, and communities resisted change. Serving as the basis of this paper, Mexican food history, for instance, has sparked discussions and debates questioning identity, industrialization, authenticity, and socio-cultural practices. But few scholars, have approached these topics by examining artisanal cheese to answer questions of globalization, power, and agency in a rapidly industrializing world.

For the thousands of years that followed the advent of cheese in the fertile crescent, the migration of cheese and cheesemaking techniques consistently changed throughout Western civilization. Scholars who have discussed Mexican cheese tend to highlight the importance of "authenticity" within cuisine and how different types of cheese fit into categories. Rafael Hernández discusses how cheese has played an important role in Mexican cuisine and how "Mexican-inspired cooking", like Tex-Mex and Cal-Mex, has benefited from cheese consumption in the United States. [3] Abraham Villegas de Gante, Armando Santos Moreno, and Fernando Cervantes Escoto's work on Mexican artisanal cheese categorizes the different varieties and details the process of their make up within small and large scale factories. [4]

Although this work provides brilliant information about the cheesemaking process throughout Mexico and how the communities have produced a variety of cheeses, few articles take into

[3] Rafael Hernández, "Cheese." In The American Mosaic: The Latino American Experience, ABC-CLIO, 2024. Accessed February 20, 2024. https://latinoamerican2.abc-clio.com/Search/Display/1744372

[4] Abraham Villegas de Gante, Armando Santos Moreno, and Fernando Cervantes Escoto. *Los quesos mexicanos tradicionales*. (Chapingo, Estado de México: Universidad Autónoma Chapingo, 2016.)

consideration how rural communities have historically resisted industrialization and globalization of their products. After visiting Oxtotitlán, I learned about the "*Milagro de Santiago Apóstol*" which occurred during the joint Mexican American campaign to eradicate foot and mouth disease (CMAEFA) in Mexico (1947-1952) and how the campaign evoked negative feelings among *rancheros* or cattlemen, nearly eighty years later.

Thus, this project aims to historically contextualize the bi-lateral campaign to eradicate foot and mouth disease to explain why rural communities in the western coastal region of Mexico resist the proliferation of their products. By studying how communities developed mistrust and skepticism in both federal and local government intervention in agricultural practices and examining the *fiao* (buying on credit) economic system in locales in Guerrero, this project documents oral testimonies to argue that rural cheesemakers resist globalization and industrialization to protect their socio-cultural practices.

AFTOSA en Mexico- Mistrust in Federal and Local Governments

Today, many *rancheros* in Mexico have built-up resentment and mistrust in local and federal government agencies. Although there are countless historical events that become sources of skepticism and mistrust of agricultural agencies, the bilateral campaign to eradicate Foot and Mouth Disease (FMD) in Mexico, which lasted from 1947-1952, is the best showcase of the atrocities endured by rancheros, campesinos, and rural families who owned livestock.

Although the disease, called *fiebre aftosa* in Spanish, can be originally traced to Europe in the sixteenth century, it made its way into both North and South America in the third half of the

nineteenth century, infiltrating Argentina and the U.S in the 1860s and 1870s.[5] Because of its highly contagious nature and its impact on live stock– the sores in the mouths and on the hooves combined with tendency to cause stillbirths and reduce the production of milk and meat in bovines– many ranchers feared the economic damages FMD would have on their investments. In the U.S, for instance, fears of the disease led to drastic measures, including mass slaughter of cattle and other livestock, to eradicate FMD from its herds. However, cases of FMD in the United States kept emerging, despite such measures. From 1870 to 1913, the United States documented five separate outbreaks[6], which threatened herds of cattle, pigs, sheep, and goats. During this period, Mexico and the U.S. engaged in a mutual exchange of cattle, with Mexico supplying feeder stock and the U.S. filling Mexico's demand for breeding stock. But a shift in power dynamics occurred when the Mexican revolution caused a decrease in quality feeder stock and the U.S gained momentum in the exchange because they controlled the breeder stock that *ganaderos* (cattlemen) needed to increase meat quality. This exchange economically bonded the nations but fears of FMD produced tension and prompted precaution among cattle traders. When Mexico began to look for cheaper breeder stock alternatives from other Latin American countries (Brazil and Argentina), the fears of FMD making its way to the U.S. created the space for rumors

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[5] Manuel A. Machado, Jr. *Aftosa: A Historical Survey of Foot-and-Mouth Disease and Inter-American Relations*. Albany, New York: State University of New York Press, 1969. 3.

[6] For more details and background information on the relationship between U.S. and Mexico before the 1947 campaign, See Manuel A. Machado, Jr. "Aftosa and the Mexican-United States Sanitary Convention of 1928", *Agricultural History,* Agricultural History Society, , 39, no. 4 (October 1965),; See also, Kendrick A. Clements, "Managing a National Crisis: The 1924 Foot-and-Mouth Disease Outbreak in California." *California History* 84, no. 3 (April 1, 2007): 23–42. https://doi.org/10.2307/25161893. ; and Jane F. Phillips, "The Foot and Mouth Epidemic in 1924: An Episode in California History." *The Historical Society of Southern California Quarterly* 43, no. 3 (September 1, 1961): 335–41. https://doi.org/10.2307/41169539. ; Donald P. Spear, "California Besieged: The Foot-and-Mouth Epidemic of 1924," Agricultural History, Agricultural History Society, 1982.

and gossip.

In 1913, the U.S. Consul in Tampico reported that "aftosa…was probably enzootic in that vicinity"[7]. Two years later, Texan ranchers halted the import of Mexican cattle at the border under speculation that they were infected with the disease. However, no signs of FMD were found in this quarantined herd. Then in 1922, another U.S consul reported that "informal information" spoke of Argentine cattle being imported into Mexico and that the stock was infected.[8] This notice to the U.S. caused outrage among its cattlemen, prompted an investigation, and pushed to develop a "sanitary convention" [9] to prevent the disease from spreading north, despite there never having been a record of such Argentine cattle or a case of FMD in Mexico. However people in Mexico, and even U.S. consuls, began speculating the rumors were "propaganda aimed at protecting an established foreign market for U.S. cattle raisers".[10]

Then, the 1924 FMD outbreak in California[11], which was traced back to U.S. imports from Japan, soon spread east to Texas and became the catalyst for the United States and Mexico to collaborate and make policy to protect their agricultural interests. While the U.S pushed Mexico to be responsible and report any cattle imports from foreign countries back to them, the United

[7] Machado, "Sanitary Convention of 1928," 240.

[8] Machado, 241.

[9] Machado, 242.

[10]Machado, 243.

[11]For California FMD outbreak, see Donald P. Spear. "California Besieged: The Foot and Mouth Epidemic of 1924." *Agricultural History Society*, Agricultural History, 56, no. 3 (July 1982): 528–41.

States was importing stock from infected countries and not responsibly following the embargoes placed by Mexican government–which generously allowed Texan exports to enter Mexico with the proper safeguard that the cattle could not be from infected regions. Because of this malpractice, within eighteen months of the outbreak in California, the first documented case of aftosa was recorded in northern state of Tabasco.

The Tabasco outbreak in 1925 made two things clear: the United States was responsible for the spread of the disease, despite their insistence for Mexico to be responsible, and that the northern states of Mexico, which dominated the Mexican cattle industry, were at risk because of the United States' mishandling of FMD. Still, the threat to Mexican cattle pushed the federal government to work with its northern neighbor who, by this time, had eradicated the disease seven times. The governments worked together for years and finally signed an agreement that would go into effect in January of 1930. In this agreement, Article IX sets the stage for the next phase of the story.

> "The High Contracting Parties shall not issue permits for domestic ruminants or swine originating in any foreign countries or zones where highly infectious and rapidly spreading diseases such as foot-and-mouth disease and rinderpest appear frequently, until at least sixty days have elapsed without any outbreak of the disease in such countries or zones...When such a disease occurs near the land border of a foreign country, the neighboring part of the adjacent country shall be considered as exposed until the contrary is positively shown." – Article IX of the Convention between the United States and Mexico: Safeguarding Livestock interests through the Prevention of Infectious and Contagious Diseases.

This section does two things. First, it prohibits the distribution of animals from infected countries or zones where the disease "appear[s] frequently"[12], which is ironic considering the United States had experience nine outbreaks by 1930. Despite it being outlined in the agreement, the U.S. saw very little implications as they continued to trade with foreign countries, putting Mexico in danger of another outbreak. Second, Article IX considers border nations as "exposed until the contrary is positively shown", which would make the U.S. "infected" until Mexico eradicated FMD, in the event of another outbreak. This set up the perfect model for U.S intervention in 1947, when Mexico purchased breeder stock from Brazil, which caused an outbreak that would soon ravage the countryside.

Between 1945 and 1946, Mexican cattle investors, seeking to incorporate breeder stock that were hardier and resisted parasites and disease better than American and European cattle, purchased hundreds of Zebu (Brahman) bulls from Brazil, which had a history of FMD[13]. In October 1945, the Mexican government "permitted the entry" of two shipments of Zebu bulls, with the first shipment containing about 130 heads and the second arriving in May 1956 with 327 bulls.[14] By September and after months of testing, the Mexican Secretary of Agriculture and Development, Marte R. Gomez, allowed the bulls to be shipped off the quarantine island and distributed

[12] Article IX of the "Convention between the United States and Mexico: Safe guarding Livestock interests through the Prevention of Infectious and Contagious Diseases."

[13] John Ledbetter, "Fighting Foot-and-Mouth Disease in Mexico: Popular Protest against Diplomatic Decisions." *Texas State Historical Association*, The Southwestern Historical Quarterly, 104, no. 3 (January 2001), 389.

[14] "Digest of Congressional Proceedings of Interest to the Department of Agriculture." Office of Budget and Finance, February 11, 1947., 1005

throughout Mexico.[15] However, on December 26, 1946, Mexican officials detected aftosa in these Brahman bulls, which was previously mistaken to be vesicular stomatitis.[16] To protect U.S interests and uphold the agreement of the sanitary convention, President Truman signed a bill into law, which would allow the establishment of the Mexican-United States Commission for the Eradication of Foot and Mouth Disease (*Comisión México-Americana para la Eradicación de la Fiebre Aftosa) or* CMAPEFA[17].

The bilateral commission– made up of U.S. and Mexican government officials, veterinarians, and military personnel– was now tasked with eradicating the disease by any means necessary. Their preferred method, which was thought to be the most efficient route to eradication, was the slaughter method, which quite literally meant shooting the animals with a rifle and burying them in mass graves. Soon, brigades of jeeps, steam-plows, veterinarians, and military personnel roamed the countryside, setting up quarantine lines and killing any infected or exposed animals. By the first year, it's estimated that the commission killed 58,000 cows weekly, totaling nearly

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[15] Mary E. Mendoza, "Battling Aftosa: North-to-South Migration across the U.S.-Mexico Border, 1947–1954." *Journal of the West* 54, no. 1 (Winter 2015). 39

[16] C.J. Alvarez, "The U.S.-Mexico Border and the 1947 Foot-and-Mouth-Disease Outbreak in Mexico." *Journal of the Southwest* 61, no. 4 (2019), 691. https://doi.org/10.1353/jsw.2019.0039. Vesicular stomatitis, also commonly referred to as "*mal de boca*", caused similar lesions in the mouth. Some believe the Mexican government intentionally withheld information about the disease for months. See Ledbetter for information on the government scandal involving President elect Aleman and Cardenas. Whether the information is correct, the rumors are symbolic of the different social classes (wealthy/elite vs. poor).

[17] Mendoza, "Battling Aftosa," 39.

500,000 cattle, and just as many small animals (goats, sheep, pigs, and chickens). [18]At that rate, the commission estimated it would slaughter 5 million cattle to eradicate the disease entirely, which would have absolutely devastated the industry.

Because FMD was contained in the central and southern states of Mexico, the slaughter disproportionately affected rural communities and small ranchers, who primarily used the animals for subsistence agriculture. The northern states, which dominated large scale agriculture to control the market, broadly supported the slaughter method because the disease had not yet infiltrated their region, and they wished to protect their investments. Also, the embargo placed on Mexican exports threatened these "transnational enterprises", many of whom relied on the U.S market and were part owned by U.S businessmen.[19] On the other hand, the embargo did not impact families who were using their animals for subsistence commodities, like milk, wool, or manure. Even if the disease would have infiltrated the northern states like Sonora and Chihuahua, large scale farmers and ganaderos could cash in on the indemnities provided by the American paymasters. But rural families, who primarily used animals for small scale production or subsistence farming valued the animal more than the cash.

Additionally, the commission often struggled to identify a standard measurement of value for the animal and sometimes slaughtered animals without paying the indemnity. Those who received

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[18] William Dusenberry. "Foot and Mouth Disease in Mexico, 1946-1951." *Agricultural History Society*, Agricultural History, 29, no. 2 (April 1955), 86.

[19] Thomas Rath, *The Dread Plague and the Cow Killers: The Politics of Animal Disease in Mexico and the World* (Cambridge University Press, 2022), 44.

the indemnities often made "complaints" because the process was "partial and corrupt", as many Mexicans believed the commission was full of "official graft and profiteering middlemen".[20], Also, people in the countryside believe they were not offered the same privileges as richer cattlemen, who were sometimes exempt for slaughter or quarantine. For example, John Ledbetter argues that some of the first infected bulls imported from Brazilian President Getulio Vargas' cattle ranch, were moved to the ranches of Mexican elite like president elect Miguel Alemán and former president Lazaro Cardenas before the required sixty day minimum.[21] This shows that the outbreak could be traced to improper handling and quarantining of the Mexican and Brazilian elite, which would signal a spread from the top down. Such situation, I feel, would harbor resentment toward the federal government because rural ranchers had to bear the brunt of the damages, which disproportionately impacted the poorer class.

Because the CMAPEFA relied so heavily on the slaughter method and festering skepticism surrounding the indemnity payments spread quickly, Mexican r*ancheros*, especially in the countryside, strongly opposed the campaign. From simply hiding their animals during commission visits, to resisting through violent measures, rancheros fought back in numerous ways. However, the largest number of "incidents of opposition" compared to the slaughtered animals occurred in Guerrero. To put it in perspective, Guerrero's eastern neighbor, Michoacán witnessed 42 "incidents of opposition" and had 184,000 livestock slaughtered in 1947. Guerrero had only 6,000 livestock slaughtered but one less "incident of opposition".[22] When I visited the church in Oxtotitlan, I learned the story of Sr. Santiago Apostle, who appeared to a commission

[20] Rath, "The Dread Plague", 92.
[21] Ledbetter, "Popular Protest against Diplomatic Decisions," 390.
[22] Rath, 86.

worker while he was operating a steam shovel to dig mass burial trenches. The horse-mounted man instructed the worker to stop digging the trench and he leaped over the steam shovel. Suddenly the earth began to shake, and the machine tracks sunk into the earth. Different iterations of the story are told in and around Oxtotitlan, but the message stays relatively the same. If even this story is mythical, religious, spiritual, or fictional, it serves as a symbol of the town's resistance to industrialization. The steam shovel, representing the United States advanced equipment and industrial mode of production, is destroyed by a horseman who is opposed to the slaughter of the animals in the region. It does not matter if the story took place, but the story does reflect truths- the fact is, rancheros in Oxtotitlan resisted the slaughter of the campaign and believed it was a hoax. Additionally, the "miracle" gives rancheros and rural families a memory that reminds them of their past struggles to protect their lively hoods. I believe, this story serves as a beacon of resistance to industrialization and protects the rural cheesemakers' art and socio-cultural practices.

Need for Fiao in Mexico

Before I dive into the "buying on credit" economic strategy of survival, its important to explore the political context that leads to economic crisis and the need for fiao in the 20th and 21st centuries. John Mason Hart writes about the shrinking community landholdings and how foreign investment led to economic disaster, impacting urban, rural, and agrarian laborers significantly.

> "During the Porfiriato, most agrarian laborers found work on emergent ranching and agricultural estates, and many urban artisans, unable to compete with the economies of large-scale manufacturing and imported goods, joined migrants from the rural population

> in seeking employment in the new factories… By 1900, foreign investors held some 90 percent of the incorporated value of Mexican industry…In the last years of the regime, the economy suffered a serious contraction, and real wages declined significantly. Agriculture, the most important sector of the economy, suffered disastrous setback after 1907. So did the textile industry… In 1908 and 1909, the failures of the corn and cotton crops… led to famine and food riots…" [23]

This shows how land privatization and foreign investment during the late 19th and early 20th century had detrimental economic impacts that impacted all levels of society, including communities who could no longer compete with the rapid expanding industries. Alyshia Gálvez lists past presidents' influences on land reform and economic intervention starting with Jose Venustiano Carranza (1917-1920), which had a "vision of development through private enterprise".[24] She also highlights that Lazaro Cárdenas implemented state sponsored land distribution through *ejidos* and how his successor, Manuel Camacho (1940-1946), turned away from an agricultural emphasis and focused, again, on industrialization for development.[25] This constant shift from privatization of national industries, like oil and agriculture, to policy about opening free trade, which becomes problematic especially during the Carlos Salinas presidency from 1988-1994, leads to the implementation of the North American Free Trade Agreement

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[23] John Mason Hart, "The Mexican Revolution, 1910-1920." In *The Oxford History of Mexico*, (Oxford University Press, 2010), 409-437.

[24] Alyshia Gálvez, *Eating NAFTA: Trade, Food Policies, and the Destruction of Mexico*. Oakland, (California: University of California Press, 2018), 72

[25] Gálvez, 72.

(NAFTA)[26]. The contract between Mexico, Canada, and the U.S. would threaten small-sale farmers by rolling back the protections established in earlier decades, having significant impacts on the economies of rural agrarian communities.

Thus, I argue that the *fiao* economic system is not only a necessary survival practice used to purchase groceries and commodities on credit in an unstable and unpredictable economy, but a process in which rural communities build strong relationships of trust to resist industrialization of their product and protect socio-cultural practices. I was first intrigued with the "buying on credit" practice during a non-structured open dialogue with my abuelita Mariana. During our discussion about cheese industrialization, the topic of micro factories kept emerging. She informed me of *empresas* or factories who produce *queso de cincho* in larger quantities and primarily distribute within Teloloapan and other larger towns in Guerrero. She explained that the price of cheese is generally cheaper in the larger towns. I questioned why people would still shop local if they could purchase the cheese for less in the next town over and she responded with, "*no fian en Teloloapan*"– "they don't sell on credit in Teloloapan". This conversation inspired me to visit this rural *pueblo*, nestled in the mountains and conduct semi-structured interviews with artisanal cheese producers and cattlemen to better understand how their role as "lenders" play a part in the *fiao* system.

[26] During this time, President Carlos Salinas de Gortari and the Partido Revolutionario Institucional (PRI) become involved in a massive corruption scandal in which the Salinas family funnels large amounts of money to an offshore account in Switzerland. This further escalates mistrust in the federal government and adds to the skepticism that people have toward national banks. This is evident in my travels to Guerrero, where some people told me that they don't trust the banks and they must store cash in secret stashes in their homes.

Protecting culture through Fiao

On my research trip to Oxtotitlan, I spoke with Mauro Miranda, whose is a ranchero on *Rancho las Tres Gotas*. He coined the name for the ranch, which translates to Three Drop Ranch, implying the cows give very little milk. I had the pleasure of conducting an informal, semi-structured interview with Mauro and his wife, Inés Nestor Vela, where we discussed how cheesemaking knowledge is passed down through generations. During the conversation, I asked if buying cheese on credit was common within the community. "Yes, absolutely. Its usually because they don't have the money, as they don't get paid until the end of the month," Mauro answered[27]. This is the case for many informal laborers in Oxtotitlan and for many around the country. When asked how important *fiao* is for maintaining, both, a sense of community and the cheese market, Inés replied, "Its very important because it protects our patrimony, revives the economy, and allows people to still buy our cheese."[28] The process of selling a cheese on credit demonstrates the relationship of trust built in this rural community because it shows how cheesemakers (sellers) and cheese consumers (buyers) sign a social contract and both parties have to keep their word and be what Christine Hippert calls "*gente responsable".*[29] This idea of buying on credit represents a larger moral economy, based on trust that one will pay their debt,

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[27] Mauro Miranda and Inés Nestor Vela. Interviewed by Guillermo D. Miranda, November 20, 2024.

[28] Miranda Nestor Vela. Here, I infer the term "patrimony", is used to describe the heritage of cheese making that is passed down through generations. Fiao protects this custom and incubates it for a stronger future.

[29] Hippert, Christine. "Buying Food on Credit". *Food and Foodways* 25, no. 3 (July 3, 2017): 193–214. https://doi.org/10.1080/07409710.2017.1343065. *Gente responsable,* translating to responsible people, is a term used to describe people who keep up their end of the fiao social contract and make payments toward their debt. I am using this term to show how people who have paid their cheese debts would be considered "responsible".

which can fail if the contract in not upheld. Throughout the conversation, I asked how they decide who can be trusted with buying on credit, if the person needs to have regular employment, and what happens if they don't pay the debt. Mauro responded, "We try to sell to people that we know and that we know will pay it back. Usually family, relatives, or neighbors who have jobs. The relationship would be affected if they didn't pay back their debt, and there were many times when people didn't. We had a notebook with people's names on it. It was sad because we lost the product, the costumer, and the relationship. In the end, we lost."[30]

There is so much one can learn from these micro-histories. Despite large economic and social losses, cheesemakers like Mauro and Inés continue to provide their community with buying on credit options because it stimulates the economy and protects the endangered art of Mexican cheesemaking. While this conversation was instrumental to my research into this economic exchange, I wanted to find more instances of this practice.

I had the honor of observing the cheesemaking process of another family in Oxtotitlan. Ivette Ortega, who learned how to make cheese by watching her mother-in-law, handles anywhere from 60 to 120 liters of milk, daily. While I watched her gently separate the curds from the whey, I asked her if she sells the cheese on credit. She replied, "Erm, yes we do, but to people that will pay us back. Some people don't like to pay and I have to send my son over to give them a gentle reminder every once in a while."[31] I feel that Ivette's answer to my question had a tone layered with hesitation based on previous experiences. Similarly to Mauro and Inés, Evette has

[30] Miranda and Nestor Vela.

[31] Ivette Ortega. Interviewed by Guillermo. November 21, 2024.

been burned by people who failed to pay back their debts. But their willingness to sell on credit to responsible people who are known to pay it back is an example of how the economic practice fosters community. Ivette knows that she can maintain positive relationships within her community, so long as borrowers uphold their end of the deal. *Fiao* gives value to people's character and reputation. Additionally, it gives people the ability to purchase local cheese and enjoy the cultural commodity.

Conclusion

While this essay only scratches the surface of this topic and I can't cover everything in one or two case studies, there obviously needs to be more research into this fiao system and how communities use it as a tool of resistance to prevent the industrialization of their cheese, which the larger scope my project intends to address. However, I have suggested that rural artisanal cheesemaker in Guerrero have resisted the industrialization of their products to protect their socio-culture practices. By using the *aftosa* campaigns as a historical backdrop and establishing the skepticism toward government intervention in agriculture, I have supported my argument that *aftosa* and *fiao* becomes a tool of resisting the exploitation of labor and the "know how" developed over generations.

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