The place of disarticulations: global commodity production in La Laguna, Mexico

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Abstract. Studies of the shifting social organization and geography of global garment production have been critical to development of the commodity chains framework as an important field of study for scholars of political economy in various disciplines. Our paper intervenes in this literature by proposing what we call a ‘disarticulations’ perspective, an approach attentive to historical and spatial processes of accumulation, disinvestment and dispossession that produce the uneven geographies generative of transnational production networks. We make the case for disarticulations as an approach to commodity chains via a case study of a region in north-central Mexico called La Laguna—a celebrated center of export dynamism in the 1990s, following the implementation of the North American Free Trade Agreement (NAFTA), and of rapid decline in the 2000s. Rather than offer a conventional commodity chain analysis of the boom to bust cycle in La Laguna, which would follow the apparel chain as it passes through La Laguna and on to other locations, we instead follow La Laguna’s ‘travels’ through the cotton, textile, and garment industries over 150 years. We show how the recent NAFTA-era boom was premised on this layered history of engagements with the cotton–textile–apparel commodity chain. The disarticulations approach to commodity chains that we develop here foregrounds the processes of dispossession, accumulation and disinvestment through which not only commodity chains, but the uneven geographies that are their conditions of possibility, are reproduced.

1 Introduction: disarticulations in global commodity production
In the late 1990s visitors to La Laguna might have regarded this region of north-central Mexico as a textbook illustration of the export-generated growth predicted by boosters of the North American Free Trade Agreement (NAFTA). Tens of thousands of workers were employed in the region’s maquiladoras, making tractor engines for John Deere, automotive ignition systems for General Motors, and televisions for Thomson RCA. The region’s leading product, however, and the engine of its post-NAFTA export surge, was blue jeans, which local factories were turning out by the millions per week. Bearing familiar labels such as Gap and Calvin Klein, most of these jeans would be sold in US retail outlets to consumers whose purchases enabled the region to proclaim itself the “blue jeans capital of the world.” Industry analysts celebrated La Laguna as a promising sourcing location for foreign clothing companies, while regional development agencies touted the dramatic growth in its manufacturing base, citing impressive increases in both employment and production volumes (Bianchi, 1999; Gereffi and Martínez, 2000). Apparel industry jobs more than quintupled in the first five years after NAFTA, increasing from 12,000 in 1993 to 65,000 in 1998. By 2000 approximately 75,000 people were working in the region’s textile mills, sewing factories, and industrial laundries. Collectively they produced six million garments a week—a twelve-fold increase over the region’s estimated pre-NAFTA output (Bair and Gereffi 2001).
The globalization of the garment and textile industry in the 1980s and 1990s, including the export booms of the sort witnessed in La Laguna, is important for the development of network-based frameworks for analyzing transnational processes of industrial restructuring. Prominent among these, global commodity chain (GCC) studies in sociology and global production network (GPN) approaches in geography seek to understand the dynamics of extraterritorial networks in the production of commodities, primarily in terms of how such networks link local and foreign firms to each other and to international markets (Bair, 2009). Within the GCC literature, La Laguna’s blue jeans boom has attracted the attention of scholars seeking to evaluate the causes and consequences of the region’s export surge. They conclude that what was driving La Laguna’s transformation from a relatively modest cluster of domestically oriented apparel firms into a center of high-quality, cost-competitive world-class garment exporters was a reorganization of the North American apparel industry and, specifically, a reconfiguration of the macroregional commodity chains linking textile mills, apparel companies, and foreign buyers in the US and Mexico (Bair and Gereffi, 2001; Gereffi et al, 2002; Van Doren and Zarate, 2003). Scholars emphasize the role in this reorganization played by NAFTA’s regulatory regime, which made Mexico a more attractive site both for foreign investment in textile-related production operations, and, more commonly, for the development of subcontracting relationships between US companies and local apparel manufacturers.

Beyond tracing the organizational lineaments of garment and textile production networks, the global chains literature also debates the outcomes of such linkages for ‘development’, understood as the capacity of local firms to ‘upgrade’ production: intra-sectorally (eg by occupying more profitable links in the chain) or inter-sectorally (eg by switching from labor-intensive to capital-intensive or technology-intensive chains) (Bair and Gereffi, 2001; 2003; Schrank, 2004). In the GCC literature, upgrading is the outcome of cooperative relationships between buyers and suppliers, the former providing technology transfer, knowledge, and other kinds of support enabling local firms to move from highly competitive nodes of the network with low barriers to entry (designated as ‘low value-added’) to activities with higher barriers to entry (‘higher value-added’), thereby increasing their competitiveness and helping ensure, at a minimum, their continued participation in these networks (Gereffi, 1999).

The notion that export-oriented industrialization can facilitate development through upgrading has been roundly debated in the literature. La Laguna, and other regions of garment sector dynamism, have again been central to this debate, as scholars outline the possibilities and failures of upgraded firms to maintain and expand their participation in production networks (Bair and Gereffi, 2003; Pickles et al, 2006; Schrank, 2004). Yet much of this literature has focused on upgrading at particular moments of expansion or consolidation of firms and regional clusters in production networks, paying little attention to processes of contraction and their significance.

Despite the transformation of local manufacturers into global suppliers in La Laguna, for example, and the industrial upgrading that accompanied this export boom, the region subsequently experienced a dramatic decline in the blue jeans economy’s fortunes. By 2008 some US buyers had ceased sourcing from the region entirely, and many factories were shuttered. Production volumes at several of those remaining open had plummeted. The result for apparel industry employment has been dismal. In 2008 we found that employment at the largest apparel manufacturers in La Laguna had fallen by about half from its post-NAFTA peak. The most recent census data released by the Mexican government confirm this trend: the number of workers
employed in La Laguna’s sewing factories plummeted more than 40% between 1999 and 2009 (INEGI, various years).(1)

Such downturns have received much less attention in the GCC and GPN literatures. These approaches tend to exhibit what we call an ‘inclusionary bias’ in their analysis, tracing participation in networks, rather than coupled processes of linking and delinking that underlie the shifting geography of global industries and condition the position of regions within transnational production arrangements (cf Sheppard, 2002). Although the scale and speed of La Laguna’s boom-to-bust cycle are exceptional, it is nevertheless a particularly illustrative example of the accelerated dynamic by which many garment and textile producing areas in Mexico and the circum-Caribbean have been incorporated into and expelled from global commodity circuits over the last decade, as the industry’s center of gravity has shifted decisively to Asia (Mesquita, 2007; Werner and Bair, 2009). Most studies that narrate the macroregion’s export downturn focus on a set of key factors, such as decreased demand associated with recession in the US economy, the inauguration of quota-free trade following the phase-out of the Multifiber Arrangement, and, above all, the expansion of China’s textile and clothing sector (eg Dussel Peters, 2004; Heron, 2006). Several scholars have drawn on the downturn to question the link between upgrading and regional development, especially in the absence of a clear correlation between firm capabilities and firm closures in the macroregion (Bair and Dussel Peters, 2006; Sargent and Matthews, 2009).

In short, while earlier work on the garment commodity chain identified the combination of macroregional production networks and preferential trade regimes as the cause of regional export success and, potentially, of industrial development, the few attempts to explain the stagnation or collapse of the circum-Caribbean’s export apparel sector have focused on the reorientation of those same networks, in the context of trade liberalization, towards lower cost producers elsewhere. In this sense, we appear to be left with the same explanatory apparatus to understand both the booms that follow incorporation into extraterritorial networks and the export sector busts, when firms are expelled from such networks in favor of more competitive suppliers. What makes such dramatic cycles possible, and how they both rely on and in turn shape social relations of production locally, are questions overshadowed by proximate, and often ahistorical, analyses of a region’s incorporation into transnational circuits of commodity production.(2) Here, we draw on what we call a ‘disarticulations’ perspective to intercede in the analysis of these networks. By examining commodity chains through disarticulations, we focus on the reproduction of uneven geographies of capitalism as they relate to processes of incorporation and exclusion from global commodity circuits.

The disarticulations approach we develop in the pages that follow seeks to explain why export-oriented apparel production emerged when it did in La Laguna and why the industry expanded so rapidly before experiencing an equally rapid contraction. We argue that the region’s rise as a blue jeans capital was linked to two processes: agrarian reform, which can be understood as an on-going process of dispossession whereby labor is separated from land, and to the collapse of Mexico’s state-led industrialization model, as a process of disinvestment that devalues existing production arrangements

(1) Authors’ calculations, based on municipal-level data from the 1999, 2004, and 2009 Economic Census carried out by the Mexican government. Census data are available online at http://www.inegi.org.mx/est/contenidos/Proyectos/ce/Default.aspx

(2) Among those works which use a global network approach but nevertheless emphasize the importance of historical, often institutional, legacies in shaping the apparel export sector, we would include Begg et al (2003), Neidik and Gereffi (2008), and Tewari (2008). Works that focus specifically on the impact of agrarian legacies include Chari (2004) and Hart (2002).
and then makes those devalued assets available for new cycles of investment and accumulation. We aim to show that these processes are shaped by, but not reducible to, either capitalist crises (like the Mexican peso devaluation of 1994), or the enactment of new regulatory regimes (like NAFTA). These are, of course, key moments of dispossession, but they cannot alone explain the contours of uneven geographies, nor the processes by which certain places and people become incorporated into new rounds of accumulation while others are excluded (cf Harvey, 2003). Thus, we propose disarticulations as a way to explicate the layered histories of dispossession, disinvestment, and accumulation that shape a region's position in global circuits of commodity production. In so doing, we turn commodity chains on their head to examine the uneven geographies that are constitutive of, as well as constituted by, these configurations of global production (see Werner and Bair, 2011).

We develop the concept of disarticulations through a study of La Laguna's ephemeral reign as blue jeans capital. We proceed not by tracing the global apparel chain from inputs to final product, but rather by fixing ourselves analytically to this particular region and then asking how the possibility of it being linked to extraterritorial circuits of production is interwoven with the production of the region itself. In the first section we historize the region's post-NAFTA export surge by locating it within a long trajectory of involvement in extraterritorial circuits of the garment commodity chain: Although this region of north-central Mexico ended the 20th century as a cluster of export-oriented factories sewing denim pants made from imported cotton, La Laguna began that century as Mexico's most important cotton-growing area. A crucible of radical agrarian politics in the post-Revolutionary period, in 1936 La Laguna was the site of one of the most famous land expropriations in Mexican history, which resulted in the creation of more than 300 collective cotton farms, or ejidos. Over the next half century, as these rural communities were incorporated into the patronage system of the ruling party, La Laguna's cotton farmers became clients of a Mexican state that steadily withdrew support from the ejidal sector. In the early 1990s this process of dispossession culminated in a far-reaching land (counter)reform designed to stimulate markets for both land and labor by instituting a new property rights regime in the Mexican countryside.

In section 2 we trace the development of the region's apparel industry and explain how a combination of two factors—the dismantling of Mexico's inward-oriented development regime, and external regulatory interventions giving Mexico preferential access to the US market—converted La Laguna's domestic manufacturers into maquiladoras. Section 3 explains how the process of agrarian restructuring described in section 1 intersects the apparel export boom described in section 2. We look at the conditional expansion of employment to rural areas, particularly through one manifestation of this trend: the creation of cooperative garment maquilas on ejidos reeling from rural-sector restructuring. The export sector's decline came quickly on the heels of rural industrialization as domestic producers faced plummeting orders from US buyers, leading to widespread retrenchment.

Throughout, we aim to show that, although the blue jeans boom was short lived, this burst of export dynamism was embedded in and enabled by deeply rooted historical processes of struggle, dispossession, and accumulation that shaped the region's articulation with extraterritorial networks linking local producers to global or, more precisely, North American markets. While conventional commodity chain analysis might read the bust of the blue jeans boom as an inexorable outcome of increasing global competition, or evidence of the failure of local firms to successfully upgrade, we are able to locate not just the downturn itself but also the boom that preceded it in the
context of La Laguna’s ongoing production vis-à-vis the cotton-textile-apparel chain, and its reproduction as an uneven node in geographies of global commodity circuits.

2 A brief history of La Laguna: the making and unmaking of Mexico’s cotton lands

La Comarca Lagunera, or La Laguna as it is known, is comprised of fifteen municipalities and three major cities: Gómez Palacio and Lerdo in the state of Durango and, across the border in the state of Coahuila, La Laguna’s largest urban center, Torreón (figure 1). When it began over a decade ago, what most impressed observers about La Laguna’s blue jeans boom was the apparent rapidity with which the region emerged as a major center of export-oriented manufacturing (Bair and Gereffi, 2001; Van Dooren and Zarate, 2003). Yet the region that was being hailed as North America’s new blue jeans capital was by no means a greenfield site for clothing production, nor was this the first time that the fortunes of the local economy were intimately tied to a US-controlled textile trade. Rather, the different productive activities that comprise the apparel commodity chain, and the social formations that they both reflect and engender, have been woven into the region’s political economy since the 19th century, and more specifically into the various moments of political mobilization and dispossession that run through La Laguna’s history.

The origins of La Laguna’s cotton economy were rooted in contraband trade with the Confederacy during the US Civil War, when the region became a critical conduit
enabling the South to circumvent the Union’s naval blockade of its ports. This trade created opportunities for local elites to invest their accumulated capital both in producing textiles from a portion of the Confederate cotton trafficked through Mexico en route to England and, after the US Civil War, in financing local production of cotton to fuel these new mills (Tyler, 1973). By the early 1900s La Laguna was the most important cotton-growing area of the country, producing more than two thirds of Mexico’s cotton crop. This position was secured and maintained well into the 20th century by the establishment of irrigation and railroad routes, and, above all, highly concentrated land tenure (Plana, 1991).

Despite the violence and upheaval that La Laguna experienced during the Mexican Revolution and the tumultuous decade that followed, the social structure of the region’s countryside was left largely unaltered. A quarter century after the Revolution, most of La Laguna’s rural producers lived and worked on large cotton plantations under conditions that were little changed from the late 19th century. From that time forward, La Laguna’s modern cotton estates were organized primarily around wage labor instead of labor systems based on debt peonage or sharecropping arrangements, as were typical of the traditional haciendas in central and southern Mexico. The result was a flexible, highly mobile labor force that had “no link with the land and could not—as could peasants in other regions—supplement their wage with income or products from small family plots” (Rello, 1987, page 40). Temporary or seasonal employment in the United States was one way that workers supplemented their wages on the cotton estates.

In the mid-1920s agricultural workers began to mobilize for the rights promised in the 1917 Constitution. After a decade of organizing, which included the formation of agricultural trade unions and the development of a strong alliance between the region’s urban and rural workers, the conflict over land and livelihood in La Laguna culminated in a general strike in 1936 that threatened the season’s cotton crop (Carr, 1987; Hellman, 1983). The strike was ended in dramatic fashion by Mexican President Lazaro Cardenas, who announced a massive land-distribution program for the region. Over the course of forty days in fall 1936, 300 government officials, including Cardenas himself, presided over a reform that involved the expropriation of more than one million acres of land from the region’s cotton plantations (Otero, 1999; Senior, 1940). This land was redistributed to 38,000 families, making them, or more precisely their male heads of household, ejidatarios. (3)

The expropriation in La Laguna was the first of a series of similar acts carried out by Cardenas, who not only greatly expanded the quantity of land redistributed to ejidatarios, but also sought to ensure the continued cultivation of commercial crops in regions like La Laguna by promoting collectivized production on high-quality, irrigated lands, thus preventing a shift to subsistence foodstuffs on revenue-generating lands. The Cardenas government realized that a critical component of such a strategy would be the provision of credit necessary to sustain the productivity of La Laguna’s cotton fields. Thus by the same 6 October 1936 decree announcing the expropriations, Cardenas established the Banco Nacional de Crédito Ejidal, which was responsible for organizing local credit associations and ultimately for financing the collective cotton farms which replaced the previous system of privately owned commercial estates in much of La Laguna (Rello, 1987).

Initially, La Laguna’s collective ejidos flourished. Agricultural output increased after an early and minor dip, and ejidatarios enjoyed relatively high incomes compared

(3) Under article 27 of the Mexican Constitution, ejidal land was designated as inalienable. Ejidatarios were given usufruct rights to land, which could be passed on to their heirs, but until the new agrarian law of 1991, ejidal land could not be sold.
with their landless counterparts. By some accounts, La Laguna’s ejidatarios were undermined by this success, as the Mexican state feared that collectively organized, self-directed smallholders would threaten the corporatist structure of the post-Revolutionary regime. The government sought to increase control over ejidos and was successful in doing so via the Ejidal Bank, which withdrew support for the collective producers and encouraged a reorganization of farming that featured the subdivision of land and the allocation of small plots to individual ejidatarios. The Mexican government’s efforts to weaken collective agriculture on La Laguna’s ejidos were compounded in the 1950s by changes in global markets. Cotton prices began a period of steady decline related in part to the release of massive cotton stockpiles on the world market by the US, the outcome of price supports initiated under Roosevelt’s Agricultural Adjustment Act two decades earlier (Walsh, 2008).

Although it was less and less profitable to grow cotton, most of La Laguna’s ejidatarios continued to do so through the 1960s and beyond, largely because cotton was the crop for which the Ejidal Bank (later, the Banco Nacional de Crédito Rural, or Banrural) provided credit. State influence over the organization of the ejido, as both the principal economic unit of rural production and the foundation of the ruling party’s political base in the Mexican countryside, was by then consolidated to the point that the state apparatus dominated virtually every aspect of ejidal life. Perhaps most significantly, the government provided short-term credits, the primary source of income on which ejidatarios depended. These payments were initially intended as a cash advance on anticipated profits that would be sufficient to sustain the ejidatario and his family though the growing season. Over time, however, as it became clear that the marketing and sale of the harvested cotton did not generate profits, this system transformed the ejidatarios into de facto wage laborers and the Mexican state into their employer (Rello, 1987). Thus, while growing cotton was no longer profitable, its continued dominance was insured by the fact that it was mutually beneficial to the state and its rural clients: cotton is a labor-intensive crop and, since ejidatarios were heavily dependent on the credit the government provided in exchange for their labor, its cultivation guaranteed them access to this income, even if their inability to pay back these ‘loans’ increased their indebtedness to the bank. From the perspective of the government, cotton also had advantages: it absorbed large amounts of labor and thus buffered the problem of regional unemployment and underemployment in the countryside, if also proving to be a financial drain on the state.

Although de facto departures from the juridical foundations of the ejidal sector were becoming increasingly commonplace, as a growing number of ejidatarios in La Laguna and elsewhere who found that they lacked the resources necessary to cultivate their plots were illegally renting out their land to others who could farm it, there was limited official recognition of the growing disjuncture between the particular ideology of the ejido and the actual, existing institution of the ejido as it functioned in the Mexican countryside. Despite intense discussion and debate about restructuring the country’s agrarian sector in the wake of the debt crisis in 1982, the Mexican government continued, for the most part, to affirm its commitment to the institution of the ejido.

This status quo was finally and decisively breached by President Carlos Salinas, who oversaw a sweeping agrarian (counter)reform. Promising to liberate the ejidatarios from the heavy hand of the state, the reforms proposed by Salinas outlined a process by which ejidatarios could petition to receive title to their land, which could then be converted into private property and legally rented or sold to others. Under the discursive banner of agricultural modernization, Salinas effectively aimed to create a new property rights regime capable of stimulating investment in the countryside, as the state
simultaneously promoted a shift from domestically consumed crops such as cotton (as national industrial input) and corn (for national and subsistence consumption) to foreign-exchange-producing export crops, such as the fresh fruit and vegetables desired by US consumers.

There is marked regional variation in the reaction and outcomes associated with the neoliberal reforms across the diverse landscape of rural Mexico, with the Zapatista movement in the south representing the most dramatic and well-known rejection of Salinas’s program of economic liberalization. The almost exclusive dedication of ejidos in the north to commercial, highly capitalized crop production was connected to a very different expression of agrarianism than the one associated with the largely indigenous ejidal communities of the south: namely, “the belief that the state has an obligation to create viable conditions and opportunities for the landless peasant, if not by distributing land, than by providing him [sic] with employment through the decentralization of industry or the promotion of new economic activities” (Hellman, 1983, page 5; see also Joseph, 2000).

This flexibility of the state’s commitment to the countryside in northern Mexico understood as the distribution of land or the provision of employment would bear itself out in subsequent state-promoted development strategies in the wake of agrarian reform and the decisive shift to an export-led growth model. As we shall see, the slow dispossession of rural producers that we have chronicled here facilitated the efforts of a handful of La Laguna’s garment firms to convert their enterprises from medium-sized domestic producers to large exporters. The refashioning of rural–urban relations in the neoliberal era—first, through the recruitment of factory labor from ejidos and later through the creation of sewing factories on ejidos—rested upon layers of agrarian politics and the contests over their legacy as the region was reworked from cotton lands to maquila cluster.

3 From manufacturing center to maquila cluster

Like large-scale commercial agriculture, textile production in La Laguna dates from the 19th century. The region’s first mills were extensions of the cotton haciendas on which the industry’s raw material was grown. Unlike in some parts of Mexico, where clothing production emerged from the forward-integration strategies of companies making fabric, the garment manufacturing industry that emerged in La Laguna developed independently from this local textile sector. From the beginning, the region’s apparel producers specialized in making pants for the many farmers, railroad workers, and miners who labored in the region. Among La Laguna’s early manufacturers of work clothing was one of the first Mexican companies to manufacture blue jeans. Created in 1947, this family-owned company would become Prima—one of the largest local manufacturers at the time of the post-NAFTA blue jeans boom and the architect of the ejido–maquila program described in the next section.

(4) Research for this and the following section draws primarily on semistructured interviews and factory visits carried out in 1998 and 2000 by Bair with managers and owners of domestic and foreign-owned apparel and textile firms, as well as with several US clients of those manufacturers, and representatives of the apparel industry association in La Laguna. Some of this research was conducted collaboratively with colleagues from Duke University, Gary Gereffi and Martha Martinez. Findings from this fieldwork have been reported in numerous publications, including Bair and Gereffi (2001; 2003), Gereffi and Martinez (2000); and Gereffi et al, 2002. In 2008 Bair returned to the region along with Werner to conduct repeat interviews with most of the firms studied in the earlier period. This 2008 firm-level data were supplemented by interviews with local experts, including academics and political organizers. In this paper we have used pseudonyms for the names of all companies and individuals interviewed in La Laguna.
In addition to its specialty focus on workwear and eventually blue jeans, another distinguishing characteristic of the local apparel industry was the prominent role of immigrant entrepreneurs. La Laguna has been an important destination for Middle Eastern immigrants since the late 19th century, with a pronounced wave of migrants arriving in the region in the post-Revolutionary period. Between 1920 and 1929, seventy such families settled in Torreón and another thirty-four in Gómez Palacio. The economic upheavals of the late 1920s and early 1930s opened a window of opportunity for this group: when several local apparel factories went bankrupt, they were acquired by immigrants from the Middle East (Alfaro-Velcamp, 2007). At the time of the NAFTA-era boom, four of the ten largest apparel manufacturing firms in the cluster were owned by members of one large extended family of Levantine descent. Additionally, a group of five, somewhat smaller, companies were owned by a set of brothers and cousins from a family of Maronite Christians who immigrated from modern-day Lebanon.

Together with a handful of other local producers that were manufacturing for the domestic market, these family-owned companies constituted the core of La Laguna’s apparel industry up through the 1970s. At the end of that decade, a large Texas-based company began to outsource production to La Laguna, developing a business relationship with both of the families of Middle Eastern origin mentioned above. Although it had been one of the largest pants manufacturers in the world, this firm was reeling at the time from a bruising strike, which involved a national boycott sanctioned by the AFL-CIO, and ended with the unionization of the company’s five El Paso sewing plants.

La Laguna’s nascent export business also relied on orders from US brokers. Typically based on the border, brokers were individuals or small companies that coordinated production in Mexico for US firms. Most clients were US manufacturers that had their own domestic factories, but were looking to outsource a portion of their sewing to Mexico in order to exploit the ‘production-sharing provisions’ of US trade law. Under this regime—called ‘807 trade’ for the clause of US trade law that regulated it—US companies could import goods assembled abroad from US components without paying duty on the value of those inputs when importing the finished good. Thus, while most of the garments exported from Mexico at that time were being produced on the US–Mexico border in factories, or maquilas, created for this purpose, La Laguna’s apparel exports began when a few local manufacturers orientated a small proportion of their existing domestic production capacity, still viable under the state’s import-substitution regime, towards filling subcontracting orders for foreign clients.

By the 1980s this state-led, inward-oriented model was in crisis. Since Mexico was heavily dependent on revenues generated by petroleum exports to help alleviate what had become persistent, substantial deficits, the collapse in world oil prices during the recession of 1981–82 hit the country hard. With inflation soaring and the value of the peso in a seeming free-fall following major devaluations of the currency, the Mexican government, which received assistance from both the International Monetary Fund and the US government, committed itself to a course of far-reaching reforms that would soon become known as the Washington Consensus. As one of the first indications of its commitment to this new course, Mexico joined the General Agreement on Tariffs and Trade in 1986.

(5) According to one of our informants, a descendant of a prominent Middle Eastern family in the local apparel industry, some of the first apparel companies in the region have their origins in sewing kits that were made up by women members of this immigrant community. Containing a pattern, fabric, and thread, these kits were sold, often by itinerant vendors, to women who could use them to make clothes for family members.
For the Mexican manufacturing sector, the currency devaluation coincided with the implementation of trade liberalization to create a perfect storm of plummeting demand. However, the devaluation, which decreased the price of Mexican labor, made the country a more attractive production site for foreign clothing companies, as did a new US regulatory intervention—an amendment to the 807 program known as 807A. Under this provision, companies assembling apparel in Mexico under the production-sharing regime were given essentially limitless quotas known as Guaranteed Access Levels if they used fabric both formed and cut in the United States.

These changing structural conditions deeply affected La Laguna's garment firms, but the resulting restructuring was, nevertheless, slow and uneven. By the late 1980s the majority of local apparel manufacturers had begun to dedicate at least some of their production capacity to export orders, marking what local producers considered the beginning of the cluster's 'maquila era'. For example, after more than thirty years of manufacturing its own brand of jeans for the national market, Prima decided to convert 100% of its production to export in 1982. Another locally owned manufacturer with a longstanding history of own-brand production for the national market, Adelante, entered the maquila business a few years later, when it began accepting orders for a US broker working with Levi's. Among firms making the maquila transition, Prima and Adelante were exceptional, both for their longevity and for the visibility of their brands in the national market, but they were only the most notable examples of a larger set of locally owned companies benefiting from the expansion of export-oriented production during this period. This set included a handful of newer firms, all less than a decade old, which were filling small orders for US brokers.

In 1988 Horizon Garments, a large US-based apparel manufacturer producing for several well-known brands, arrived in La Laguna. It began by placing modest-sized orders, on the scale of 20,000 garments per week, with a few local firms. Within one decade this company had closed its domestic manufacturing plants and dramatically expanded its operations in Mexico, where it was producing between 480,000 and 540,000 pairs of pants per week. The arrival of Horizon Garments foreshadowed several of the trends that would soon remake La Laguna into North America's blue jeans capital. The firm was among the first to make a 'bricks and mortar' investment in the region, establishing an owned and operated maquiladora called Maquila de Moda, which opened in 1994. This addition to La Laguna's industrial landscape was joined a few years later by another US-owned production complex, this one built by a well-known jeans company, Westwear. Prior to NAFTA, foreign clients had relied on local subcontractors to fill their orders, most often elective to work through independent brokers. But NAFTA's implementation, which elevated Mexico's importance within the sourcing strategies of many US companies, encouraged buyers to establish direct relationships with Mexican contractors and, in some cases, to invest in their own manufacturing facilities. By the time of Bair's fieldwork in summer 2000, the factories owned by Maquila de Moda and Westwear jointly employed more than 5500 workers.

Before building Maquila de Moda, Horizon Garments relied heavily on an extensive network of over fifty contractors, and about a third of the factories that the company worked with were domestic firms that had only recently ventured into the maquila business. One local firm that had a long-term relationship with Horizon was Adelante. When Adelante began subcontracting for Horizon, it was producing only 3000 pairs of jeans per week, down from the 30,000 it had manufactured for the domestic market. By the end of its six-year relationship with Horizon, Adelante's production volumes reached 60,000 pairs weekly. But, if working with Horizon provided a number of La Laguna's apparel firms with a hands-on tutorial on the quality and price exigencies of the US market, several companies also blamed Horizon for
introducing intense price competition into the apparel cluster, claiming that its arrival coincided with a drastic decline in the standard price per piece paid by foreign clients. Thus on the eve of NAFTA's implementation, La Laguna's conversion to maquila production was more or less complete, even if the cluster continued to be dominated by local, family-owned firms with a history of manufacturing for domestic consumers. In this sense, the post-NAFTA blue jeans boom was rooted in the disarticulation of Mexican companies from the national market—a disarticulation that was wrought by the economic upheaval of the 1980s and the country's subsequent adoption of a neoliberal development model.

The full extent of La Laguna's dependence on the maquila business did not become clear until the following decade, however, when US buyers flocked to the region after the implementation of NAFTA in 1994. In addition to its history of jeans production, part of what attracted buyers to La Laguna was its small textile industry. The availability of local fabric was a new factor in the sourcing calculations of US buyers, since NAFTA extended both duty-free and quota-free access to the US market to garments assembled from fabrics made in any of the NAFTA countries, thus incentivizing the use of Mexican-made denim in La Laguna's jean exports. In 1995 two new denim mills, both joint ventures between Mexican and US companies, opened in La Laguna. One of these plants was a partnership between a North-Carolina-based textile corporation and a Mexican company founded by the Madero family in the 19th century. Thus, while investment in expanding local textile production in the 1990s was clearly spurred by NAFTA and intended to fuel the region's booming exports of blue jeans to the US market, it was also tied to La Laguna's history as a domestic center for cotton and textile manufacturing.

The clearest manifestation of the post-NAFTA blue jeans boom in La Laguna was the dramatic increase in the cluster's output. Production volumes grew from less than a half million pairs per week in 1993 to approximately 4 million pairs per week in 1998 and 6 million garments per week in 2000. In the latter year the production capacity of La Laguna's single, largest firm was just shy of the total, combined capacity of the entire region's manufacturers six years earlier. This expansion was enabled both by increases in the production capacity of local producers such as Prima and Adelante, and by the creation of new factories, like the large maquiladoras opened by Horizon Apparel and Westwear.

For most of NAFTA's first decade, demand for La Laguna's blue jeans continued to outstrip supply, and factories were operating at or near full capacity. Strong demand also stabilized prices, and at the time of Bair's fieldwork in 1998, local producers reported being able to charge between $1.20 and $2.00 to assemble a basic pair of jeans. Although this was up from a nadir of less than $1.00 per unit a decade earlier, it was less than the reported $3.00 per assembled jean that firms were getting in 1994, just prior to the increase in local capacity.

Some companies sought to escape this price competition by moving beyond maquila subcontracting to full-package production, which involved buying the fabric and other inputs needed for a garment and adding additional postproduction operations beyond sewing, such as laundering. But full-package production was expensive to finance, since the purchase of textiles required far more working capital than traditional maquila production. While a handful of the largest companies in the region were making the transition from assembly subcontracting to full-package production in the late 1990s, most tried to maintain the profit margins of their traditional assembly

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(6) The plant is located near La Laguna's first textile mill, established by the grandfather of Francisco Madero. Madero, a prosperous textile industrialist and owner of a large cotton estate, would challenge Porfirio Diaz in the 1910 elections, sparking the Mexican Revolution.
operations by increasing productivity and minimizing labor costs. This proved difficult, however, since the tight labor market created by the post-NAFTA boom meant that workers with abundant employment opportunities could easily switch from one factory to another if wages or working conditions were unsatisfactory. The problem of retention, in turn, negatively impacted productivity, since high turnover meant that companies were constantly attempting to get new operators up to speed.

A number of local manufacturers became convinced that the scourge of turnover and the corollary problem of low productivity was the single most significant problem facing La Laguna. When a new apparel industry association was created in 1995, industrialists hoped that it would provide a forum to address the issue, perhaps by securing agreement among all the association’s members to refrain from the common but much maligned practice of ‘pirating’ away competitors’ workers. Although La Laguna’s apparel manufacturers failed to find a collective solution to their joint problem, a common strategy did emerge among firms looking to secure a steady supply of labor while keeping labor costs low: the extension of maquilas to rural areas.

4 From cotton fields to sewing factories in La Laguna’s countryside
In 1990, an apparel manufacturer from La Laguna named Eduardo Salem approached President Salinas with a proposal for bringing economic growth and employment generation to La Laguna’s countryside. The project Salem proposed—Laguna 2000—would create small cooperative sewing factories on the region’s ejidos that would be owned by their approximately 100 plus employees. A state agency supporting foreign trade, BANCOMEXT (Banco Nacional de Comercio Exterior), would provide financing to build the plants and procure the necessary machinery. Once established, these factories would work as subcontractors for larger apparel companies located in La Laguna’s urban areas, like the one owned by Eduardo Salem: Prima. Salem’s proposal to promote rural industrialization nicely complemented Salinas’s vision of the Mexican countryside, which was to modernize the agricultural sector and generate employment alternatives for the many Mexican farmers that would be made redundant through such a restructuring. The first maquila established under Laguna 2000 opened in 1992. It was located on an ejido in the municipality of Francisco I Madero, which had been created in 1936 from expropriated hacienda lands.

By the mid-1990s, a total of twenty-three ejido plants throughout La Laguna were employing 2600 workers. At the time, the region’s ejido—maquilas were being regarded as a template that could be replicated in other parts of the country with high rates of rural underemployment and unemployment. Salem himself oversaw the creation of the first apparel maquiladora in Oaxaca under a Laguna-2000-like program in the mid-1990s, and by 1998 Salem’s network of rural subcontractors included several factories located in this southern state.

The Laguna 2000 program that was developed by Salem and implemented with the government’s support is an exceptionally clear example of the way in which the blue jeans boom relied on the restructuring of the region’s agricultural sector and the conversion of La Laguna’s ejidatarios into wage workers. But the particular configuration of the ejido—maquila formed part of a more general process of extending the garment commodity chain into rural areas of La Laguna. One local apparel industrialist boasted that by the late 1990s virtually every one of the region’s 300 ejidos hosted a maquiladora. While this almost certainly overestimates the extent of the trend,

(7) One study of three ejidos in La Laguna found that maquiladoras located in both rural and urban areas provided the principal source of employment for these communities, which were also characterized by high rates of out-migration to the US (Martínez et al, 2005).
Van Dooren’s study of La Laguna’s apparel cluster reports approximately eighty rural factories employing an estimated 10,000 garment workers by 2000. While some of these plants were maquiladoras owned by foreign firms, the majority were subsidiaries, or subcontractors, of La Laguna’s large, locally owned, and urban-based apparel companies (Van Dooren, 2003).

As noted above, what motivated the expansion of apparel production beyond La Laguna’s urban core was the desire to access a more stable supply of structurally devalued workers. At the time of Bair’s 1998 fieldwork, managers and owners emphasized the persistent problem of finding and retaining workers. Large numbers of rural workers were bussed to and from the factories located in La Laguna’s industrial parks and these transportation services were described by managers as one of the most costly benefits they offered to their workers. Instead of transporting rural workers to urban factories, then, rural factories brought jobs to a labor force with fewer employment options. Garment firm operators hoped that the absence of competing industrial employment opportunities would enable rural factories to escape the excessively high turnover rates (frequently reaching 10% per month) that plagued the plants operating in the large industrial parks.

Sustained demand for labor was the condition on which the success of the ejido–maquilas and La Laguna’s other rural factories depended; employment, in turn, depended on a steady supply of orders from US companies buying the blue jeans being produced in La Laguna. During the height of the post-NAFTA export boom, both private and public sector officials expressed confidence about the foundation of the region’s competitiveness in global apparel markets. Inflows of capital, expanded employment, and the development of direct sourcing relationships between the region’s leading manufacturers and US brands generated an optimistic assessment of La Laguna’s prospects for growth and upgrading among most of the informants interviewed. One manifestation of this optimism was spotted during fieldwork carried out in the summer of 2000. While touring Adelante’s factory complex, Bair spotted an unusual monument in the courtyard outside the comedor (the workers’ dining hall). Upon closer inspection she found that the monument was a tombstone, marking the final resting place of “Sr. No Se Puede,” who was symbolically laid to rest on 21 September 1998—the date that this company’s new production complex was opened. The inscription on the grave read “Aquí se yace Sr. No Se Puede—Originario del país de la mediocridad” (Here lies Mr. It’s Not Possible—from the country of mediocrity). The phrase’s banishment to the grave was intended to signal the inculcation of a ‘can-do’ attitude appropriate to La Laguna’s modern, post-NAFTA economy among the company’s management and workforce.

At the time, the apparel company in question, Adelante, was the fourth largest in La Laguna, employing 3200 workers and producing half a million garments per week. Widely regarded by other local companies as one of the best and most innovative manufacturers in the region, Adelante had already made the transition from producing for a protected, domestic market to subcontracting for foreign firms, and it appeared to be among the best poised of the local firms to make a successful transition to

(8) In 2000, this would have represented about 15% of total employment in La Laguna’s textile and apparel industry. On the basis of municipal-level census data, we estimate that rural areas accounted for 17.4% of La Laguna’s total apparel employment in 2004 and just over 21% of the total in 2009. However, this percentage increase primarily reflects contraction in total employment in recent years; thus, while rural apparel employment increased as a percentage of total apparel employment between 2004 and 2009, the actual number of people employed in rural apparel factories declined by 36% over the same period. By 2009 there were fewer people in La Laguna’s rural areas employed in sewing factories than there had been a decade earlier.
full-package production. But Adelante’s fortunes suffered something of a reversal between our 2000 interviews and our next visit to the company in 2008.

Adelante managed to weather the early years of the downturn in La Laguna’s apparel cluster, which most firms reported as beginning in earnest in 2001; the company even expanded production, reaching a record volume of 11 million pairs of pants in 2005.

Business contracted sharply thereafter, however, with the loss of several large orders for US clients. Employment fell from 5000 in 2005 to 3600 in 2007 to 1800 at the time of our interview in March 2008. Similar declines were reported throughout La Laguna. When we updated Bair and Gereffi’s (2001) research, we found that production at the ten largest firms had declined from 2.6 million pairs of pants weekly in 2000 to approximately 1.3 million in 2008. Three of the Mexican-owned companies that had been among the region’s ten largest manufacturers in 2000 had closed, and another three continued to operate, but at lower volumes and with fewer employees. In addition to Adelante, this set of manufacturers included Punto Azul, which was opening a new factory in Central America, presumably to be close to its most important US client, a jeans manufacturer that was expanding to Nicaragua, a country increasingly viewed as a viable low-cost competitor to Mexico.

The third and hardest hit among La Laguna’s local garment exporters is Prima, the company whose owner proposed the ejido–maquila as a rural employment scheme to support the region’s export economy in its brighter days. Prima’s estimated production volume of 50,000 garments per week in March 2008 represented one eighth of its production (400,000 garments per week) in summer 2000, at which time Prima still had sufficient business to subcontract out some of its production to a number of ejido–maquilas. Under the original blueprint for the Laguna 2000 program, Salem was supposed to deliver a steady stream of orders to these rural plants, as well as provide training and support in areas such as quality control. In return, these factories would offer Prima subcontracting services for a highly competitive per unit price. Out of the revenue generated by the business relationship between the ejido–maquilas and Prima, the factories would meet payroll as well as pay off their loans to the bank. Once the loans from BANCOMEXT (which were guaranteed by Salem) were repaid, the cooperatives would be able to diversify their client base and begin subcontracting for other local producers. Wages were low but, since the workers were also the cooperative owners of these ventures, the expectation was that these would eventually be supplemented by the profits earned by the ejido–maquilas. (Van Dooren, 2003).

The actual trajectory of the ejido–maquila has diverged sharply from this blueprint, however. In contrast to expectations, turnover of the young and predominantly female workforce has been high in many of the cooperatives. In addition, not a single ejido–maquila managed to pay off its start-up loan: instead, of becoming profitable, independent businesses, their indebtedness increased over time. Because they continued to produce exclusively for a single client, their success became intimately tied to the fortunes of Prima, and problems with the latter’s logistics management

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(9) We were unable to interview this firm in 2008; thus our estimate of Prima’s production volume is based on triangulated estimates from the other companies in the cluster.

(10) Overall, the ruralization strategy appears not to have succeeded in stabilizing the apparel workforce. One of the companies that Bair interviewed in 1998 had established six sewing factories in rural areas. The manager was surprised by the average turnover rate at the rural factories which, at 6–7% per month, was by no means excessive for the region’s apparel firms, but was higher than the turnover rate at the company’s large finishing plant and industrial laundry complex in an industrial park just outside the city. In his view, this was perplexing, since there appeared to be a large surplus of labor looking for work in these communities and the sewing plants were the only source of industrial employment available in each.
have reportedly plagued the ejido–maquilas. Even before the downturn, Van Dooren
reported that production was sometimes delayed or halted due to late deliveries of
work materials from the client company. These complications were greatly exacerbated
by the downturn in the industry that began in the early 2000s. Among the rural
factories most negatively impacted by this downturn were the cooperatives, all of which
were forced to suspend operations for some period of time, and some of which were
closed for more than six months (Van Dooren, 2003). By 2008 only a handful of ejido–
maquilas were operating in La Laguna, with a maximum workforce of a few hundred
owner–debtor/employees.

While the downturn in the apparel industry has been particularly precipitous, it is
not the only branch of the manufacturing sector to experience retrenchment in recent
years. Between 2004 and 2009 overall manufacturing employment in La Laguna
has declined by more than 22%. In the rural municipalities of La Laguna specifically,
the decline in manufacturing employment has been only slightly less dramatic, falling
19% over this five-year period (INEGI, various years). La Laguna’s restructured agri-
cultural economy promises few alternatives to factory employment in rural areas. In
fact, changes within the agricultural sector are compounding the problem of industrial
job loss. Cattle fodder has replaced cotton as La Laguna’s dominant crop, a trend that
reflects the consolidation and accelerated growth of the region’s dairy industry over the
course of the 1990s and into the 2000s. The switch to fodder (maize, sorghum, and
alfalfa) from cotton has important implications for the ability of the region’s agricul-
tural sector to absorb rural workers because the cultivation of a hectare of most feed
crops requires fewer work days than the equivalent amount of cotton. While trends in
both the agricultural and industrial sectors point in the direction of persistent unem-
ployment and underemployment, future research is needed to chart how the processes
of dispossession and disarticulation described here will shape the region’s rural and
urban communities, now that the blue jeans boom has gone bust.

5 Conclusion: uneven geographies and commodity chains
La Laguna is only one of many regions in Latin America to have experienced a
marked contraction in apparel production for export in recent years. As many analysts
note, major regulatory changes in the global garment trade, and specifically the phase-
out of the Multi-Fiber Arrangement, are proximate causes of these shifts in the
geography of textile and garment production. Indeed, much of the current research
on the global commodity chain for apparel focuses on those regions—particularly
China and to a lesser extent India—that are emerging as the new blue jeans (or
sweater or t-shirt) capitals of the world (Appelbaum, 2005; Dussel Peters, 2004). While
La Laguna’s reversal of fortunes is exceptional in degree, its overall trajectory—of
rapid industry expansion with rising exports and employment followed by contrac-
tion—is all too common. In proposing the concept of disarticulations, and applying
it to the rise and fall of this erstwhile blue jeans capital, our goal has been to explicate
the importance of such cycles for both place and commodity production, beyond the
proximate impact of an immediate shift in firm networks and corollary changes in
regulation. Thus, rather than interpret La Laguna’s export surge as an event centered
on its ‘new’ maquila industry in the period leading up to and following NAFTA, it is
better understood as a particular moment in the reworking of La Laguna’s 150-year
encounter with the web of social relations that comprise the apparel commodity
chain. We have told this story of La Laguna’s journey from cotton fields to blue
jeans capital in three episodes, beginning with a struggle for land and livelihoods in
the post-Revolutionary period that resulted in a massive land expropriation from the
region’s estates, and the creation of a new class of collectivized cotton producers.
This arrangement was short lived, however, as adverse developments in global markets compounded the Mexican state’s systematic efforts to turn farmers into dependent clients, leading to a disintegration of the collective ejidal structure, a deterioration of the ejidatarios’ status as independent producers, and the eventual collapse of local cotton production. This drawn-out process of dispossessing La Laguna’s rural producers culminated in the agrarian reform of the early 1990s, which facilitated the expansion of export-oriented production by structurally devaluing land and labor.

If rural restructuring helps explain the region’s export dynamism, we must look to the history of La Laguna’s manufacturing sector to understand the specific content of the export boom. Its specialization in blue jeans is tied both to La Laguna’s history of textile production, itself a product of forward linkages from the region’s cotton economy, and to a deeply rooted local apparel industry, with firms whose owners include descendants of immigrant entrepreneurs to La Laguna in the early 20th century. Converting these domestic manufacturers into export maquilas was achieved through external regulatory regimes—like the production-sharing (807) program and NAFTA—as well as the collapse of state support for domestic industry. At the peak of the boom, these processes of agricultural and industrial restructuring crystallized in the Laguna 2000 program, and the wider effort by capital to mobilize rural communities into wage labor by setting up factories in their towns and/or recruiting workers into urban industrial zones. Finally, in the context of La Laguna’s declining apparel sector, social relations, firm structures and livelihood possibilities are again being remade as the contours of uneven geographies are iteratively reproduced, and global commodity networks shift to reflect them.

A disarticulations perspective thus sheds light on the related processes of accumulation, disinvestment, and dispossession that reproduce places like La Laguna, and the contours of uneven geography of which they form a part. Although it was La Laguna’s post-NAFTA export dynamism that first brought it to the attention of many industry experts and development scholars alike, we have shown that this region’s encounter with the apparel commodity chain did not begin in the 1990s. Indeed, we have argued that one cannot understand either the blue jeans boom or the subsequent bust without understanding how the fortunes of both labor and capital in La Laguna have long been linked to the region’s changing position in the cotton–textile–apparel chain. Our perspective has important implications for the emphasis in network-based literatures on industrial upgrading as the dominant narrative for understanding development and change in the context of globalization. Currently conceived as a firm-level process of adopting new technologies, capabilities, and work arrangements in order to increase competitiveness and maintain participation in global markets, the upgrading concept belies the complex social relations that condition the availability of labor and capital for these restructuring efforts.

In sum, our efforts to ‘turn commodity chains on their head’ reveal the uneven geographies that constitute the terrain of global capitalism. The suturing together of this uneven terrain into a commodity chain is a structurally contingent process. Rather than study the chain as an emergent network of relationships, then, a disarticulations perspective suggests an alternative focus on the social and spatial processes that underwrite these chains. In elaborating this approach and its relevance for understanding commodity chains, we have argued specifically for the importance of studying ‘delinking’—that is, we aim to explore how the connections tying people and places to a particular chain are severed, thereby excluding them, from circuits of capital accumulation in ways that may be important for their later incorporation into new chains and new circuits of accumulation. In the end, we argue, it is these complex trajectories of inclusion and exclusion that make commodity chains possible. Thus, while standard
accounts of commodity chains have tended to view these networks as either motors of development or as mechanisms for the reproduction of an unequal world-system, the disarticulations approach outlined here suggests that such chains can also be understood as ‘effects’ of the uneven geographies that constitute the terrain of global capitalism; the task of critical scholarship, then, is to delve deeply into the social relations that produce these geographies so generative of the unstable formations of global commodity production.

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