



***Brazilian Auto Workers and Labour Militancy; Observing the Crisis of
Capitalism From the 1920s to the Present***

Winning Essay of the 2022 Undergraduate-level Michael Baptista Essay Prize

by

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Baptista Prizewinning Essay

December 2022

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HIST4630

March 16, 2022

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In Joel Wolfe's book, *Autos and Progress*, Wolfe argues that both the production of cars and the consumption of cars in Brazil signified benchmark processes in Brazil's search for modernity, progress, and democracy. The consumption of cars in Brazil required the government to invest in infrastructure by building roads and increasing automobility. Social cohesion was one of the chief goals of the 1920's modernists, who believed that road construction in Brazil would geographically and socially unite a polarized country. These same modernists and elites were inspired by the Fordist mode of production and wished to see Brazil engaged in car manufacturing. Ford was "making cars and men" in the United States, and Brazilian elites anticipated that Fordism in Brazil would create a new "civilized" working class (Esch, 2). Brazilian automobility, car consumption, and car production were all part of the same effort to reinvent Brazilian identity and create popular citizenship (Wolfe, 9). In the late 1970's, auto-industry workers who had long been "civilized" by the Fordist mode of production went on strike for 41 days in the area known as the ABC Paulista, in a display of labour militancy which openly challenged the military dictatorship. Sociologist Beverly Silver, in her book *Forces of Labor*, observes patterns of capitalist crises, contradictions, and social movements across time and space (Silver, 20). Using the logic of Silver's book, I will explain how capitalist crises have manifested in the auto-industry in Brazil, especially in the form of labour militancy. I will evaluate past and current labour-capital relations in the auto-industry, and I will conclude by discussing some of Silver's speculations about the future of the industry, applying them to the Brazilian case.

Silver uses Marxist and Polanyian logic to construct her argument about capitalism in crisis. In Silver's reading of *Volume I* of Marx's *Capital*, Marx determines that labour is revealed

as a fictitious commodity at the point of production (Silver, 17). The capitalist who purchases “labour power soon finds out that it is not a commodity like any other. Rather, it is embodied in human beings who complain if they are driven too long, too hard, or too fast” (17). In Silver’s reading of Polanyi, the tense labour-capital relationship resembles the movement of a pendulum, what Polanyi calls a “double movement” (Polanyi qtd. in Silver, 17). Polanyi claims that “the extension/deepening of unregulated markets for labour and other fictitious commodities inevitably provokes a corresponding countermovement for the ‘protection of society’” (17). Silver reinforces her argument that capitalism is always in crisis by introducing the concept of capitalist “fixes”. When capitalists are facing a “crisis of profitability” they introduce capitalist “fixes” in order to swing the pendulum toward the commodification of labour (39). Workers confronting a “crisis of legitimacy”, pursue labour militancy, swinging the pendulum back toward the de-commodification of labour (38). Capitalist fixes include the “spatial fix”, the “product fix”, the “financial fix”, and the “technological/organizational fix” (39). I will later define these fixes using examples from the auto industry. Although these fixes may temporarily suspend the challenges facing capitalists, Silver argues that these solutions only “reschedule crisis”, and do not permanently solve them (41). The Marxist and Polanyian models show how new working classes will necessarily be situated within the tense labour-capital relationship, leading to a “strengthening of [their] capacity and disposition to resist exploitation” (18). Silver observes that across space and time, global working classes are being made and unmade (19). These same contradictions, fixes, and labour movements are evidenced in the history of the Brazilian auto-industry.

Silver argues that the auto-industry is extremely vulnerable to worker militancy (41). Ford’s implementation of the assembly line in Detroit de-skilled labour and increased production. Ford reduced the workplace bargaining power of skilled workers, while creating a *new* workforce

trained to perform specific tasks. The automotive industry requires significant capital input in order to purchase and operate the high-tech machinery which was invented to de-skill workers. When Ford reduced the bargaining power of skilled workers by introducing the assembly line, he did so as a “technological fix”. This new “fix” created a system which could easily be disrupted by worker sabotage, sit-ins, or strikes (46). The Fordist production system required a precise division of labour and extreme coordination between all departments (46). When a “technological fix” was not sufficient in suppressing the rights of workers, auto-industry employers may have sought new mechanisms to control workers, by implementing a “spatial fix” which involves moving production to new locales (48). Although these new locales offer fresh armies of reserve labour, the hefty investment price of opening a new auto-manufacturing plant acts as a strong deterrent against pursuing a “spatial fix” in the auto industry (48). The Fordist mode of production may have de-skilled labourers but the assembly line was costly to move elsewhere when workers sabotaged production (48). Ironically, notes Silver, “mass production in the automobile industry has tended to recreate similar social contradictions wherever it has grown, and, as a result, strong and effective labour movements have emerged virtually in every site where Fordist mass production expanded rapidly” (41). In the case of Brazil, the formation of an elite working class of auto-workers helped bring social legitimacy to a labour movement in the late 1970’s which impactfully influenced the shift toward democracy and out of dictatorship (6).

The point of departure in my analysis of the Brazilian auto industry begins in the 1920’s, when elites were negotiating nationalist identities through aspirations of unity, modernity, and progress (Wolfe, 61). Cars and automobility metaphorically reflected these aspirations. To Brazilians, car ownership was synonymous with American values of middle-class consumerism, the nuclear family, and democracy (69). American Hollywood films advanced these values in

Brazil (71). Through the 1920's, Brazil was one of the largest importers of American cars (38). At the 1925 "First Exposition of Automobility" car show in Rio, the most popular event was watching the assembly of Ford's Model T (48). According to Wolfe, "[i]t was one thing to imagine a new imported technology such as the automobile being used to unify a massive country like Brazil; it was quite another for Brazilians to imagine themselves as capable of building such machines" (48). By the mid-1920's, Ford and Chevy were assembling cars in Brazil from "Completely Knocked-Down Units" (CKD's) imported from the United States (64). These cars were cheap to manufacture in the United States during the early phase of the product cycle, when competitive pressures were low (Silver, 77). American car companies opened CKD assembly lines in Sao Paulo in an effort to expand their Brazilian consumer base (Wolfe, 65). Full manufacturing of Ford and GM cars in Brazil would not be pursued until after the 1964 military coup when the dictatorship denied rights to workers and cracked down on labour movements (133, 117). I will explore later how, in a moment when auto-manufacturing plants in the United States became a formidable hotbed of labour militancy, capitalists opted for a "spatial fix" (119). By moving operations to Brazil, auto industry capitalists took advantage of poor worker's rights under the military dictatorship (119). It was beginning in the 1920's, however, that a new Brazilian auto-industry workforce was being made and would later come to replace a U.S. workforce which was being unmade (Silver, 19).

Cars offered new conceptions of space and time, which was especially important considering the new emphasis placed on clock-time in the Fordist mode of production (Wolfe, 10). To Brazilians, it seemed like Ford had discovered a revolutionary ability to subordinate nature, geographies, and people to a rational and systematic order (83). Ford promised he could transform any man into a loyal worker (Esch, 15). Securing worker loyalty at home and abroad required

paying a high wage, and offering a plethora of benefits and services to employees (Wolfe, 63). However, after the First World War it was increasingly difficult for Ford to provide paternalistic benefits to U.S. workers, causing him to escalate productive pressures at work through scientific management and Taylorism (Esch, 5). At the same time, Ford hired Black Americans who had migrated internally from the U.S. South and offered them the most dangerous and dirty jobs at the Rouge River plant (5, 8). Considered benevolent for his apparent status as an equal opportunity employer, Elizabeth Esch contends that the Fordist mode of production was founded on white supremacy (3). Esch argues that Ford's proclivity for transforming and "civilizing" men through hard work, consumption, and paternalistic employment shows "how such workers would be viewed, often through the prism of eugenic ideas- as citizens, potential citizens needing fixing, or those who needed to be excluded from citizenship" (3). White managerialism was intrinsic to the Fordist mode of production and involved the constant surveillance of workers on the job and at home (2). These features of Fordism, Esch argues, resembled slavery and colonialism (10).

The ideology of Fordism encountered fertile terrain in Brazil. White Brazilian elites were concerned with the racial fitness of the "backwards" people of the interior and welcomed the transformative powers of Fordism in Brazil (Wolfe, 67). In Ford factories, men worked on the assembly line to provide for their families at home (67). Encouraging sexist divisions of labour, men were breadwinners who produced automobiles, while women performed domestic labour, birthed future workers, and engaged in household consumption (Esch, 7). Despite the failure of Fordlandia, Henry Ford's sprawling rubber plantation in the Amazon, Brazilians were impressed by Ford's ambitious developmental project (Wolfe, 88). Ford called Fordlandia "a work of civilization" (84). Wives of Fordlandia workers "no long[er] gathered bananas and prepared mandioca to serve with the fish they caught in the river. Now they shopped like women in Sao

Paulo, Rio, and American cities” (87). Esch argues that “Fordism aligned itself with ‘productions of difference’ in and out of the United States” (Esch, 6). It is important to recognize that Ford expanded production in areas of the global South where he could maintain racist hierarchies of “production, power, and knowledge” (Stoler and Cooper qtd. in Esch, 11). Ford established industries in Brazil and South Africa precisely *because* they were racist (Esch, 17). Dividing the workforce based on racial hierarchies is an example of an “organizational fix” (Silver, 73). Workers treated differently based on blatant racial hierarchies are less likely to create solidaristic bonds and become militant (73). Likewise, men with families to feed are less likely to jeopardize their jobs through labour activism. Fordism encouraged racist, sexist, and heteronormative social relations.

The 1930’s and 40’s in Brazil were defined by Vargas-era politics. Vargas’ main goal was to create a highly centralized state and reduce the political regionalism common to Brazil (Wolfe, 92). This goal necessitated the construction of highways which would help to physically unite Brazil and allow the imposition of top-down militaristic discipline from the capital to the regions (93). Vargas stoked nationalist pride by investing in Brazilian infrastructure and industry, attempting to make Brazil more self-reliant (95). In the 1930’s, Vargas doubled the kilometers of roads and highways in Brazil (96). Incidentally, World War II improved Brazilian industry, as European and American markets were less able to purchase cheap export commodities like coffee (105). In a period of Latin American history marked by “Import Substitution Industrialization”, Vargas insisted that Brazil should diversify its productive capacities (112). Although the Brazilian car industry involved the assembly of CKD’s produced abroad, Vargas oversaw the growth of important sectors affiliated with the auto-industry (105). Vargas opened the National Steel Company in 1941, establishing a steel mill on an abandoned coffee plantation in Volta Redonda

(105). Volta Redonda, which the Vargas administration modeled after Fordlandia, supplied steel for car/car parts manufacturing in Brazil (105, 107). Vargas helped Brazil industrialize by investing in national industries, however, these industries relied on foreign capital and technology (111). Vargas deepened the state's dependency on foreign automotive and oil companies through the 1930's and 40's (112). During his dictatorship, Vargas created intense government bureaucracy so that worker complaints would be addressed through the formal channels of corporatist trade unions and labour courts (94). This would allow an improved degree of labour regulation in Brazil, ameliorating the conditions of workers who had few rights, but also restricting (by force) labour activism outside of the formal channels (94).

Juscelino Kubitschek (JK) furthered Vargas's nationalist industrial goals, promising "50 years of progress in 5" (113). JK "rejected the tenets of laissez-faire capitalism and instead embraced the idea of using the state to plan the development of the nation" (115). Delivering on his vision of state-led development, JK developed a highway system which penetrated the interior, and built the new capital city of Brasilia in 1960, which was designed for automobility (113, 135). JK created the "Executive Group on the Automobile Industry", which mandated that auto-companies use a minimum of 90% domestic content for automobiles by 1960 or face stiff import tariffs (117). Ford and GM were worried that there was not a large enough domestic consumer base to warrant full expansion into car manufacturing and decided to forgo car production in Brazil (117). German Volkswagen (VW) and American Kaiser Industries began car manufacturing in Brazil in the mid-1950's, coinciding with the first time in history when cars were cheap enough for middle-class Brazilians to afford (119, 125). By 1960, Brazil was exporting domestically manufactured cars to other parts of Latin America (123). Brazilians felt a sense of nationalist pride as the auto-industry was shaping the city of Sao Paulo (126). Kubitschek had advanced the national

auto-industry in significant ways but did not “insulate the Brazilian economy from external forces”, as Brazil remained chronically dependent on foreign investment (141, 166).

In 1957, workers from the traditional industrial sectors of Sao Paulo launched a massive general strike, known as the “Strike of the 400,000” (Fontes and Macedo, 86). This 1957 general strike was organized by many different industrial sectors who were all experiencing the economic repercussions of JK’s lofty developmentalist projects (89). There was an influx of internal migrants in the city of Sao Paulo from the interiors of Sao Paulo state, Minas Gerais, and the Brazilian Northeast (89). This internal migration was made possible by the improved highway and road systems expanded by Vargas and JK (Wolfe, 130). As Fontes and Macedo argue, the city of Sao Paulo and the industrial sectors grew at an incredible pace, “[h]owever if the supply of jobs increased the same was not necessarily true of wages” ... “[t]he abundant supply of labour contributed to the relative compression of wages, despite the visible development underway” (Fontes and Macedo, 89). The middle and upper classes of Sao Paulo lived in the center of the city, while the poor occupied informal settlements on the city’s outskirts (89). The urban working-class was suffering from a high cost of living and rising inflation, caused by massive government spending and growing national debt (89). While workforces in the traditional industrial sectors were experiencing a “crisis of legitimacy”, the automotive industry was creating a new “elite working class, more interested in consumerism than labour militancy” (Wolfe, 133). The auto-industry in Sao Paulo operated as a release-valve for capitalists to pursue the “product fix” (128). Silver explains that the product cycle transitions through three phases; innovation, maturity, and standardization, with decreasing financial returns during each phase (Silver, 77). Capitalists who had invested in the traditional industrial sectors, like the textile sector, were disinvesting from

those sectors and investing “into new industries and product lines subject to less competition”, like automobiles (132).

During the “innovative” phase of the product cycle for automobiles, Ford was able to reinvest windfall profits into high wages and social benefits of his workers, a reality which eventually became impossible to maintain in the United States once the auto-industry entered its “mature” phase (Silver, 78-79). Foreign automotive industries in Brazil in the late 1950’s and early 60’s offered high wages and good benefits to auto-workers (Wolfe, 128). At this time it was still possible for auto-industry capitalists to extend Fordist benefits to Brazilian workers due to the comparatively low cost of manufacturing in Brazil (128). Of course, this was only made possible by first pursuing a “spatial fix” and shifting production away from original manufacturing locales. Foreign auto-industries paid the highest industrial wages in Brazil and offered health care and life insurance (129). Auto-companies adjusted wages to keep up with inflation, and according to Lula da Silva, in the early 1960’s workers in the “automobile industry got something like ten raises a year. They were the elite- they had houses, they were the first to buy televisions, the first to buy cars” (da Silva qtd. In Wolfe, 133-132). Fordism in the ABC auto-industries in Sao Paulo led to the formation of a well-respected, elite, and articulate working class. This new working class was composed mostly of men from the “backwards” interiors of Brazil, superficially delivering on the Fordist promise of “civilizing” racialized populations (127). However, the late 1950’s and early 60’s era of Fordism in the Brazilian auto-industry was short-lived.

The mid-1960’s represents a junction of unfavourable conditions for auto-workers. After the Cuban Revolution, cold war tensions were high, and Brazilian elites were anxious about the threat of communism in Brazil (148). JK’s developmentalism resulted in economic uncertainty and high expectations that Brazil was on the path to modernity (148). Presidents Quadros and

Goulart were unable to manage these considerable pressures, and a military coup successfully turned Brazil into a dictatorship in 1964 (149). The military dictatorship cracked down on unions and repressed wages, rejecting Fordism, while cutting social funding and benefits (150). Silver underscores the contradiction in this logic, claiming that “efforts by capital (and states) to restore profits invariably involve[d] breaking established social compacts and intensifying the commodification of labour, thereby producing crises of legitimacy and backlash” (Silver, 20). Undermining itself by introducing austerity measures at the expense of the working classes, the military dictatorship installed in 1964 would come to encounter a crisis of legitimacy.

The authoritarian political agenda pursued by the military dictatorship in Brazil fostered the expansion of foreign car production by companies like GM and Ford (Wolfe, 164). Foreign car companies made new workforces in Brazil where wages and rights were actively suppressed by the government (Silver, 54). This undermined worker movements in North America and Europe, where pervasive labour militancy had created a crisis of profitability for car manufacturers (54). The automotive industry grew rapidly and became integral to Brazil’s economy. During the period of “1969 to 1974, vehicle output increased by an average annual rate of 20.7%” (54). Fontes and Macedo argue that the “Economic Miracle” was made possible by suppressing auto-industry wages (Fontes and Macedo, 90). The “Economic Miracle” era from 1968-73 was a period where the GDP was growing and inflation was stabilized (Wolfe, 154, 161). During the “miracle” years the Medici government followed in the footsteps of JK, funding an expensive developmentalist program called “Operation Amazon”, which offered Amazonian farmland to Northeastern migrants (153). “Operation Amazon” was a state-interventionist attempt to reduce overpopulation pressures in Brazil’s coastal cities, where informal settlements were swelling beyond control (153). By the mid-1960’s it had become evident that the modernist cause of progress and unity was

achieved through automobility, while creating new modern problems in Brazil (149, 158). Ironically, the “Operation Amazon” project, largely considered an economic and environmental failure, increased the socio-economic problems of urban working-class Brazilians. This became especially apparent after the 1973 oil shock, which ended the “miracle” years and thrust the Brazilian economy into overwhelming debt and inflation (162). Brazilian manufacturing was totally dependent on imported oil, a terrible detriment to the Brazilian economy (162). The miracle years had been a mirage.

After the 1973 oil shock, official inflation rates were doctored until 1977 to reflect lower values, meaning that government-approved wage increments did not keep up with the real rate of inflation (Humphrey, 78). Auto-industry employees witnessed the impressive growth of the automotive industry in Brazil, frustrated that they were not receiving their share of the profits, and “there was considerable pressure to increase productivity and extend the working day” (73). The military dictatorship was not interested in securing the domestic consumption of cars, shifting focus towards export production (Wolfe, 160, 163). Suppressed wages meant that the average auto-industry worker could not afford to buy the product he produced (169). Evidencing a major shift away from Fordism, it is worth remembering Wolfe’s claim that since the 1920’s in Brazil, car ownership was culturally associated with democracy (69).

Wages earned by auto-workers in the 1970’s were average compared to other industrial sectors, and the privileges associated with automotive industry jobs were no longer evident (Humphrey, 74). Although their material realities may have changed, auto-workers remained culturally esteemed as an elite and well-respected working-class group (Wolfe, 173). When automotive industry metal-workers launched the ABC Paulista strike in 1978, their elevated cultural status helped foster popular support for the strike (174). The auto-workers were driving

the Brazilian economy and held incredible bargaining power (Silver, 55). The “Metal Workers Union of Sao Bernardo” represented some 125,000 members across Sao Paulo (Humphrey, 76). Learning that the inflation rates had been doctored, “the metal-workers of Sao Bernardo do Campo folded their arms in front of their machines and refused to work” (Fontes and Macedo, 99). They demanded an immediate wage increase (Humphrey, 78). The process of wage negotiation under the dictatorship involved an official hearing between the foreign car companies, union representatives, and the Ministry of Labour (Wolfe, 172). The Ministry of Labour held absolute bureaucratic power in deciding the increment made to wage, which, according to Humphrey, was always “within the narrowest parameters”, and “favoured no change to the status quo” (Humphrey, 78). For this reason, in “the 1978 negotiations, the union decided to do nothing and boycott negotiations completely in order to show its members that the formal procedures were a sham” (78). The Metalworkers Union insisted on direct negotiations with their employers, undermining the bureaucracy (and legitimacy) of the military dictatorship (Fontes and Macedo, 100).

The Metalworkers Union headed by Lula da Silva, went on strike for 41 days causing colossal damages to car companies. These companies lost the equivalent of 75,000 cars during the strike period (102). Despite the use of police force against picketing and gathering, auto-workers managed to generate popular support for the strike by politicizing their own neighbourhoods and gaining solidarity from family, friends, and members of their churches (100, 104). The strike ended when workers were forced to return to work without having their demands met, as they were “facing a complex and powerful set of pressures”, including threats of massive layoffs (102). Strikers returned to work feeling defeated by the outcome of the strike and had only won a 6% pay raise (Humphrey, 81). Union leaders were jailed, demands were not met, and workers lost significant income during the strike (82). Only with historical perspective is it possible to examine

the ways in which the ABC Paulista strike was successful. The Metalworkers Union strike inspired other sectors in Brazil to strike, which reached “a peak of 9 million workers involved in 1987” (Silver, 56). Impressively, the strike movement pushed the government to shift toward democracy, including new provisions in the constitution that gave workers the right to strike, form independent unions, and negotiate directly with employers (56). Finally, the workers movement led to the creation of the Workers Party in 1980 (during the “abertura”), headed by Lula da Silva (Fontes and Macedo, 102). After over a decade of labour commodification and a crisis of legitimacy, Brazilian auto-workers used labour militancy to swing the pendulum toward the decommodification of labour.

There is a debate among scholars as to whether the ABC Paulista strike represents a totally novel expression of labour militancy, or whether it can be observed as a continuation of past strikes, like “The Strike of the 400,000” in 1957. I agree with scholars Fontes and Macedo that the 1978 strike represents a continuum (Fontes and Macedo, 87). As I mentioned before, the product fix shifted capital into the expansion of a new industry (cars), while disinvesting from old industries (ie. textiles). The “product fix” evidences how crisis can be rescheduled *within* and *between* industries (Silver, 74). With the benefit of perspective, these strikes reveal patterns of labour militancy which were articulated across time and space. Investigating the ways in which these strikes manifested historically may provide some insight into the current conditions of the Brazilian auto-industry.

Silver argues that the auto-industry has entered the standardization phase since the 1980’s (78). When Silver wrote *Forces of Labor* in 2003, she predicted that capital would flow into the new semiconductor industry, which was in the innovation phase (123). The “product fix” and the “financial fix” will be two avenues for disinvestment from the auto-industry. The “financial fix”

involves moving capital into “money lending, financial intermediation, and speculation” (133). Silver argues that growing financialization since the 1980’s has increased capital mobility (106, 166). Beverly Silver and Mark Anner both identify a growing concern among scholars in the early 2000’s, known as the “globalization thesis” (Anner, 609, Silver, 8). This theory hypothesizes that the hypermobility of capital and the consolidation of power among multinational corporations (MNC’s) has created weaker states, which are less capable of maintaining sovereignty and controlling economies (Anner, 609, Silver, 8). Silver and Anner lament, using the logic of the “globalization thesis”, that globalization is creating serious challenges to working-class movements, which must now try to confront powerful and elusive MNC’s (Anner, 609, Silver, 8). Both authors offer the same solution to this problem, which I will return to.

The collapse and decay of the once-prosperous city of Detroit serves as a poignant example of the social consequence of auto-industry disinvestment (Anner, 620). Auto-industry disinvestment has already occurred in the traditional ABC region of Sao Paulo (Santana, 95). Since the 1990’s, the auto-industry has been pursuing two new production strategies; “Just-In-Time” (JIT) production, and “green-fielding” (95-96). The former represents a “technological/organizational fix”, while the latter represents a “spatial fix”. In JIT production, MNC auto-industries will outsource supplies and labour among different production facilities (96). Marco Santana describes how JIT manufacturing means the strategic installation of “‘industrial condominiums’ that cluster suppliers around the main assembly plant, reducing transportation costs and ensuring a steady flow of just-in-time supplies” (96). In JIT production, car manufacturing and assembly are decentralized processes, happening across various plants (Anner, 607). The “green-fielding” strategy involves moving manufacturing plants out of the ABC region, and into smaller municipalities where there is little union presence, and where MNC auto-

industries can pay lower wages (Santana, 95). In addition to paying lower wages, argues Santana, the cost of living in these new regions is significantly higher than in the ABC region (99). The shift toward JIT production and green-fielding highlights the disturbing power of MNC's to disperse the labour force and undermine labour movements.

Anner found that in 2001, the average monthly wage for an auto-worker in the ABC region was \$907 USD, while an auto-worker in a new green-field plant made \$477 USD (Anner, 613). According to data collected in 2016 by Ulrich Jurgens and Martin Krzydzinski, the VW Anchieta plant (located in the ABC region) had a workforce of 20,000 employees compared to 50,000 employees in the 1980's (Krzydzinski and Jurgens, 64). Of the 20,000 current employees, "12,000 work directly for VW and 8,000 are in outsourced activities" (64). These findings reveal that the auto-industry workforce is being underpaid and decentralized, while also being reduced all-together (Anner, 626). According to Silver, JIT production is still vulnerable to worker sabotage (Silver, 6). If production is disrupted in only one subcontracted plant, the whole system stagnates (6). Furthermore, Anner and Silver insist that these new styles of production require a strong worker movement in favour of labour-transnationalism (Anner, 607, Silver, 10). Anner suggests that the weakened role of the state, as outlined in the "globalization thesis", requires strong labour transnationalism (Anner, 609). As capital has become hypermobile, Silver believes that worker activism should build parallel global networks (Silver, 10).

Anner outlines some successful cases of labour transnationalism involving the Brazilian auto-industry. When auto-workers for the Mercedes-Benz plant in the ABC region were "asked to do overtime to compensate for production losses at a Mercedes-Benz plant in South Africa, workers immediately refused" (Anner, 621). In 1999 the Canadian Autoworkers Union (CAW), known for its commitment to transnationalism, launched the "Ford Exchange" between unions in

Canada, Brazil and South Africa (623). These unions toured production facilities and communities in all three countries, exchanging information regarding their experiences with restructuring techniques (623). In 2001 amid a massive strike to protest layoffs, VW workers from Brazil went directly to the company headquarters in Germany and received support from the local union in negotiating with the MNC (624). Even domestically, Santana has found that solidaristic sub-national alliances between the ABC region and the new greenfield sites has radicalized the new workforces, helping them bargain with MNC's for better wages (Santana, 100). Of course, transnational labour alliances will encounter moments where interests conflict (Anner, 628). However, I agree with Silver and Anner that transnational labor networks offer a viable solution to overcoming the massive problems facing labour movements today. Just as different industrial sectors united in the 1957 "Strike of the 400,000", and civilians joined the 1978 ABC Paulista strike, transnational labour movements could impede capitalist production and swing the pendulum toward the de-commodification of labour. Transnational labour movements *within* industries and *between* industries, especially between workforces which are being made and unmade, will wield significant bargaining power.

The history of the Brazilian auto industry, full of contradictions, articulates how capitalism is always in crisis. Beginning in the 1920's, automotive industries from North America and Europe came to Brazil to exploit inequalities based on gender, race, and class. Brazilian modernist elites welcomed the arrival of foreign auto-companies who would "civilize" the mixed-race people of the interior. By introducing the Fordist mode of production and creating a new workforce in Brazil, foreign auto-companies created the conditions for Marxist and Polanyian labour-capital contradictions. Foreign auto-companies established and expanded an empowered workforce that would come to demand higher pay and better rights inside and outside of factory walls. Mid-

century state development programs were expected to deliver progress and modernity by increasing automobility and created new social problems. The military dictatorship, attempting to solve economic instability through suppressing worker wages and rights, unintentionally strengthened working class movements in Brazil. Finally, the restructuring techniques, consolidation of financial power, weakened states, and hypermobility of capital which define the current moment, will inevitably confront the same capitalist contradictions. I have evidenced how the four fixes; “spatial”, “product”, “technological/organizational”, and “financial”, were all attempted by foreign auto-companies in Brazil, and merely rescheduled crisis. I believe that labour transnationalism is one possible avenue for overcoming the current crisis of legitimacy in Brazil and beyond.

Bibliography

- Anner, Mark. "Industrial Structure, the State, and Ideology: Shaping Labor Transnationalism in the Brazilian Auto Industry." *Social Science History*, vol. 27, no. 4, Cambridge University Press, 2003, pp. 603–34.
- Esch, Elizabeth. *The Color Line and the Assembly Line: Managing Race in the Ford Empire*. 1st ed. vol. 50. University of California Press, 2018, pp. 119-146.
- Fontes, Paulo, and Francisco Barbosa de Macedo. "Strikes and Pickets in Brazil: Working-Class Mobilization in the 'Old' and 'New' Unionism, the Strikes of 1957 and 1980." *International Labor and Working-Class History*, no. 83, International Labor and Working-Class, Inc./Cambridge University Press, 2013, pp. 86–111.
- Humphrey, John. "Auto Workers and the Working Class in Brazil." *Latin American Perspectives*, vol. 6, no. 4, Sage Publications, Inc., 1979, pp. 71–89.
- Jürgens, Ulrich and Martin Krzywdzinski. *The New Worlds of Work: Varieties of Work in Car Factories in the BRIC Countries*. 1st edition. Oxford University Press, 2016.
- Santana, Marco Aurelio. "New Industrial Areas, Old Workers' Solidarities: The Browning of the Auto Industry Multinationals' Green Field Sites in Brazil." *Work, Organisation, Labour & Globalisation*, vol. 2, no. 1, Pluto Journals, 2008, pp. 95–103.
- Silver, Beverly J. *Forces of Labor: Workers' Movements and Globalization Since 1870*. Cambridge University Press, 2003.
- Wolfe, Joel. *Autos and Progress: The Brazilian Search for Modernity*. Oxford University Press, 2010.