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“TO SACRIFICE THE VITAL RHYTHMS OF THEIR BEING”: IMPAIRMENT, RESISTANCE,
AND INDUSTRIAL CRISIS IN SÃO JERÔNIMO, RIO GRANDE DO SUL, 1944-1964

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"TO SACRIFICE THE VITAL RHYTHMS OF THEIR BEING": IMPAIRMENT, RESISTANCE,
AND INDUSTRIAL CRISIS IN SÃO JERÔNIMO, RIO GRANDE DO SUL, 1944-1964

A THESIS APPROVED FOR THE
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Table of Contents

INTRODUCTION	1
COAL, THE UNION, AND COMPANY POWER IN RIO GRANDE DO SUL	9
LABORATORIES OVER LABORERS	13
TRIAL BY STRIKE: IMPAIRMENT AND THE STRIKES OF 1945 AND 1946	21
ADDING INSULT TO INDEMNITIES: BODILY HARM AND VOLATILITY	31
CONCLUSION	38
BIBLIOGRAPHY	41

Abstract: This thesis mainly examines how Brazilian coalminers dealt with the consequences and opportunities presented them through Retirement and Pensions Institutes in a period of national and global tumult from 1942 to 1947. An Allied State of War during the Estado Novo dictatorship forced workers to produce more as supervisors questioned their aptitude for work. Physically impaired, epileptic, chronically-, and mentally-ill miners suddenly found themselves unemployed and fighting for welfare as peers fought fascism through industry. With the advent of democracy, the Brazilian Communist Party entered a brief two-year period of legality in which it supported wildcat strikes throughout Brazil. The coalminers of Rio Grande do Sul struck for thirty-five days in 1946, cutting electricity to the capital city and halting commercial transit region-wide. They called for raises, better working conditions, and improvements to medical services. Impaired workers played a key role in this struggle. Dozens of impaired workers pooled pension monies to sustain the strike, while others used their position outside the full control of the company as an advantage. Impaired retirees hosted meetings at shops bought with indemnities, intimidated work captains that no longer commanded them, and collected alms for the cause. Workers won a pay raise in 1947 and eventually entirely new leadership and regulations for the Pension Office in 1948. Insalubrity continued to plague workers, but the justice system finally forced the company to pay its mounting costs. The financial burden of industrial indifference to workers' pains grew so large that by June 1964 a newly-installed military dictatorship forced executives to pay pension debts, resulting in the company's bankruptcy. Workers won, in part, the bodily struggle that began two decades earlier.

Keywords: Labor and Impairment/Disability, Public Health, Estado Novo, Second Brazilian Republic, coal strike, Rio Grande do Sul, Brazil

Introduction

Over the past three years, two disasters have threatened Brazilian workers' well-being and strained industrial relations: one material, the other legal. The first disaster, a wave of toxic sludge from an iron mine, barreled down the Doce River near Mariana, Brazil on November 5th, 2015. The Vale Company, an international mining corporation, continues to provide temporary relief, but toxins still poison eco-systems and people's homes. Vale is unlikely to face significant criminal prosecution.¹ Recent labor law reforms, passed by the Brazilian Congress in November 2017, are a disaster of a different kind. A conservative congress significantly weakened the Labor Law Consolidation (CLT) first promulgated by the Estado Novo dictator, Getúlio Vargas. This framework has regulated all aspects of work from its decree in 1943: workplace safety, union rights, hiring, firing, collective bargaining, and employer healthcare obligations, etc. Now, companies can sub-contract services essential to their business and legally provide weaker safety measures. When a worker suffers an accident, she must go through her contracting agency. Cases will inevitably drag on.² Brazilian workers have fought for the last 75 years for rights that are now under threat.

My study examines one of the initial struggles to define healthcare and workplace safety rights³ in the context of a coal mine in southern Brazil, where a 1944 court case dealing with "insalubrity," in this case, a legal designation of a space as exhibiting high industrial risk

¹ Georgetown University, "Brazil's Rio Doce Disaster: "What Were the Consequences?," *n.d* by Matthew Johnson, Douglas McRae, <https://blogs.commonsgorgetown.edu/rio-doce-environment-blog/what-were-the-consequences-of-the-disaster/>

² Ruy Gomes Braga Neto. "Sociólogo Ruy Braga fala sobre a reforma trabalhista," interviewed by Heloísa Mendça, Renato Franco, Guilherme Guimarães Feliciano, Frederico Melo, and Paulo Cesar Machado Feitosa, *Voz Ativa, Rede Minas*, May 7th, 2017; Afonso Benites, "STF autoriza terceirização irrestrita e sela destino de milhares de processos trabalhistas," *El País Brasil*, August 30th, 2018.

<https://www.google.com/search?q=Soci%C3%B3logo+Ruy+Braga+fala+sobre+a+reforma+trabalhista&oq=Soci%C3%B3logo+Ruy+Braga+fala+sobre+a+reforma+trabalhista&aqs=chrome..69i57j69i65.2513j0j4&sourceid=chrome&ie=UTF-8>

³ See Decreto Lei N° 5.452, May 1st, 1943, Art. 126, 475-476, 706, for examples of the CLT's jurisdiction and power in the pensions system and articles 157-191 for jurisdiction and power over workplace safety. While these areas were also regulated by civil legislation, the CLT provided more mechanisms for enforcement and recourse.

obligating special rights and compensation to workers, had long-lasting consequences for Brazilian workers and employers alike. I argue that coal miners in São Jerônimo, Rio Grande do Sul, fought to make the laws enshrined in the CLT tangible by using the wounds inscribed on and embedded in their bodies. Through labor activism, bodies became the coin of the realm in struggles between workers and the Administrative Consortium of Mining Companies (CADEM) management from 1944 to 1964. Following World War II and the coup against Getúlio Vargas in 1945, Brazilian technical inspectors denied the insalubrity of the coal mine using clinical methods that ignored the dynamism of the body at work and the natural forces within the mine. Rather than use science to improve working conditions, technocrats used expertise to sanction inaction. Industrial hygienists institutionalized a supposedly scientifically-justified rationale for halting workplace reform and invalidated workers' knowledge in the process. Technocracy was barrier and not a bridge to reform before the Cold War.

Meanwhile, legions of impaired workers received paltry pensions, pushing them to the margins of their communities while draining government and company coffers alike. Miners in the state where Getúlio Vargas built his political career challenged the legitimacy of labor courts and opted to strike in 1945 and 1946 once the failure of the courts became clear. Many "invalid" workers sacrificed what little money they had to paralyze production. Some impaired miners used their distance from the company to provide support that able-bodied workers could not. Workers won reforms in the Pensions Office, but the financial weight of so many bodies only grew. The military regime eventually forced CADEM to pay large debts owed to workers right after the 1964 coup. Similar financial crises in Pensions Offices throughout the state and among São Paulo industrialists suggest similar dynamics likely contributed to political crisis that fueled the coup.

My primary concern in this thesis is the intersection of disability⁴ and labor history. Rather than simply a functional limit on the body, Impairment⁵ functioned as a strategic, if precarious, asset that workers leveraged in a highly dangerous trade. Impairment was a central feature of capitalist development and a structural flaw that created openings for workers' resistance.

Disability history generally has moved beyond medical and rights histories. Apart from Pamela Block and Fátima Cavalcante's collaborative scholarship, however, disability history is still in its infancy in Brazil.⁶ Recent studies from the U.S. and U.K. demonstrate just how extensively disabled people participated in the worlds of work across many contexts and time periods. Various authors show how the idea that a disabled person could not work developed as capitalism evolved in the Global South and North. In these works, disabled individuals appear as products of industry.⁷ Impaired workers are depicted as simply adapting and resisting in daily

⁴ For the purposes of this introduction, I use the term disability to denote a loose system of social, political, and economic challenges individuals face due to a long-term or permanent bodily difference and/or medical diagnosis. Disability as a culturally, historically, and politically significant term was not in common usage until after the period of this study (see references in footnote 6) and none of the workers in this article refer to themselves or are referred to with that term. As such, I use the term only in a theoretical sense to describe the not-strictly-medical difficulties faced by miners who acquired long-term or permanent injuries and illnesses. Much like systematic discrimination based on race, one need not consider one's self disabled to experience the effects of discrimination based on the non-normative condition or functioning of one's body.

⁵ Impairment refers to a bodily injury and/or condition that causes a permanent change in how a given individual interacts with the physical and social world. This change may vary and shift and may or may not be accompanied by physical or emotional pain. The loss of a limb, or a traumatic brain injury would be a serious impairment and those individuals' physical capabilities will be greatly affected. Impairments may or may not be accompanied by a diagnosis or medical care. Impairment also includes mental illnesses. The reader should keep in mind that not every permanent injury is always an impairment. Take for example, Brazil's ex-president, Luiz Ignácio "Lula" da Silva, who lost his pinky finger on his left hand due to a metallurgy accident. While his loss was a body-altering injury, it does not generally affect the use of one's hand. Impairments are the bodily conditions upon which the social, political, and economic oppressions of disability are built. I developed my sense of the definition of impairment and its distinction from disability through my readings with Dr. Aparna Nair and not from a distinct set of theoretical texts.

⁶ Pamela Block and Fátima Gonçalves Calvacante, "Historical Perspectives on Autism in Brazil, Professional Treatment, Family Advocacy and Autistic Pride, 1943-2010," in *Disability History* (eds.) Burch, Susan and Michael Rembis (Urbana: University of Illinois Press, 2014,) 77-97; see other works within this volume for a partial overview of the field's present breadth. Otto Marques da Silva, *A epopéia ignorada: a pessoa deficiente no mundo de ontem e hoje*. São Paulo: CEDAS, 1987; Lília Ferreira Lobo, *Os infames da história: pobres, escravos e deficientes no Brasil*. Rio de Janeiro: FAPERJ, 2009; Ana Maria 'Lia' Morales Crespo, "Da invisibilidade à construção da própria: Os obstáculos, as estratégias e as conquistas do movimento social das pessoas com deficiência através de seus líderes" (PhD Diss. in History, Universidade de São Paulo, 2009); São Paulo (State) Secretaria dos Direitos da Pessoa com Deficiência; Memorial da Inclusão, *30 anos do AIPD: Ano Internacional das Pessoas Deficientes, 1981-2011*, (São Paulo: Imprensa Oficial do Estado de São Paulo, 2011).

⁷ Julie Livingston, "Male Migration and the Pluralization of Medicine," in *Debility and the Moral Imagination in Botswana* (Bloomington: University of Indiana Press, 2005), 142-195; Rose, *No Right to Be Idle*, 1-6, 15, 46-47, 193; David M. Turner and Daniel Blackie, *Disability and the Industrial Revolution* (Manchester: Manchester University Press, 2018), 4-6, 15, 45, 175-183; Matthew Kohrman, *Bodies of Difference: Experiences of Disability and Institutional Advocacy in the Making of Modern China*

life. Scholars of disability and labor, much like Marx,⁸ tend to see disabled workers as bystanders in collective struggle. They sometimes appear in histories of labor as strike breakers or totems of suffering, but rarely, if ever, as protagonists in organized labor.⁹ But, that is exactly what they were in the labor struggles I describe in this thesis.

The history below highlights the variability of workers' bodies and impairments as tools of resistance for laborers within a specifically Brazilian context. The distinctive history of the Brazilian labor tribunals and the layers of conflict in São Jerônimo facilitate a narrative reading that challenges the eurocentrism latent in most labor history.¹⁰ Angela de Castro Gomes and Fernando Teixeira da Silva argue that the labor courts grew from the evolution and fruits of organized labor during Brazil's First Republic, not from imitations of European fascism.¹¹ Historians from across the globe have described, in increasing detail, the multiple levers of power used most by elites and workers in class conflict.¹² Calls for intersectionality, to include women, ethnic and racial minorities, LGBTQ people, and Indigenous peoples as meaningful participants in organized labor histories have revealed intricate divisions and bonds among the working classes.¹³ Disabled workers constitute yet "another 'Other'" in need of further

(Berkeley: University of California Press, 2005). There are subtle nods within Latin American labor history, for example: Myrna Santiago, "Work, Home, and Natural Environments: Health and Safety in the Mexican Oil Industry, 1900-1938," in *Dangerous Trade: Histories of Industrial Hazard Across a Globalizing World* (eds.) Christopher C. Sellers and Joseph Melling, (Philadelphia: Temple University Press, 2011), 39-42.

⁸ Staffan Bengtsson, "Out of the frame: disability and the body in the writings of Karl Marx" *Scandinavian Journal of Disability Research* 19, n. 2, (2017): 151-160. Unfortunately, Bengtsson only examines three volumes of *Capital*, which focus predominately on describing the vicissitudes and inter-workings of capitalism as a system. It is very possible that analysis of Marx's earlier, more activist works may yield a different understanding.

⁹ See for example, Turner and Blackie, *Disability and the Industrial Revolution*, 175-183.

¹⁰ Marcel Van der Linden "História do trabalho: o novo, o velho e o global" *Revista Mundos do Trabalho* 1 n. 1 (janeiro-junho de 2009): 11-25.

¹¹ Angela M. de Castro Gomes and Fernando Teixeira da Silva "Labor Courts in Brazil: Their Origins, Challenges, and Expansion," in *Labor Justice across the Americas* (eds.) Leon Fink and Juan Manuel Palácio. (Chicago: University of Illinois Press, 2017), 212-217, 220.

¹² Gunther Peck, *Reinventing Free Labor: Padrones and Immigrant Workers in the North American West, 1885-1930* (Oxford: Cambridge University Press, 2000; Antonio Luigi Negro, *Linhas de montagem: o industrialismo nacional* (São Paulo: Editora Bom Tempo, 2004).

¹³ John D. French and Daniel James, eds. *The Gendered Worlds of Latin American Women Workers: From Household and Factory to the Union Hall and Ballot Box*. (Durham: Duke University Press, 1997); Monica Perales, *Smeltertown: Making and Remembering a Southwest Border Community* (Chapel Hill: University of North Carolina Press, 2010; Pablo Ben and Santiago Joaquín Insuasti. "Dictatorial Rule and Sexual Politics in Argentina: The Case of the Frente de Liberación Homosexual, 1967-

attention.¹⁴ My study adds disability as a meaningful lens in analyses of labor in the Global South.

The case of São Jerônimo allows me to examine workers' early efforts to realize the labor rights inside the CLT and how the uneasy understanding it held together among workers, elites and government officials had physical fallout. The historiography broadly recognizes that the rights encoded within the CLT only helped workers reach their potential when they held employers and officials accountable. However, the process many authors describe took place gradually, over many years of learning and testing limits within and outside the labor justice system.¹⁵

The miners of São Jerônimo took hold of their rights, in the courtroom and in direct conflict with the company, soon after Vargas decreed the CLT. A proxy for one of the first sector-wide suits in Brazil using the CLT, victory in the failed case would have effectively regulated the entire industry. Historian Clarice Gontarski Speranza explains how miners across Brazil likely have brought similar cases to court and gained pay raises, medical care, and workplace protections, too.¹⁶ Additionally, the power of industrialists' discourse, particularly around workplace norms and safety is on full display in the insalubrity case. I build on Barbara Weinstein's analysis of the "social peace" brokered in Brazilian industry and showcase concrete consequences of industrial safety discourse for workers' bodily integrity and the company's

1976," *Hispanic American Historical Review* 97 n. 2, (2017): 297-325; Tracy B. Voyles, *Wastelanding: Legacies of Uranium Mining in Navajo Country* (Minneapolis: University of Minnesota Press, 2015).

¹⁴ Catherine J. Kudlick, "Disability History: Why We Need Another "Other," *The American Historical Review*, 108, iss. 3, n. 1 (June 2003): 763–793. This is an ironic gap considering the ubiquity of physical strain and work accidents. Studies of labor by disability historians do exist, but labor historians have yet to value disability among other key differences.

¹⁵ John D. French, *Drowning in Laws: Labor Law and Brazilian Political Culture*. (Durham: Duke University Press, 2004); Angela M. de Castro Gomes, *A invenção do Trabalhismo*. 2. ed. (Rio de Janeiro: Relume-Dumará, 1994); Brodwyn M. Fischer, *A Poverty of Rights: Citizenship and Inequality in Twentieth-Century Rio de Janeiro* (Stanford: Stanford University Press, 2008), Part 2; Oliver J. Dinius, *Brazil's Steel City: Developmentalism, Strategic Power, and Industrial Relations in Volta Redonda, 1941-1964* (Stanford University Press, 2010); Fernando Teixeira da Silva, *Trabalhadores no Tribunal: Conflitos e Justiça do Trabalho em São Paulo no Contexto do Golpe de 1964* (São Paulo: Editora Almeida, 2017).

¹⁶ Clarice Gontarski Speranza, *Cavando direitos: as leis trabalhistas e os conflitos entre os mineiros e seus patrões no Rio Grande do Sul (1940-1954)* (São Leopoldo and Porto Alegre: Oikos and ANPUHRs, 2014), 34-37, 142-149, 277, 281-283;

financial ledgers.¹⁷

In São Jerônimo, impaired workers used the very differences ostracizing them, the medical issues in need of remedy to halt production and expand healthcare services for fellow workers. Social histories of medicine often emphasize non-normative bodies within discussions of healthcare. Historians of medicine have progressed in pushing past the typifying gaze of doctors and nurses. The medical records that exist are overwhelmingly focused on “fixing” disabled or impaired bodies, and the historians who have used those records have generally followed their lead, ignoring the lived experience of patients in order to assess the motives, successes, and failures of medical practitioners.¹⁸ Other scholars have challenged this model and described the varied choices and actions of practitioners and patients in hospitals and communities. Impaired, injured, and ill workers¹⁹ then move beyond mere victims to become protagonists in redefining bureaucracies of the body.²⁰

When strikes centered around frustrations with healthcare and welfare bureaucracies, organized labor held real leverage over the company. The resources meant to placate them and the sympathy of the government and public shifted the power dynamic. Newer histories of

¹⁷ Barbara Weinstein, *For Social Peace in Brazil: Industrialists and the Remaking of the Working-class in São Paulo, 1920-1964* (Chapel Hill: University of North Carolina Press, 1996). Weinstein does discuss work accidents, see pages 229, 234, 266-276, but more in the sense of what workers ought to do or the bureaucratic structures for prevention, Internal Commissions on Accident Prevention (CIPA). I, on the other hand, focus on the consequences of un-prevented accident and illness and focus less on the politics of discourse around safety and rationalization.

¹⁸ Gilberto Hochman, *The Sanitation of Brazil: Nation, State, and Public Health, 1889-1930*, trans. Diane Groszklaus Whitty (Urbana: University of Illinois Press, 2017); While a classic in the subfield of the history of Brazilian Medicine, Hochman's narrow focus on elite efforts to cure a disease impedes opportunities for meaningful analysis of patients, much less patients deemed different.

¹⁹ I use the conjunction of these three terms because individuals go in and outside of the category of functionally impaired. The fluidity of this coalition of impaired workers highlights how many minors may lean on categories of impairment for labor struggle.

²⁰ Sidney Chalhouh, *Cidade febril: Cortiços e epidemias na Corte Imperial* (São Paulo: Editora Companhia das Letras, 1997); Alexandra Mina Stern, “Buildings, Boundaries, and Blood: Medicalization and Nation-Building on the U.S.-Mexico Border, 1910-1930,” *The Hispanic American Historical Review*, 79, n. 1 (February 1999): 41-81; Okezi T. Otavo, *Progressive Mothers, Better Babies: Race, Public Health, and the State in Brazil, 1850-1945* (Austin: University of Texas Press, 2016); Daniel A. Rodriguez, “‘To Fight These Powerful Trusts and Free the Medical Profession’: Medicine, Class Formation, and Revolution in Cuba, 1925-1935,” *Hispanic American Historical Review* 95, n. 4, (2015): 595-629; Jennifer L. Lambe *Madhouse: Psychiatry and Politics in Cuban History*, (Chapel Hill: University of North Carolina Press, 2017).

workers' compensation across the globe similarly emphasize the multitude of possibilities presented to bureaucrats and workers, impaired or not. Historians of welfare and work accidents in the U.S. tend to lament missed opportunities to move to a better system, and compare the U.S. model unfavorably to those of European nations.²¹ Brazilian scholars tend to draw on Marx to depict the workers' body as destroyed or awaiting destruction.²² While both visions have elements of truth, neither is particularly useful in measuring the impacts of these systems on larger political processes. Historians must interrogate how workers utilized insufficient, yet necessary, opportunities and resources for personal gain, and, at times, collective advantage. In the context of ambitious production goals after World War II and the 1964 coup, labor emphasized the financial cost of these accidents for public sympathy and sometimes used these systems in labor conflicts. Management faltered under the weight of so many corpses and impairments. Pain—for real, but fleeting moments—mattered more than profit in the coal mining towns.

This thesis also analyzes the bureaucracy of industrial hygiene. I explore how technocrats tilted the scale further against workers by distorting evidence concerning the bodily dangers of their physical labor amidst a complex built environment. Christopher Sellers asserts that “occupational disease [is] manufactured...once in worker’s bodies and again by industrial hygienist’s professional culture.”²³ US and Latin American historiographies have borne out this

²¹ John Fabian Witt, *The Accidental Republic: Crippled Workingmen, Destitute Widows, and the Remaking of American Law* (Cambridge: Harvard University Press, 2006); Sarah F Rose, “The Greatest Handicap Suffered by Cripple Workers: The Perverse Impact of Workmens’ Compensation,” in *No Right to Be Idle: The Invention of Disability, 1840s–1930s* (Chapel Hill: University of North Carolina Press, 2017), 137-171.

²² Vicente P Faleiros, *O trabalho da política: saúde e segurança dos trabalhadores*, (São Paulo: Editora Cortez, 1992); Evangelia Arivanis. “Os processos de acidente de trabalho na capital do Rio Grande do Sul no início da Era Vargas: embates entre a Justiça, o patronato e o trabalhador,” *Revista Latino-Americana de História* 1 n. 3 (March 2012): 300-310; Ana Beatriz Ribeiro Barros Silva, “O desgaste e a recuperação dos corpos para o capital: acidentes de trabalho, prevencionismo e reabilitação profissional durante a ditadura militar brasileira (1964-1985) (PhD. Diss. in History, Universidade Federal de Pernambuco, 2016).

²³ Christopher C. Sellers, *Hazards of the Job: From Industrial Disease to Environmental Health Science* (Chapel Hill: University of North Carolina Press, 1999), 8.

truth over two decades and they anchor my study.²⁴ My analysis focuses on how the state obscured the impact of environmental factors in the mines. CADEM could not account for a complex built environment, the “...physically and socially constructed spaces that seek to utilize, leverage, or abrogate the effects of natural forces in favor of human needs.”²⁵ Technocrats denied the idea that mines, as excavated environments, held forces outside their control.

The state’s technocrats, denied insalubrity using the very expertise in industrial hygiene theoretically intended to produce workplace reform. Social scientists and historians have illuminated many aspects of technocrats across the Global South, most notably their need to construct expertise through association with the Global North and a “will to improve.”²⁶ Technocrats also were not a monolith globally and Brazilian technocrats proved no different.²⁷ Many inspectors highlighted the complex scientific nature of insalubrity, brandishing their expertise with relative impartiality—some even defied superiors more interested in political calm than industrial reform. Yet, most scholarship on the history of technocracy focuses on the Cold War or its aftermath.²⁸ Without the debates and prerogatives of the struggle between capitalism and communism as pathways for Latin American economic development, Rio Grande do Sul mine inspectors had no imperative to act and enforced inaction to maintain the status quo between 1944 and 1947.

²⁴ Monica Perales, *Smeltertown*; Myrna Santiago, *The Ecology of Oil: Environment, Labor, and the Mexican Revolution, 1900-1938* (Cambridge University Press, 2006); Thomas D. Rogers, *The Deepest Wounds. A Labor and Environmental History of Sugar in Northeast Brazil* (Chapel Hill: University of North Carolina Press, 2010), 168, 185-188, 203-204.

²⁵ The definition of built environment quoted above came from the Brazilian Studies Association panel, “Modernity and The Built Environment in Twentieth-Century Brazil” (July 27th, 2018, Rio de Janeiro) description I organized with Douglas McRae with feedback from Dr. Rogers and PhD Candidate, Matt Corpolongo.

²⁶ Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley: University of California Press, 2002); Tania Murray Li, *The Will to Improve: Governmentality, Development, and the Practice of Politics* (Durham: Duke University Press, 2007).

²⁷ Wendy Wolford, “The Casa and the Causa: Institutional Histories and Cultural Politics in Brazilian Land Reform,” *Latin American Research Review*, v. 51, n. 4, (2016): 24-42; Eve E. Buckley, *Technocrats and the Politics of Drought and Development in Twentieth-Century Brazil* (Chapel Hill: University of North Carolina Press, 2017).

²⁸ While several sections of Buckley’s book take place before the Cold War, these chapters illustrate more gradual increases in prestige and practices of technocrats as opposed to an ability to affect policy prerogatives or brandish institutional power in respect to technical matters.

The bodily struggle of the coal miners of São Jerônimo spanned two decades. Their fight began with the technocrats of Rio Grande do Sul. The Union tested the strength of miners' legal claims in court in 1944 and by 1947 left sorely disappointed. Two strikes in 1945 and 1946 fueled by the spectacle of the court proceedings spurred high payouts and better services for the pensions bureaucracies in São Jerônimo and marked the beginnings of CADEM's gradual slide to bankruptcy. CADEM executives found themselves increasingly unable and unwilling to manage their financial obligations to workers' health and by June 1964 miners threatened to strike. Labor militants found an unusual ally in the recently installed military dictatorship who forced CADEM to pay their debts, likely fearing unrest and perceiving CADEM as antithetical to their new vision of development in Brazil. The history recounted below highlights the power of the physical body and its hardships not just as essential for labor, but as a focal point for labor resistance and a major contributor to economic and political crises.

Coal, the Union, and Company Power in Rio Grande do Sul

Rio Grande do Sul's coal industry has an illustrious history that contributed to the two decades of labor struggle discussed below. The state contains nearly ninety percent of all Brazil's coal. During the Brazilian monarchy (1822-1889), Princess Isabel first ceded mining rights to entrepreneurs to attract investment and spur industry. Roberto Cardoso, a prominent Rio businessman formed CADEM as an amalgamation of these initial enterprises in 1936. The company controlled Companhia Estrado de Ferro e Minas de São Jerônimo, (CEFMSJ) with mines and a railway in Arroio dos Ratos and Companhia Carbonífera Minas de Butiá (CCMB) with mines in Butiá, located in the then mega-municipality of São Jerônimo. Elites based in the city of Rio de Janeiro filled CADEM's board of trustees due to coals' centrality to industrial energy production. While corporate power in the mine shifted from European to Brazilian hands,

most labor in the shafts mirrored the state's ethnic make-up: first- and second-generation immigrants from Germany, Italy, Spain, and Eastern Europe. These same immigrants filled the coal miners' union.²⁹

The Ministry of Labor officially recognized the Coal Extraction Workers' Union of São Jerônimo (SITEC, hereafter dubbed the Union) in 1936, after refusing to sanction them for three years. The details of this delay remain uncertain. However, many of the original union members professed belief in socialist and anarchist ideals.³⁰ Revolutionary politics likely influenced the Ministry's reticence. Indeed, on their first May Day in 1933, a pamphlet written by Union leadership informed workers of a march they planned in homage "to the memory of that handful of brave men who, with their blood, freed us from the oppressor's yoke," referencing those killed in Chicago's Haymarket Massacre of 1886.³¹ Four months later, 400 miners participated in the Union's first official strike and won higher wages.³² Such shows of overt resistance remained rare, but CADEM management could never fully control dissent.

By Brazil's entrance into World War II alongside the Allies, management and the Union both agreed miners needed to "work assiduously." "Coal is what Brazil wants," CADEM president Roberto Cardoso declared, "and She will not lack it." Union leadership reiterated that freedom was at stake, reminding workers their loyalty was the price of the CLT, "...the envy of

²⁹Alexsandro Witkowski and Tassiane Melo de Freitas. "A fundação do Sindicato dos Mineiros de Butiá," *Cadernos FAPA*— n. 2 v. 2(September 2005): 92-96, 100. For more on the origins of the companies associated with CADEM and CADEM's rise through World War II, see Cristina Ennes da Silva, "Nas profundezas da terra: um estudo sobre a região carbonífera do Rio Grande do Sul (1883/1945)," (PhD diss. in History, Pontifical Catholic University of Rio Grande do Sul, 2007).

³⁰ Witkowski & Freitas, "A fundação do...", 96, 98-99; between 1933 and 1936 the Sindicato de Mineiros e Classes Anexas combined with its counterpart in Arroio dos Ratos, but it is clear from the SITEC's attitude toward CADEM after 1936 that members with confrontational Marxist ideologies remained active in SITEC from then on.

³¹ SITEC Board, "Aviso N°16 do Diretoria aos associados do Sindicato de Mineiros e Classes Anexas das Minas de Butiá," April 28th, 1933. 08.01(Catras do sindicato), Box 1 Arquivo Histórico de Mineração do Museu Estadual do Carvão in Arroio dos Ratos, RS, Brazil (AHM-MEC).

³² Jorge Vivar, "Linha de tempo," AHM-MEC; Witowski Freitas, "a fundação do...", 100. The timeline referenced above is posted in the archive in the researcher room.

many nations.”³³

Still, the partnership between the Union and the company did not quell conflict completely. Union leadership sent a list of complaints to Cardoso, asking him to end arbitrary punishments and firings, follow worker laws, and address the insalubrity of the mine. Cardoso responded that production had to increase, “cost what it may,” and quickly explained all the benefits that CADEM provided, including a long list of schools, medical facilities, recreational activities, and social services. Cardoso paid for community services rather than improve safety or defray medical costs. 1943 marked a production high, 1.4 million tons. World War II cut South America off from North American and British coal, sales soared to all-time highs.³⁴

Control of all aspects of life shielded CADEM from the immense human costs of coal. Not only did loyalty determine access to food, social services, and leisure, but opening any court case against CADEM meant losing one’s job, housing, and healthcare. CADEM’s obsession with increased production took a tremendous toll on workers.³⁵ By 1943 Butiá’s accident rates doubled and respiratory ailments accounted for a third of early retirements and deaths from 1942

³³ Roberto Cardoso to the President do SITEC, March 11th, 1943, 08.01, Box 2, AHM-MEC; SITEC Leadership Members, September 1st, 1944, 08.01, Box 2, AHM-MEC. Most administrative documents circulated during World War II included a purple stamp saying, “State of War—work assiduously.” See other documents in Box 2 for examples. I do not mean to say there were not still tensions, just that both entities maintained similar goals for distinct reasons. For more on union organizing and labor militancy in the Porto Alegre metropolitan region, see Alexandre Fortes, *Nós do quarto distrito: a classe trabalhadora porto-alegrense e a era Vargas*, (Rio de Janeiro: Editora Garamond, 2006).

³⁴ Ibid; Márcia Elisa de Oliveira, “Mineiros de São Jerônimo no final do Estado Novo: na encruzilhada entre a Legislação Trabalhista e as leis de Guerra (1943 - 1945),” (TCC in History, Universidade Federal do Rio Grande do Sul, 2009), 41; CADEM Administrative. Office, “Produção bruta de carvão em ambas minas,” 08.01, Box 3, AHM-MEC. This brief contains various months’ production from June 1942 to December 1945.

³⁵ Roberto Cardoso to the President do SITEC, March 11th, 1943, 1-3, 08.01, Box 2, AHM-MEC; Speranza, *cavando direitos*, 70-80, 125-127; Departamento Legal, “Consulta nº 514,” December 11th, 1946. 05.08.04, Box 338, AHM-MEC; CADEM to Departamento Legal “Consulta nº 112,” November 28th, 1946. 05.08.04 (Consultas e Pareceres), Box 338; Sindicato de Mineiros e Classes Anexas do Município de São Jerônimo, “Depoimentos de Wacław Sienko, Luis C. Souza e Fernando Carvalho,” June 24th, 1939. 08.01, Box 1, AHM-MEC. While management requested these consults after the War, given the State of War and all that has been written about CADEM’s paternalism its very unlikely that attitudes had changed.

to 1944.³⁶ About 96% of all retirees eventually left service because of illness or injury.³⁷

Impairment in São Jerônimo however included more than respiratory illness. By 1945, 20 percent of the 434 retirees on file left work because of all manner of physical, mental, and sensory impairments. Pensions Office statistics listed lost limbs, blindness, epilepsy, schizophrenia, and deafness as some examples of workers' impairments.³⁸

Pensions Office in this paper refers to a complex system of sector-specific *Caixas e Institutos de Aposentadorias e Pensões*, or Retirement and Pensions Funds that not only paid monies to retired, impaired, and ill workers, but also provided medical care to miners in their workplaces as well within the company towns. The Pensions Office also examined workers for the purposes of compensating work accidents, but workers had to show a direct and acute work-related cause of their injuries or accidents and then receive appropriate documentation from police and the insurance company. The Miners' Pensions Office controlled workers' housing as well. Workers paid deductions from their salaries, companies paid a percentage of their profits, and the government technically committed to providing a share of import taxes into these funds, but this money rarely reached workers. Insurance companies usually paid out indemnities for accidents and temporary illness. Otherwise, the sector's Fund paid costs. As each bureaucracy pointed expectant workers to the other, welfare became a disorienting shell game.³⁹

³⁶ Survey of *Registros de acidentes do trabalho da CCMB, 1940-1949*. 05.2.07.22. Box 186, AHM-MEC. Administration of Hospital Sarmiento Leite, "Estatísticas de mortalidade, 1942-1944," January 25th to February 2nd, 1945. 05.04.2.2, Box 292, AHM-MEC. For more on the precarity and legal challenges miners faced in São Jerônimo in the 1930s, see Felipe Figueiró Klován, *Sob o fardo do ouro negro: as experiências de exploração e resistência dos mineiros de carvão do Rio Grande do Sul na primeira metade da década de 1930*, (MA thesis in History, Federal University of Rio Grande do Sul, 2009).

³⁷ Pensions Office [Caixa de Aposentadorias e Pensões dos Mineiros], "Relatórios de exercício financeiro da Caixa de Aposentadorias de Mineração de Porto Alegre 1945, 1946, 1947, 1948, 1949," 05.03.01.1 (Cartas-Caixa de Aposentadorias e Pensões), Box 255, AHM-MEC; I divided the amount of money spent on "invalidity" pensions over combined pension spending for this statistic.

³⁸ Medical Division of the Pensions Office to the President of the Pensions Office, April 27th, 1945, 1-2, 05.01.1, Box 131 (Caixa das greves), AHM-MEC. These diagnoses do not necessarily reflect present-day understandings or diagnoses of the medical conditions named, but merely perceptions of the symptoms catalogued by company doctors. See footnote 75 for more on future efforts to better understand these diagnoses better in historical terms.

³⁹ Jamie A. de Araújo Oliveira and Sonia M. Fleury Teixeira, *(Im)previdência social: 60 anos de da previdência no Brasil* (Petropolis, RJ: Editora Vozes) 94, 106; Faleiros, *O trabalho da política*, 83-85, 120; Antônio D'Amore de Melo, "Entre a

CADEM's Fund, created in 1932 was consistently controlled by close friends of Roberto Cardoso. Many São Jerônimo miners were then apparently enrolled in the Instituto of Aposentadoria e Pensões dos Empregados de Transporte e Cargas (IAPTEC) as well, a sector-wide fund for cargo and transport workers. In practice, these miners depended on the largesse and patronage of their employer for services in the mining town and far-off bureaucrats for more substantial payments. Even workers who successfully navigated Pensions bureaucracies received little aid due to low caps on medical services and a penchant for cost-saving among the architects of Vargas' welfare systems. Coal miners found themselves trapped between a dangerous trade and a welfare system designed to placate, but not support, their demands for well-being. Miners latched onto the CLT as the spark for a conflict that spanned decades and left an indelible mark on coal mining and the legacy of workers in São Jerônimo.⁴⁰

Laboratories over Laborers

In March 1944, twelve Brazilian coal miners from São Jerônimo lodged an insalubrity case against CADEM using the CLT. The Union lawyer, A. D. Pinto argued "...existence of silica amongst insalubrious conditions...is public and notorious [fact] and its effects have been incontestably denounced through diverse post-mortem exams of miners." Moreover, he lambasted CADEM executives for "**having not observed at all** the legal strictures obligating raises [due to insalubrity]." He contended this negligence merely "maintained its old mercantile

insegurança estrutural e a ambiguidade da lei: as estratégias de patrões e trabalhadores em relação à lei de Acidentes de Trabalho de 1934 (Porto Alegre, 1935 - 1940)," (TCC in History, Universidade Federal do Rio Grande do Sul, 2013), 8-9, 42-43.

⁴⁰ "Histórico: Período de 1888 a 1933" Secretária de Previdência, Ministério da Economia, last modified 05/01/2013. <http://www.previdencia.gov.br/acesso-a-informacao/institucional/historico/periodo-de-1888-1933/>; Oliveira e Teixeira, *(Im)previdência social*, 64, 69, 74, 82; COPELMI to Humberto Lupinacci, May 19th, 1973, Silvia's Box, AHM-MEC. The exact nature of the overlap between CADEM's fund and IAPTEC remains unclear. The inter-play between private insurance companies, industries, and public insurers is extremely complex and CADEM's records gave no clear indication of how these spheres interact. However, in many court cases IAPTEC and the Fund are mentioned together and I do know that CADEM switches out private insurers for IAPTEC in 1953. In any case, these changes made it more difficult for workers to get benefits. As I explain below, from 1953 on CADEM fights with IAPTEC over responsibility for certain accident costs. The overlap of the Fund and IAPTEC allowed for the government to slowly encroach on CADEM's control over pensions/welfare systems.

technique of exploiting not only the normal energies, but the very health of the workers who construct their prosperity.”⁴¹ In 1947, the head labor tribunal judge, Carlos Alberto Barata Silva, dismissed the case. He called it “badly proposed, badly received, and continuously obstructed by both parties.” He scolded Pinto for “deceiv[ing]... the heroic mining collective.... through hopes...of a right...that does not exist.”⁴²

The laboratory science employed by Dr. Pontes de Corrêa, the court’s expert investigator, distorted the complexity of the built environment and when technocrats did take their bodies into account, considered them static. It is no surprise that the CLT allowed the court to ignore the obvious truths of insalubrity.⁴³ However, the separation of the workers’ body from the risk in a shaft mine deep underground made the court’s decision acceptable. Technocracy obscured insalubrity by over-simplifying the workers’ body and the natural forces around him. The inspectors’ knowledge trumped workers’ experience.

Justifications for the ruling reveal power struggles within and outside the courts. Judge Barata Silva clarified, the proof “must be individual, not collective,” since their earlier industry-wide collective suit had failed. For judicial order to be maintained, “...technical analyses of the workplace [were to be] individualized.” Judge Barata Silva questioned the certainty of an insalubrity declaration. He then pointed out how “...some believe the mines to be insalubrious, others believed their conditions...[are] great. He reminded the public “of [insalubrity’s] most scientific order...only the [Labor Ministry’s] Division of Hygiene and Safety could decide it.”

⁴¹ Processo [case] 14/46, v. 1, 67. The formatting of the second quote reflects A.D.’s formatting in-text.

⁴² Clarice Speranza, *cavando direitos*, 147-148; Proc. 14/46, v. 5, pg. 81. Coleção Acervos 1: Processos Trabalhistas de São Jerônimo/RS (1938/1947). Memorial da Justiça do Trabalho no Rio Grande do Sul (MTRT-4). CD-ROM. All further references to this case will be abbreviated Proc. 14/46.... All reference come from the same CD and page numbers match PDF numbering, not the hard copy. Although the case technically has 5 volumes, the CD only contains 4, but has the entire case. Therefore, I assume PDF file 1 contains volumes 1 and 2, and go by CD numbering, not the physical filing. The bolded and underlined section matches the source’s original formatting.

⁴³ See French, “The CLT in Practice: A Generosity Akin to Fraud” in *Drowning in Laws*, 40-53 for a detailed explanation of many ways that the structure of the courts and related bureaucracies greatly reduced workers’ chances of success in court.

The court could not interfere. “Lamentable” as this was, “more research was required.”⁴⁴ There was apparently too much doubt as to whether the mines could be certified as dangerous.

An observer of the case might conclude a decision on insalubrity was hardly clear cut. The case featured a dizzying number of reports, all of which seemed to contradict one another. Initially, the Labor Ministry’s inspection detailed injustices workers faced, but the report denied insalubrity by the law’s technical definition.⁴⁵ The Ministry’s inspector, Dr. Othelo Rosa, admitted the exploitative nature of the mining industry, how the company “forc[ed] those young, invalid, and old” to “sacrifice the vital rhythm of their being” through “services least compatible with their bodies.”⁴⁶ He went on to point out how perforators blinded workers and careless wiring led to electrocutions and that Arroio dos Ratos had vast medical services while the other mining town, Butiá had only the Pensions Office staff and the insurance company’s doctor. Despite all these issues, Rosa found no humidity, average temperatures, and could not say with certainty whether coal dust caused workers’ respiratory ailments.⁴⁷ Several doctors and technicians who had worked in the mine challenged these findings. They referenced their day-to-day experiences in the shafts and meeting with sick miners, but could provide no empirical evidence of their observations. The court then scheduled for a seemingly impartial investigator to produce a more scientific report.⁴⁸ Bureaucrats quibbled over whether CADEM mines contributed to workers’ sickness and death. Meanwhile, judges held to legal strictures for the burden of proof that left a decision over insalubrity unclear.

However, CADEM knew the risk and health issues to of the mine and how to improve workers’ safety. Brasil Companhia de Seguros Gerais, CADEM’s insurer, advised the company

⁴⁴ Proc. 14/46, v. 5, 65-66, 77-80.

⁴⁵ Proc. 14/46, v. 1, 3-13

⁴⁶ Proc. 14/46, v. 1, 19-20

⁴⁷ Proc. 14/46, v. 1, 17-28

⁴⁸ Proc. 14/46, v.1, 73-75, 80

that workers' claims demonstrated a worrying increase in anthracosis and silicosis⁴⁹ payouts ordered by common law courts. Between 1937 and 1940, the Judge ordered thirteen indemnities. In just the first six months of 1940, seven had already been granted. The insurer stated emphatically that "in virtue of the Judge's attitude, the number of cases [could] only increase, threatening the financial stability of [Brasil Companhia de Seguros Gerais]." They explained Anthracosis took 10-15 years to develop, so many of their workers would soon fall ill.⁵⁰ Only changes in ventilation, equipment, and training could resolve future crises, otherwise the insurer would cut ties with the mine CADEM made no changes and the insurer covered CADEM for another decade.⁵¹

Five years later, an inspector for the Division of Hygiene and Safety, Dr. Claudio Vieira de Pontes Corrêa testified in court over CADEM's mines. He reasoned that "for as careful and technically perfected the [safety measures] used [were], they cannot eliminate insalubrity. Humidity is evident..." and some parts of the mine even "have highly ineffective ventilation."⁵² Dr. Pontes Corrêa gave a very different final assessment of the same mines a year later when he stepped down from the Division to serve as impartial testimony for the Labor Justice in the insalubrity case at the recommendation of CADEM. Now, he found it "impossible" to decide on

⁴⁹ "Pneumonicose, Anthracose, Silicose," 05.03.1.1, Box 281, AHM-MEC; Brasil Companhia de Seguros Gerais to F. Bento e Cia. "Seguro 'CADEM' e casos de 'antracose,'" August 15th, 1940. 05.08.04, Box 338, AHM-MEC; Proc. 14.46, v. 4, 66-94. Anthracosis, in the understanding of CADEM doctors and their insurance companies, was the lodging of coal dust in the lungs which caused miners to cough, experience thoracic pain and shortness of breath. Silicosis was seen as a more intense version of Anthracosis caused by silica dust. The two illnesses were often seen together and sometimes combined pneumonia. These understandings do not reflect present day understandings of either Anthracosis or Silicosis, but the medical figures in the CADEM case all agreed on these symptoms and that mining was their cause. They also agreed that miners *could* contract these illnesses. Debate was over who did or did not, who would and would not contract these illnesses. By 1944, both are codified as miners' diseases, but not necessarily present in São Jerônimo.

⁵⁰ Brasil Companhia de Seguros Gerais to F. Bento e Cia. "Seguro 'CADEM' e casos de 'Antracose,'" August 15th, 1940. 05.08.04, Box 338, AHM-MEC.

⁵¹ Clarice Speranza, *Cavando direitos*, 144-146. The state of the mines and safety precautions by the end of the insalubrity case demonstrate CADEM did not incorporate the changes the insurer suggested.

⁵² Dr. Claudio Vieira de Pontes Corrêa to the Regional Labor Inspector of RS referring to case 15.905/45 [*Delegado Regional de Trabalho do RS* "referente ao proc. 15.905/45"], n.d. 05.08.13, Box 345, AHM-MEC.

insalubrity in the same mines, “the best installed and regulated he knew of.”⁵³ The insurer’s notification and Dr. Pontes Corrêa’s reversal of opinion on the mine conditions demonstrated CADEM knew of illegal dangers present in the shafts and that the risks workers faced met standards for insalubrity.

If all parties involved in the case were aware of the harmful conditions of the mine, one might wonder why the court even ordered further study rather than justify their verdict with quick testimony that painted the mines as safe. First, World War II marked a highpoint in production as well as worker injury and death. As the War came to an end, public outrage surged.⁵⁴ On May 6th, 1945 only a week after the inspector was named, a wildcat strike broke out motivated by mine conditions. A facile verdict held the possibility of more unrest that threatened production.⁵⁵ Second, the Vargas administration promoted technocracy and scientific precision as the key to addressing worker health issues. The government could only “preserve[] the health of the worker-citizen, ‘living cell of the patriotic organism[,]’ if both “working condition and labor activities be properly ordered and physiologically regulated.”⁵⁶ Conflicting testimony did not meet the state’s own metric. Finally, the Labor Justice, previously tied to the executive branch, became part of the Judiciary in 1946 and had to legitimize itself in the wake of the contradictions of a dictatorship that helped overthrow European fascism.⁵⁷ After a constitutional crisis, another study allowed the court to continue privileging production over people while fulfilling its mandate.

⁵³ Proc. 14/46 v. 4, 108-110.

⁵⁴ *n.d.* “O drama dos mineiros,” *Folha da Tarde* [Porto Alegre], January, 28th, 1946, 05.01.1, Box 131, AHM-MEC.

⁵⁵ Proc. 14/46, v1, 105, 107, 130; Proc. 14/46, v 3, 19. I cross-referenced the date of these events with events in the strike discussed below.

⁵⁶ Simone Petraglia Kopf, “O coração do trabalhador: cardiologia e projeto nacional no Estado Novo,” in *Corpo: sujeito objeto*. (eds.) Marta Mega de Andrade, Lise Fernanda Sedrez; William de Souza Martins. (Rio de Janeiro: Editora Ponteio, 2012), 219, 225-226; Speranza *Cavando direitos*, 119-155.

⁵⁷ Gomes and Silva, *Labor Justice Across*, 219-220, 222. The balance of power within Brazilian politics heavily favored economic elites over workers.

The line of questioning CADEM presented to the new technocrat, Dr. Pontes de Corrêa, underscored the preeminence of laboratory findings over labor difficulties. Of eleven questions concerning insalubrity, nine covered scientific measurements: the size, concentration, character of silica, the mixture of compounds, levels of exposure to workers. The final two questions simply asked if “the Mine provides protections to workers” and whether “conditions present prove pernicious to health.” All answers had to be individualized, meaning that the inspector had to isolate the specific conditions that affected these twelve miners from all other conditions in the shaft. Judge Barata da Silva asked the inspector to measure an open-air space in isolation.⁵⁸

Dr. Pontes de Corrêa pointed out that work conditions could not be individualized. He explained “conditions of insalubrity...are a result of common environment[s], materials, and methods[—]each of these suffer the influence [from one another].” In other words, interlinked spaces and variables exerted uncertain and uneven effects on the workplace. He tacitly admitted a flaw in his model. Furthermore, he lamented he could not recreate the conditions of the mine in 1943. He admitted silica did exist and could pose dangers. He even cited other worker’s clinical records from the Pensions Office. Dr. Pontes de Corrêa stated, “the beginning of silicosis would be possible,” but was not necessarily inevitable for all workers. Humidity could also prove harmful; both these components depended on nonexistent medical examinations of the plaintiffs. This lack of specific medical documents and the individualization problem made decisions on insalubrity “impossible.” Finally, he pointed out that CADEM provided masks for protection and suggested a “*rodizio* of tasks,” rotating workers to minimize exposure to silica and humidity.⁵⁹

Pontes de Corrêa’s study tracked with trends in US industrial hygiene to make workplace safety a clinical problem. The industrial science employed in the final study of mining conditions

⁵⁸ Proc. 14/46, v. 3, 4-17. This paragraph and the following one were synthesized from a back-and forth across several pages.

⁵⁹ Ibid.

in Brazil reflected a model used in the U.S. innovators, like Alice Hamilton and Dr. Cecile Drinker, which Dr. Corrêa de Pontes cites almost exclusively, grew frustrated by the limited impact shop floor observations and moral appeals to executives. They needed scientific proof of the ailment that plagued workers. Drinker then developed what he considered to be a more dependable method that sought to measure chemicals in the blood and connect them to disease. In theory, architects of this innovation intended it to be used in conjunction with previous observational methods, but dependence upon corporate sponsors for research and an over-correction away from older models meant that in practice only clinical studies changed workplaces.⁶⁰ Thus, workers faced far less overt exposure to chemicals, but scientists could not capture complex interactions between toxins and work environments, or the intricate ways that worker's multiple tasks varied exposure and illness.

If in the US this model produced limited benefits, in Brazil the court's investigator turned the same logic on its head. Industrial hygienists could now employ thresholds meant to reduce chemicals to 'acceptable' levels to justify current conditions as reasonable. Moreover, the legal requirement for the individualization of conditions turned the inability of laboratory equipment to measure the variability of human behavior into a license to ignore the fluidity of workplace conditions and workers' bodily suffering. Inspectors considered reactions of their patients to chemicals, but not how their work and production processes changed chemical levels. Industrial hygienists placed the meaning of findings outside the worker's experience. The authority technocrats wielded bred mistrust between bureaucrats and workers in Brazil, as in the U.S.⁶¹ Engineers easily stretched implications of findings through their interpretation and the public

⁶⁰ Sellers, *Hazards of the Job*, 161-167, 170-171, 180; See Proc. 14.46, v. 3, 7 and Proc. 14.46, v. 4, 66-94 for Pontes de Correia's references.

⁶¹ Sellers, *Hazards of the Job*, 156, 231-232, 234, 238; Weinstein, *For Social Peace*, 197-199, 269-270, 296, 332-337. While Weinstein does point out that their interactions were not always negative, she also discusses moments of discord and the ways technocrats looked down upon workers.

simply heard no in response to worker grievances.

The CLT, in theory, provided workers parity with industrialists in labor disputes. If that were true in this case, the detailed narratives of a complex workplace would have prompted more study. The court provided an opportunity for testimony, but workers held credentials little valued in court. Miners portrayed a mine in motion, one where chemicals neatly measured in laboratories fluctuated and workers' bodies endured constant pressures that progressively chipped away at their health.

All the workers but one testified to the high concentration of dust and humidity in the air. Several claimed that they “never saw masks, or knew they were available.” Others pointed out that “Cart-pushers [*tocadores de carro*] could not even use masks.” They needed their heads and arms to push, otherwise, they could not move tons of coal at a time. The masks also obstructed their view. One miner put it in economic terms. He earned Cr\$17 a day minus rent and the mask cost Cr\$ 95 plus replacement parts. He simply could not afford a mask. Inspectors walking through empty mines with engineers or union leadership could not have observed Pushers' complaint that those who mined the coal simultaneously perforated the rock-wall as they moved through the shaft with heavy carts, increasing silica concentrations and causing accidents.

Finally, one plaintiff and former ventilation inspector [*fiscal de ventilação*] even claimed there was no “machine to recycle the air” where he worked. CADEM engineers and Gallery Captains denied all worker claims and provided a short list of miners who had bought masks.⁶² The tribunal ordered no further study. Judge Barata Silva asked the Division of Hygiene and Safety to decide on insalubrity. They did not respond. Judge Barata Silva then declared the case

⁶² Proc. 14/46, v. 3, 90-98; Proc. 14/46. v. 4, 103-114. In all 12 workers testified for SITEC, while a chief engineer/site manager, work captain, and two miners testified in defense of CADEM. This condensed overview of paraphrases and quotes came from multiple testimony across several volumes. As such, I have cited the reference at the end of the paragraph, as opposed to by the sentence here.

closed. The Union offered an unsuccessful appeal; an insalubrity declaration remained elusive.⁶³

The stakes of the insalubrity case probably caused the Ministry's silence. A Union victory held the possibility of financially undermining CADEM and Brazilian mining more generally. The industrial safety science of the day favored industrialists by ignoring the complexity of physical work in a built environment. Even Dr. Pontes' best attempt reduced the ever-changing conditions of the built environment into figures, far removed from the dank and toxic shafts that threatened the lives and livelihoods of miners. A notorious mine seemed to transform into a national masterpiece in one report. Inspector Pontes de Corrêa allowed a lack of absolute certainty to defer insalubrity for over a decade. The government did not declare mines in São Jerônimo insalubrious until 1960.⁶⁴

Trial by Strike: Impairment and the Strikes of 1945 and 1946

Working-class concerns over the risks and consequences of work to miners' bodies connected the insalubrity case of 1944 to the strikes of 1945 and 1946. In his remarks denying the last union appeal, Judge Barata Silva explained "all the plaintiffs earned above the legal minimum for insalubrity..." in June 1947. Therefore, insalubrity pay was now not an option.⁶⁵ The miners' pay had changed only because they won 50% and 25% increases from the 1945 and 1946 strikes.⁶⁶ The timing of the strikes also coincided with key junctures in the case: the first after contradicting initial testimony in the case and the second after Pontes de Corrêa was named the court's inspector. Beyond logistics, industrial safety, impairment, and healthcare needs featured prominently in all aspects of the strikes and their aftermath. Miners' fight against the

⁶³Proc. 14/46 v. 5, 128-130. I did not find a response in the case file and Judge Barata Silva made no reference to any response in his lengthy explanation of the verdict.

⁶⁴ "Portaria nº 1 de 5 de Janeiro de 1960," *Diário Oficial*, January 6th, 1960, 08.01, Box 5, AHM-MEC

⁶⁵ Proc. 14/46, v. 5, 91-94

⁶⁶ Roberto Mario Ferreira Issler, Director of the Pensions Office to Morvan Dias de Figueiredo, Minister of Labor, March 27th, 1947, 05.03.1.01, Box 256, AHM-MEC.

perils of the human body's fragility, whether to avoid it, or to face it with dignity, ran through the insalubrity case, the strikes, and, in part, CADEM's end in 1964.

The union pursued legal means to protect against industrial risk and support those who suffered in sickness and death. Workers struck once it was clear officials were unwilling to challenge CADEM's power. Miners called for workplace improvements and raises and organized to force change in the pensions systems. Retirees, often impaired, fought to survive, pushed to the margins of São Jerônimo. Working peers saw in pensioners' precarity possibilities of their future. Retirees funneled money meant to placate them into strikes and capitalized on their relative lack of connection to production to undermine CADEM. The government did not meet many of the strikers demands, but continued mobilization over workers' health and safety led to more government oversight of healthcare that gradually strained CADEM finances. Impaired and able-bodied miners allied to challenge the tacit assumption that workers were expendable and improved healthcare for all. Beyond a struggle over profits, miners battled over bodies.

Both strikes mirrored concerns over bodily integrity and healthcare obligations to the working class. Workers frequently cited improvements to the pension system and expressed fears over safety in their demands to the company in both strikes. Seven of the nineteen demands Chief Engineer, Humberto Lupinacci, listed in his testimony to police in the 1945 strike involved pensions and accident services. Workers claimed CADEM did not provide all protections within the CLT, allowed children and old men to work, and avoided paying the insalubrity taxes miners deserved. Moreover, union members criticized company control over hiring in the pensions office, objected to the low premium CADEM paid, and complained that high numbers of poorly-paid retirees "lowered the standard of living" and threatened to leave younger workers without

pensions.⁶⁷ In the 1945 strike, demands over accidents featured more than all other labor concerns.

The purported beginning of the 1945 strike had yet another connection to the insalubrity case and workers' health. CADEM claimed a Ministry of Labor inspector helped start the strike. The company repeatedly denounced Alcides Ferreira Paixão, for supposedly having “promoted [*fomentado*]” the strike of 1945.⁶⁸ Chief Engineer Lupinacci claimed to have heard testimony from a miner that Inspector Paixão “...did not take measures to avoid the strike, but soon after its start, involved himself in it.”⁶⁹ The Chief Engineer confirmed Paixão's alleged participation in and “favorable attitude” toward the strike. The Regional Labor Office even investigated Paixão for “having promoted the strike.”⁷⁰ Inspector Paixão continued to apply fines to CADEM through at least 1956—apparently, he received no significant punishment.⁷¹

Whether Inspector Paixão participated as CADEM alleged, he stood as a concrete example of the ineptitude of the State to address workers' health concerns. Perhaps Inspector Paixão did point out continued insalubrity; maybe his answers to possible questions from those in the shaft were unsatisfactory. His mere presence in the mine, as workers awaited the final insalubrity report, would have likely aroused anger and propelled the first strike. He was a symbol of the Ministry of Labor's duty to address miners' safety. The strike of 1945 was a small production stoppage that lasted only 3 days, a prelude to the much longer strike of 1946.

⁶⁷ *n.d.* “Depoimento dado pelo Dr. Humberto Lupinacci no Inquerito Policial-Militar promovido pelo Ten. Col. Francisco Silveira do Prado,” April 21st, 1945, 8, 05.01.1, Box 131 (Cartas das Greves), AHM-MEC; this sub-collection was organized by the Arquivos sem fronteira (ASF) team and does not reflect the original company filing system and is a testimony.

⁶⁸ Secretary of the Administrative Investigation [CADEM] to Chf. Eng. Humberto Lupinacci, April 19th, 1945, 05.01.1, Box 131, AHM-MEC.

⁶⁹ São Jerônimo Police, “Depoimento prestado pelo Sr. H. Lupinacci em 19.4.1945,” April 19th, 1945, 05.01.1, Box 131, AHM-MEC; CADEM to the State Chief of Police, Darcy Vignoli, April 27th, 1945, 05.01.1, Box 131, AHM-MEC.

⁷⁰ CADEM to the State Chief of Police, May 23rd, 1945, *n.d.*, Silvia's box, AHM-MEC. Silvia's box is a collection of documents organized by archival asst. Silvia Simões over communism and police repression that is publicly available, but currently un-indexed.

⁷¹ Ch. Eng. Mauré Stoltenberg to the Asst. Manager of Internal Affairs, Mr. Dante Medaglia, July 26th, 1956, 05, 01.01 (Cartas), Box 101, AHM-MEC. For more examples of fines by Insp. Paixão, see typology 05.0813, Box 345.

Miners voiced concerns that reveal impairment and healthcare as integral to the struggle against CADEM in the next strike. Workers only publicly emphasized wages and working conditions, but a report from the US embassy in Rio de Janeiro, RJ, Brazil rightfully declared that “the expressed grievances of the mine workers greatly exceed those included in workers’ formal demands.”⁷² Here too, fears over work accidents and bodily welfare appeared as central concerns. U.S. Consular Officer Edward J. Rowell described how workers under a state of war declaration were forced to work overtime and in poor working conditions, degrading their bodies and their ability to survive eventual retirement. Rowell explained CADEM calculated retirees’ wages using the last three years’ wage from their most unproductive labor, bitterly fought all compensation cases, and forced impaired miners out of their homes. CADEM robbed workers of what little comfort and support they were owed after sickness and impairment left them unable to work. Strikers’ actions and court cases corroborated the Embassy report.⁷³ Just like a year before, the physical perils of work and the precarity of the pension system were pivotal in the 1946 strike.

Before delving into the events and outcomes of the strike of 1946, the reader must understand impaired miners were not simply victims or objects of pity that strikers alluded to in the strike of 1946—they were strikers themselves. Of the 335 workers listed in strike reports as “active participants [*elementos de projeção, destacados, os que participaram*],” forty-eight most probably had impairments: 14.5 percent. Among the 120 miners with roles described in the reports, nine were highly likely to be impaired: 7.6 percent. Impaired workers formed a

⁷² Edward J. Rowell, “Rio Grande do Sul Coal Strike,” American Embassy, Rio de Janeiro Brazil, March 21st, 1946, 5, U.S. National Archives, Maryland Campus (NARA); This letter was passed along to me by Clarice Speranza who received it from Alexandre Fortes. As such I do not have the record or folder number because they did not log it. I will obtain this data soon and have requested it from NARA, but am happy to make the document available in the meantime.

⁷³ Ibid. Rowell’s characterization fits with the cases I am seeing in my larger database of common justice cases. For an example, of an eviction, see F900199762615/1948, CESFMSJ v. Deodato Oliveira Rita, Arquivo Histórico Permanente, Tribunal de Justiça do Rio Grande do Sul, Porto Alegre, RS (AHP-TJRS).

contingent of strikers in 1946.⁷⁴

Impaired miners likely participated in the strike to fend off the precarity of their daily life in São Jerônimo. Bruno Martins de Melo, listed as an active participant, emigrated from Spain in 1912 after famine took away his two daughters. After 31 years as a miner, Bruno had arthritis from a badly-healed break in his leg, reduced vision and hearing, and advanced Anthracosis-Silicosis. He hoped to farm after retirement, but no longer had the stamina to do so. To make matters worse, he claimed CADEM miscalculated his retirement. He contended he had been paid twelve cruzeiros a day, plus bonuses, and only received retirement calculated at a rate of 10, but he had no proof.⁷⁵

Another active participant, João Teixeira had a seizure in 1938. He was interned at São Pedro Psychiatric Hospital. After nine months, he had not experienced more “attacks,” but he was diagnosed with “frequent epileptic crises [*crises epileptiformes*]” and CADEM prohibited João from working with machinery. João’s diagnosis limited his earning potential and reduced his pension by his retirement in 1943.⁷⁶ Impaired workers ran great risk in choosing to participate

⁷⁴ “Elementos estranhos à CCMB que se destacaram nas greves de 3/1/46 e 30/1/46 nas minas de Butiá,” *n.d.* 1946, 1-2, 08.01, Box 3, AHM-MEC; “Empregados da CCMB que se destacaram nas greves de 3/1/46 e 30/1/46 na minas de Butiá, porto do conde e estação do silo,” *n.d.* 1946, 1-2, 08.01, Box 3, AHM-MEC; “Elementos de projeção na atual greve,” *n.d.* 1946, 08.01, Box 3, AHM-MEC; “Elementos de projeção na greve de fevereiro de 46, nas minas de Butiá,” *n.d.* 1946, 08.01, Box 3, AHM-MEC; “Relação de operários aposentados, residentes no quadro da Mina de Butiá, que tomaram parte ativa na última greve,” *n.d.* 1946, 08.01, Box 3, AHM-MEC; “Elementos de projeção na greve de fevereiro de 46, nas minas de São Jerônimo (empregados),” *n.d.* 1946, 08.01, Box 3, AHM-MEC; “Operários Aposentados pela Caixa de Ap. e serviços de mineração de S. Jerônimo,” *n.d.* 1946, 08.01, Box 3, AHM-MEC; “Leopoldos Jerônimo,” *n.d.* 1946, 08.01, Box 3, AHM-MEC, 1-3; “Elementos de projeção na greve de mês de fevereiro de 46: operários das minas do Arroio dos ratos,” *n.d.* 1946, 1-3, 08.01, Box 3, AHM-MEC; Leopoldos was a code-word for communist used in CADEM correspondence codes; see the entry for Leopoldo in typology 05.01.2, box 131. Documents from box 3 of typology 08.01 are part of the Union sub-collection organized by the ASF team and do not reflect the original company filing system. As such, I do not know when documents were produced exactly unless a date is provided. However, documents in box 3 only pertain to the strike of 1946 and seem to be part of a larger report. Therefore, I make the reasoned assumption all document originated in Fall 1946 unless otherwise and were either produced by CADEM Internal Affairs or the police in São Jerônimo. I provide authors and precise dates for those documents containing them. Otherwise, I provide only the document’s title. I calculated these statistics only using documents that clearly imputed an active role or association, dividing the number of retirees over general participants, controlling for the percentage that was not disabled based off Pensions office statistics. See page 11 of this work for more on impairment statistics.

⁷⁵ F9001997749302/1945, Bruno Martins de Melo v. CEFMSJ, 16-17, AHP-TJRS.

⁷⁶ F900199738460/1944, João Teixeira v. CCMB, 44-46, AHP-TJRS; Dr. Cavedini to Caixa de Aposentadoria e Pensões, October 16th, 1939, 05.03.1.1 (Consultório médico), Box 281, AHM-MEC. This diagnosis does not necessarily reflect present-day understandings of Epilepsy, but the medical professional’s perception of his symptoms. I have given pseudonyms to Bruno and João as a courtesy given the sensitive and private nature of their cases. Their documents can still be searched by case number.

in the strike of 1946, but only pensions and healthcare reform could improve their circumstances. Many impaired miners likely experienced similar difficulties before they decided to oppose CADEM directly.

In contrast to the small disturbance of 1945, the strike of 1946 massively disrupted political and economic life in the region and prompted military intervention. Throughout World War II, the Brazilian Communist Party (PCB) chose to cooperate with state actors for the good of the war effort, but afterwards took a much more combative posture. PCB labor unionist created the Worker Unification Movement (MUT), a non-state, inter-union movement that aimed to promote labor unrest as the War ended.⁷⁷ It is unlikely that a majority of strikers considered themselves communists, though they likely identified with the party's goals to improve workers living conditions after judicial defeat appeared a near certainty.⁷⁸ Additionally, one of São Jerônimo's favorite sons, Manuel Jover Telles later won election to congress as a PCB member. So, as the War ended and many miners felt they had no options, the PCB's organizing efforts surely gave hope to a desperate population.

On January 30th, 1946, production stopped.⁷⁹ Then, workers broke the generator that powered domestic and commercial activities. Miners left Porto Alegre intermittently in the dark for nearly two and a half weeks. Without coal, railway, and riparian commerce region-wide halted.⁸⁰ Federal troops arrived in São Jerônimo on February 15th as the specter of communism

All the sources in the last two citation are open for public and open consultation. As a result, I was exempted from an IRB review on June 12th, 2018.

⁷⁷ Daniel Arião Reis, "Entre reforma e revolução: a trajetória do Partido Comunista no Brasil entre 1943 e 1964" in *Historia do marxismo no Brasil Vol. 5: Partidos e organizações dos anos 1920 aos 1960* (eds.) Marcelo Ridenti and Daniel Arião Reis (Campinas, editor UNICAMP, 2007, 2nd ed.), 73-79; Monica Kornis, "MOVIMENTO UNIFICADOR DOS TRABALHADORES (MUT)" CPDOC-FGV, n.d <http://www.fgv.br/CPDOC/BUSCA/dicionarios/verbetes-tematicos/movimento-unificador-dos-trabalhadores-mut>

⁷⁸ Speranza, *Cavando direitos*, 180-181

⁷⁹ n.d. "Greve nos serviços de extração de carvão," *Correio do Povo*, January 31st, 1946, 05.01.1, Box 131, AHM-MEC

⁸⁰ see Speranza, *Cavando direitos*, 155-182. To my knowledge, Clarice Speranza is the only author to analyze this strike in-depth.

loomed.⁸¹ Over the next several weeks, strikers, impaired or otherwise, undertook various actions to sustain the strike and while their fellow miners tried to negotiate terms with the state. The São Jerônimo strike was so central to the struggle over post-war labor rights in 1946 that Luis Carlos Prestes, a former army lieutenant-turned Communist militant and PCB leader, delivered the coal miners' demands to the presidential palace and personally advocated on their behalf.⁸² The fight against bodily destruction in Southern mines reverberated nation-wide.

Impaired miners, much like able-bodied men and women, appeared to have beaten work captains and those who did not adhere to the strike. Armando José dos Santos and Antonio Gombia apparently “led the thrashing of work captains” in Arroio dos Ratos.⁸³ Several men and women in the company towns beat work captains to the point of hospitalization. The military intervenor banned seven perpetrators from São Jerônimo after the strike. Armando and Antonio did not appear in said lists, since they were prohibited from staying in town as retirees. These acts of physical aggression contained a gendered element. Women challenged conception of female meekness as they meted punishment to those opposed to the strike, according to Clarice Speranza.⁸⁴ Disability added another dimension to this gendered conflict. Impaired workers must have faced equal, if not more, pressure to assert their manliness as a sign of buy-in, especially since working peers considered impaired retirees a burden on the towns' economies in the previous strike.⁸⁵ Impairment did not preclude strike participation.

Impaired miners sometimes took on tasks for which they were distinctly equipped.

⁸¹ *n.d.*, “Decretada pelo governo federal ação das minas de São Jerônimo,” *Correio do Povo*, February 15th, 1946, 05.01.1, Box 131, AHM-MEC.

⁸² *n.d.* “Luis Carlos Prestes levou ao Catete o memorial dos mineiros de Butiá,” *Correio do Povo*, March 10th, 1946, 05.01.1, Box 131, AHM-MEC

⁸³ “Elementos de projeção na greve de mês de fevereiro de 46: operários das minas do Arroio dos ratos,” *n.d.* 1946, 2, 08.01, Box 3, AHM-MEC; “Elementos de projeção na atual greve” *n.d.* 1946, 1, 08.01, Box 3, AHM-MEC.

⁸⁴ Speranza, *cavando direitos*, 188-192, 202. Speranza discusses the roving bands that intimidated and physically assaulted work captains at length.

⁸⁵ Turner and Blackie, *Disability and the Industrial Revolution*, 143-148. Since impaired retirees were named as having participated, they are highly likely to have participated and faced similar pressures of masculinity.

Retirees Teófilo Lenkewicz and Edmar Firmo Rocha opened several non-company grocery stores [*mercadinhos*] in Butiá after retirement. “[T]hey gathered communists and strikers [in their stores], according to authorities.”⁸⁶ Likewise, Alfredo Francisco, a retired miner turned watch repairman, purportedly held a reputation as a “highly esteemed communist” who “held meetings in his home before and during the strikes.”⁸⁷ Meetings only took place in establishments owned by impaired pensioners, particularly retirees who ran businesses in tightly-controlled company towns. CADEM could have been using false charges of social disorder to force the few businesses they competed against to close. Yet, this was unlikely. The business owners lasted through the purges that followed the strike among a select few.⁸⁸ Strike reports branded other retirees in company housing as “inconvenient” and forced their eviction for being “extraneous to service and disruptive to industrial activity.”⁸⁹ Teófilo, Edmar, and Alfredo’s entrepreneurship showcased first how, just like counterparts in the U.S. and U.K., impaired workers who could adapt to the needs of the market fared better.⁹⁰ Second, impaired miners’ businesses, facilitated by retirement, provided a space where strikers could gather and plan inconspicuously.

Pension payments provided another contribution impaired miners could make to the strike effort. Most invalid miners likely contributed financially. CADEM cut off payments, fearing retirees could give company funds to the strike effort.⁹¹ CADEM controlled assistance

⁸⁶ “Elementos estranhos à CCMB que se destacaram nas greves de 3/1/46 e 30/1/46 nas minas de Butiá” *n.d.*, 1946, 1-2, 08.01, Box 3, AHM-MEC; F900199765823/45 Edmar Firmo Rocha v. CCMB, AHP-TJRS, 18-18, 35-39.

⁸⁷ *Ibid.*; “Relação de operários aposentados, residentes no quadro da Mina de Butiá, que tomaram parte ativa na última greve” *n.d.*, 1946, 08.01, Box 3, AHM-MEC. While the retirees in this paragraph may well have been supporters of the PCB, they also were not necessarily ‘communists’. These retirees may have simply been sympathetic to the end goals of the strike.

⁸⁸ “Relação de comunistas nas Minas de Butiá,” December 30th, 1947, 08.01, Box 3, AHM-MEC.

⁸⁹ Cap. Ebenezer Cabral de Melo to Ch. Eng. Sinval Cirio, “Assunto: despedido de operários,” April 4th, 1946, 08.01, Box 3, AHM-MEC; Cap. Ebenezer Cabral de Melo to Ney Azambuja, June 4th, 1946, 08.01, Box 3, AHM-MEC

⁹⁰ Rose, *No Right to be Idle*, 90-111, 118-122; Turner and Blackie, *Disability and the Industrial Revolution*, 39-41, 45 175-176, 190-191.

⁹¹ *n.d.* “O CADEM e a greve dos mineiros,” *Correio do Povo*, February 20th, 1946, 6 and 16; Speranza, *Cavando direitos*, 171; *n.d.* “Auxílio ao mineiros” *Correio do Povo*, February 23rd, 1946, *n.d.*, 05.01.1, Box 131, AHM-MEC; this last article discusses

funds, yes, but the decision to stop benefits revealed a real fear of misuse on the part of management. Moreover, small production stoppages began ten days before the strike's official start, so miners likely received January's payment before the longer strike began.⁹² Welfare payments made from company accounts probably supported a strike that cost trustees profit.

Impaired miners were not the only strikers accused of using Pension Office funds to support the campaign against the company. CADEM dubbed Pensions Office nurse-midwife Maria Siani Festa "the most dangerous element in Butiá" and accused her of contributing part of her salary to the 1945 and 1946 strikes.⁹³ Maria confessed to and was arrested for distributing Communist literature in 1937; her partner, Alfredo Elimar Schmidt was an associate of Procópio Farinha Vieira, a famous communist rail-worker employed by CADEM.⁹⁴ Alfredo appeared as Maria's "companion in all of her communist activities."⁹⁵ After the strike, Nurse Festa was not fired for her supposed adherence to Communism, the Party was legal at the time and popular among many of the women of Butiá.⁹⁶ Instead, Pensions Office President, Dr. Roberto Mário Ferreira Issler, fired Nurse Festa because she "placed a dab of cotton" on a patient in a doctor-ordered abortion. She was fired, the decree said, because she was "not a doctor" despite having assisted her superior in abortions "various times, always at the Doctors' discretion."⁹⁷ The women of Butiá, active strike participants, praised her as "a true friend of the working class" in

donations collected and send to the strike commission. If CADEM feared pension donations funded the strikes and impaired miners participated, then can reasonably assume pension money did support strike efforts.

⁹² "situação nas minas de Butiá," *n.d.* 1946, 3, 08.01, Box 3, AHM-MEC.

⁹³ "Elementos estranhos à CCMB que se destacaram nas greves de 3/1/46 e 30/1/46 nas minas de Butiá," *n.d.* 1946, 1, 08.01, Box 3, AHM-MEC.

⁹⁴ *n.d.* "Comunistas presos em Porto Alegre," *Correio da Manhã* (Rio de Janeiro), November 13th, 1937, 2, Hemeroteca Digital da Biblioteca Nacional (HD-BN), Rio de Janeiro, RJ, Brazil.

⁹⁵ "Elementos estranhos à CCMB que se destacaram nas greves de 3/1/46 e 30/1/46 nas minas de Butiá," *n.d.* 1946, 1, 08.01, Box 3, AHM-MEC.

⁹⁶ Oliveira, "Mineiros de São Jerônimo...", 74. The PCB was so popular among the miners' wives that the district headquarters was opened in Butiá and mostly operated by women.

⁹⁷ "Portaria 14/49 da Caixa de Aposentadoria e Pensões dos Mineiros," April 30th, 1946, 08.02, Box 3, AHM-MEC; "Relação dos comunistas das Minas de Butiá," December 30th, 1947, 2, 08.01, Box 3, AHM-MEC; Ebenezer Cabral de Melo, Cap. Admin. of 3rd Reg. Military Battalion to the Minister of Labor, September 30th, 1946, 3, 08.01, Box 3, AHM-MEC.

their post-strike pleas to Brazil's President-General, Eurico Gaspar Dutra, to revoke her firing.⁹⁸

Nurse Festa, much like Inspector Paixão, stood as a reminder of the states' obligations and shortcomings. As the Labor Ministry stated at the beginning of the insalubrity case, Butiá had no hospital services beyond the Pensions Office. Maria was one of four medical staff within a day and a half's journey of Butiá.⁹⁹ Miners and their families surely appreciated Maria's services, but they also must have known that she could not serve everyone and they needed more. Nurse Festa served miners' families health needs in her own clinic until 1950 with CADEM's knowledge.¹⁰⁰ CADEM, just as much as the residents of Butiá, likely depended on her for medical services. As workers struggled to protect their health, Maria's power over reproduction both left her vulnerable and insulated her from political persecution. Bureaucracies of the body, not only those most affected by them, propelled the strikes as well.¹⁰¹

Risks and realities of impairment and bodily harm appeared in every aspect of the strikes of 1945 and 1946. Miners' demands and motivations reflected the fears and tribulations of an industry infamous for life-altering injuries and death. Bureaucrats meant to calm difficulties over workplace health and safety, to bring workers to mutual understanding with industrialists, unwittingly stoked the flames of popular discontent. Finally, impaired miners pitched in. At times, they reinforced the roles and pressures fellow strikers faced. Elsewhere, the differences

⁹⁸ Ana Eva L. Ribeiro et. al to Pres.-Gen. Eurico Gaspar Dutra, May 9th, 1946, 2, 08.01, Box 3, AHM-MEC.

⁹⁹ Miners had to take a train to the Porto do Conde, a ship to the Estrada de Ferro railway, and another train to seek treatment beyond the little available in Butiá.

¹⁰⁰ F900199765854/1950, CCMB v. Alfredo Elemar Schmidt, AHP-TJRS; "Portaria 14/49 do Caixa de Aposentadoria e Pensões dos Mineiros," April 30th, 1946, 08.02, Box 3, AHM-MEC. This case focuses on CADEM's efforts to buy back the clinic that Maria built next to Alfredo's house in 1950. The case described the building as a commercial having 3 levels, 4 entrances, hot water, and the court classifies her as either a nurse or a midwife under her own employ at several points. She resided with Alfredo in the house next to the structure. Her firing order listed Maria as a stabilized employee, meaning she would have been awarded a legally-mandated severance when fired. Maria most likely received a large sum after her impromptu dismissal based on her humble background and the value of the structure she built, Cr\$ 130,000, following the strike. For these reasons, the structure was most probably a clinic of some kind. Dr. Cassia Roth agreed with my assessment when we spoke during BRASA on July 25th, 2018.

¹⁰¹ I plan to write a full-length article on Nurse Festa and several impaired miners not featured above during my doctoral studies. I hope to further examine dynamics of gender and rural/urban power in the pensions and medical systems of the Estado Novo and Second Republic.

others deemed debilitating served as a tool for dissent. Several roles highlighted in strike reports included impaired miners as donation collectors, messengers, even negotiators in the Union's traveling delegation, could not be verified and were not included. The rest were cross-referenced or stood as highly probable in the context of other social structures surrounding miners. Matters of the body and impairment emerged strongly in every aspect of the strike. Impaired miners lived among able-bodied peers in São Jerônimo. The impaired miners above and likely many others lost to historical record acted to better their circumstances—just as able-bodied miners did. Unfortunately, police likely forced impaired miners out in March 1946. All but the businessmen vanished from historical record after the strike.¹⁰² Impaired miners' sacrifice, however, led to better services for all who remained. Meanwhile, CADEM refused to treat the injuries of insalubrity, slowly bleeding the company dry.

Adding Insult to Indemnities: Bodily Harm and Volatility

CADEM's labor rolls dwindled following World War II "desertions" and mass firings due to the strikes. In 1945, at least 151 workers from one half of CADEM's operations, the CEFMSJ abandoned their jobs, and a year after the War 78 still left with no notice.¹⁰³ CADEM publicly denied the press claims that production had fallen and workers were leaving in high numbers, but privately proved them true.¹⁰⁴ CEFMSJ lost more workers than it gained between workers who formally quit and new employees by April 1946.¹⁰⁵ The forced exodus of workers involved in the strike, months later, only deepened the manpower deficit.¹⁰⁶ CADEM could

¹⁰² See page 27, paragraph 2.

¹⁰³ I counted the number of workers who abandoned each month for 1945 and 1946 from the Pensions Office records, 05.03.1.01, Box 255, AHM-MEC

¹⁰⁴ CADEM to Cap. Ebenezer Cabral de Mello, May 13th, 1946, 05.03.01.02 (Quartel da 3^a Região Militar), Box 153, AHM-MEC

¹⁰⁵ Chief Engineer, Mauré Stoltenberg, "Relação dos operários desligados na CEFMSJ janeiro, fevereiro e março de 1946," April 12th, 1946, 05.03.02.01, Box 153, AHM-MEC; Chief Engineer, Mauré Stoltenberg, "Relação dos operários admitidos na CEFMSJ janeiro, fevereiro e março de 1946," April 12th, 1946, 05.03.02.01, Box 153, AHM-MEC.

¹⁰⁶ Speranza, *Cavando direitos*, 194-196.

hardly maintain lofty production goals with such a reduced workforce.

Unlike CADEM, workers earned three measured victories following the 1946 strike. First, retirees continued pressuring CADEM culminating in Pensions Office Director Issler's resignation via state intervention in 1948. CADEM's associate no longer controlled the pensions office.¹⁰⁷ Second, the wage hikes from the strikes combined with greater public scrutiny of the Pensions Office more than doubled healthcare spending from 1944 to 1949. Available data suggests the increase in funding accounted for much more than their promised 62.5% net raise in wages and inflation even as the number of miners fell.¹⁰⁸ CADEM finally paid some of what it had withheld from workers. Finally, the change in leadership produced policy changes that allowed for worker redress in instances of faulty medical examinations or delays in benefit disbursement.¹⁰⁹

The coal miners' strikes undoubtedly forced CADEM executives to acknowledge and be held partially accountable for workers' injuries and ailments, but Southern miners also benefited from national policy shifts in welfare regulation. A 1944 improvement in accident law made it easier to connect certain illnesses to long-term work conditions and increased the window for opening and diagnosing work accident cases.¹¹⁰ Second, President-General Dutra, aimed to mimic US social security programs late in 1945 and was also bound by several Allied labor pacts that expanded social services for workers. Caps on medical services and employer contributions

¹⁰⁷ n.d.; "Demitido o Presidente da CAP dos serviços da mineração" *Folha da Tarde* (RS), November 12th, 1948 in *Recortes de Jornal, 1-1947 a 7-1949*. I believe this book was produced by CADEM Internal Affairs, though I am not certain. Previously, CADEM had been able to choose the CAP director.

¹⁰⁸ Miners Pensions Office, "Relatórios de exercício financeiro da Caixa de Aposentadorias de Mineração de Porto Alegre 1945, 1946, 1947, 1948, 1949" 05.03.01.1 (Cartas-Caixa de Aposentadorias e Pensões), Box 255, AHM-MEC; CAP spending in 1944 was Cr\$ 3,101, 729 and increased to Cr\$ 11, 440, 748. CAP spending rose 268% from 1944 to 1949, accumulated inflation for the period was 74.1% I found no evidence of further pensions increases. For Brazilian inflation stats, see: Dercio Garcia Monhoz, "inflação brasileira os ensinamentos desde a crise dos anos 30," in I Congresso Brasileiro de História Econômica, USP, São Paulo, September 10th, 1993, 3.

¹⁰⁹ Aloysio Leonel de Rezende, "Ordem de Serviço N° 8," June 25th, 1948, 05.03.01.1, Box 257, AHM-MEC.

¹¹⁰ Faleiros, *O trabalho da política*, 142-143.

to Pension Funds increased steadily from 1945-1951 on a national level. Pres. Gen. Dutra was anxious to dispel the specter of his fascist predecessor and promote democracy in healthcare.¹¹¹ As such, São Jerônimo became fertile ground for reform; a reform possible only after workers wrested control from CADEM through the strike of 1946. CADEM tightly controlled internal regulations for medical and pension services and as the only rural sector included in welfare legislation, state bureaucrats seldom successfully forced compliance. Coal miners campaign forced government officials to intervene only after the strikes revealed CADEM's cronyism.

After federal intervention, CADEM mistakenly blamed political subversion, not continued insalubrity, for decreased production. The mines' management requested the Regional Labor Office take "measures to re-establish normal activity in Rio Grande do Sul through removal...of communist elements." Inspector João Dentice challenged administrators' narrow rationale, writing, "it seems without a doubt that aspects beyond the strictly political should be studied as the cause for low production." Inspector Dentice suggested "workplace studies were the only way... to come to a sound conclusion." Technocrats had to evaluate "partial or total technical failures of the legal precepts of industrial hygiene" in São Jerônimo together with research on the cost of living.¹¹² The police, consistent allies of CADEM, later agreed. The station chief "consider[ed] the problem not exclusively political..., but in large part due to technical failures...."¹¹³ CADEM remained unwilling to address issues of insalubrity, just as it had been in 1944. Bodily destruction only grew costlier.

CADEM tried to replace Brazilian miners with immigrant laborers to no avail. 255 European immigrants arrived in São Jerônimo in mid-1947 and a year later only forty-one

¹¹¹ Oliveira and Teixeira, *(Im)previdência social*, 178-180, 187-188.

¹¹² Dr. João Dentice to the Ministry of Labor, April 24th, 1948, 05.08.06 (Requerimentos-Dep. Legal), Box 340, AHM-MEC

¹¹³ Adail Moraes, Government Secretary, to Ch. Eng. Humberto Lupinacci, April 30th, 05.08.06, Box 340, AHM-MEC; Walter Jobim to CADEM, April 30th, 1948, 05.08.06, Box 340, AHM-MEC.

remained. Surveys of those who left suggest sickness and physical inability to complete work as their main reason.¹¹⁴ CADEM unsuccessfully negotiated to bring Japanese immigrants to the mine in 1955.¹¹⁵ By the following year, a dozen Bahians recruited to work in the mines left for São Paulo within a year—half received illness salary or treatment at Santa Casa hospital by their departure.¹¹⁶ CADEM tried to mobilize immigrants to solve labor shortages until its bankruptcy.¹¹⁷

Insalubrity took a financial toll, mostly due to increasing government oversight of the pension bureaucracies. A 1953 law required that companies immediately report health issues to federal authorities, gave federal judges power over payment disagreements, and made companies pay benefits per worker rather than contribute a portion of profits. CADEM argued the law could drain companies of resources and force workers into lesser settlements when Pension Offices had insufficient funds.¹¹⁸ However, financial onus rather than worker welfare worried the mine's lawyers. Shortly after the law passed, CADEM took these objections to court and succeed in delaying payments to the Pension's Office through a series of appeals.¹¹⁹ Relief was short-lived.

CADEM inched closer to crisis due to insalubrity once again. The mounting cost of

¹¹⁴ Gen. M.J. Marlewski, Head of the Emigration Branch to CADEM, February 12th, 1947, 05.05.01, Box 296 (Dossiê imigração/recrutamento de trabalho), AHM-MEC; Minister of Labor, Morvan Dias de Figueiredo to Roberto Cardoso, June 12th, 1947, 05.05.01, Box 296, AHM-MEC; "Relação dos imigrantes que desejam abandonar Butiá," January 16th, 1948, 05.05.01, Box 296, AHM-MEC; "Relação dos imigrantes que ainda estão trabalhando em Butiá," November 30th, 1948, 05.05.01, Box 296, AHM-MEC.

¹¹⁵ CADEM to Humberto Lupinacci "referente ao pedido da Embaixada Japonesa," October 12th, 1955, 05.05.01, Box 296, AHM-MEC; I never found a resolution to the letter exchange between CADEM and the Japanese Embassy in Brazil, but based on the timing and the length of the back-and-forth, Dr. Jeffery Lesser confirmed it is highly unlikely Japanese immigrants came.

¹¹⁶ Currently unindexed box organized by Silvia Simões in June 2018, AHM-MEC; São Jerônimo Police, "Operários Baianos", January 12th, 1956. Silvia Box, AHM-MEC.

¹¹⁷ Arthur Fischer, Rep. of the Intergovernmental Committee for European Migration in Porto Alegre, to CADEM, August 19th, 1963, 05.05.01, Box 296, AHM-MEC.

¹¹⁸ Rafael E. M Galvão, "*Objecções que so podem erguer, prima faccie, ao projeto de lei Nº 2.862-1953*," n.d. 05.08.04, Box 338, AHM-MEC.

¹¹⁹ Clemente G. de Oliveira. Copy of Court Sentence from a case brought by the Miners Retirement and Pensions Fund against CADEM within the *Fazenda Nacional*, April 8th, 1953, 05.08.02.07, Box 333, AHM-MEC; Plínio de Freitas Travessos, Prosecutor General of the Republic [*Procurador Nacional de la República*] "Recurso Extroordinário Nº 29.711, Instituto of Aposentadoria e Pensões dos Empregados de Transporte e Cargas recorre CESFMSJ", January 3rd, 1956, 05.08.02.07, Box 333, AHM-MEC. I was only able to find these verdicts and am not sure of the results of further appeals to their respect.

worker healthcare grew so large that, starting in 1956, CADEM sold off machinery used in mining operations São Jerônimo to cover indemnities.¹²⁰ During the middle of João Goulart's pro-labor government in 1962, CADEM sold workers the land under their homes and the Union also bought the region's only hospital on behalf of the government—all to pay pensions and indemnities. CADEM sold off machinery necessary for production and state employees, not the mining administration, now ran medical care.¹²¹ CADEM declined further as workers became emboldened. Housing and healthcare privileges had long kept workers from opening labor and compensation cases. Now, workers could open judicial cases with fear of CADEM's reprisal. By 1964, CADEM owed 800 workers, 25 retirees, and 2,150 families monies: Miners threatened to strike on the heels of a military coup after more than two years of delays over accident payments and two months' back salaries and benefits.¹²²

Managers begged the Instituto of Aposentadoria e Pensões dos Empregados de Transporte e Cargas (IAPETC), the government pension agency now in charge of miners, to reconsider its order for CADEM to pay debts. "Coal could no longer compete with oil", the Chief Engineers bemoaned; they were "victims of statist planning [*dirigismo estatal*]." CADEM offered to negotiate a long-term deal to avoid the strike. IAPETC leadership threatened criminal prosecution.¹²³ Rather than respond to possible payment unrest with repression as the military and police had done throughout the mines' history, as late as 1963 and could have done through

¹²⁰ "Executivo fiscal promovido pelo IAPETC contra CCMB e CADEM" May 9th-May 14th, 1956. 05.08.02.08. Box 333, AHM-MEC.

¹²¹ Ivo de Magalhães to Humberto Lupinacci, January 15th, 1963. 08.01, Box 5, AHM-MEC; Dornelles. Delegado Estadual, Carlos Marzulla Dornelles to the President of IAPETC, May 4th, 1962, 08.01, Box 5, AHM-MEC; Noberto Nugent de Mello to the Director General of Social Providence in the Labor Ministry [Diretor-Geral da Previdência Social no Ministério do Trabalho], Dr. Dante Pelacani, November 22nd, 1962. 08.01, Box 5, AHM-MEC.

¹²² n.d., "Na luta entre o mar e a rochedo..." *Correio do Povo*, July 5th, 1964, 18; SESI-RS, Relatório Salário-doença, March 1st, 1964" 08.01, Box 5, AHM-MEC; IAPETC "Guias de recolhimento de acidente de trabalho de outubro de 1963 a março de 1964, 08.01, Box 5, AHM-MEC: this last set of documents are payment slips for the Pensions Office. Some amount of the money may have been deductions CADEM withheld from workers, but did not deposit. Retirees listed were likely to have been pensions themselves. Month to month variations suggest some amounts due included indemnities for accidents and illness.

¹²³ CADEM Administration to Dr. Manoel Augusto Godoy Bezerra, Telmo Araújo de Viegas, and João Nolasco da Costa, May 21st, 1964, 08.01, Box 5, AHM-MEC.

the then-recent Strike Law of 1964.¹²⁴ General Sandanha Menezes got the debts paid. On July 25th, 1964, the President of the Union presented the miners' "deepest gratitude for interference in acquiring the money [*obtenção numerário*] that allowed [us] to avoid striking" to the General and an administrator of EletroBras.¹²⁵ The miners of São Jerônimo forced CADEM's hand two decades after their failed case. Mining executives finally paid for the fruits of insalubrity.

That the military sided with strikers in this turbulent period may appear odd, but CADEM was no longer in step with government discourse. Chief engineers could no longer sustain the façade of its promises to address mine conditions after a long string of delayed payments and negligence from 1947 to 1964. Moreover, reliance on immigrants as expendable labor reached back to slave-holding ideas more than towards developmentalism.¹²⁶ General Castelo Branco meant to disgrace the administration he previously overthrew in his 1965 May Day speech, calling the old Pensions Systems "...new captaincies... turned over to political factions," rife with "graft and corruption," but he deftly described CADEM's crimes toward workers.¹²⁷ Even though the dictatorship expanded CADEM's model, the coal empire stood contrary to the regime's self-perception. The dictatorship could more easily contain unrest in Winter 1964 through reparations. CADEM's overt violation of São Jerônimo's moral economy warranted

¹²⁴ Marta Ciocarri, "Narrativas da repressão: trabalhadores do campo e das minas durante o regime militar no Brasil," *Teoria e Cultura (UFJF)* v. 6 n.2 (2013): 27-47.

¹²⁵ Norberto Nugent de Mello, Pres. of the Union, to General Sandanha Menezes e Almirante Edir Rocha, July 25th, 1964. 08.01, Box 5, AHM-MEC.

¹²⁶ James Sweet, *Domingos Álvares, African Healing, and the Intellectual History of the Atlantic World* (Chapel Hill, NC: University of North Carolina Press, 2011), 154-156, 219-22. Sweet describes the "'alchemy' of turning slaves into trade goods" and the incredible lengths Portuguese offices go to in order to ensure more slaves for mines and cane fields. These examples show how those with power over enslaved workers saw their bodies as fungible and preferred to purchase new workers rather than care for those already present. I do not mean to insinuate here that the condition of CADEM immigrant workers were equal to chattel slavery. CADEM miners had freedom of movement, remuneration, and received company benefits. Rather, I see some similarities in the CADEM's attitude toward workers' health and disposability.

¹²⁷ Pres.-Gen. Humberto Alencar Castelo Branco, "A Revolução e os trabalhadores," Ipatinga, MG, May 1st, 1965, 5-9, Pamphlets Collection, Brazil Box, Politics and Government Folder, Sterling Memorial Library, Manuscripts and Archives (SML-MA), Yale University, New Haven, CT.

payment. In word at least, the dictatorship viewed healthcare as a right.¹²⁸

The broader significance of the coal miners' struggle in São Jerônimo to Brazilian labor history and the popular unrest leading up to the 1964 coup remains only partially outlined, like so much in that year. However, the saga described above shed light on three areas of impact and for future research. First, the financial costs of bodily destruction and impairment in industry, far from simply acting as barometer of labor relations and exploitation of human capital, placed enormous weight on workers *and* companies. If the ascendance of oil and the brutality of administrators stood as constants in CADEM's final years, so too did the financial onus of precarity and the bargaining chip it provided organized labor to dismantle the coal consortium.

Second, a cursory look at other major industries in Rio Grande do Sul and beyond at the same time as CADEM's bankruptcy suggests that power of precarity may have been a major cause for volatility beyond São Jerônimo. Pensions offices for commercial and maritime workers as well as state public servants experienced similar financial strain across the state.¹²⁹ The São Paulo Industrial Retirement and Pensions Office, which paid out funds to industrial workers in Brazil's industrial hub in the city's most lucrative factories accumulated an astounding debt of thirty trillion cruzeiros by July 1964 stretching back several years. As happened in São Jerônimo, state officials emphasized that "goods [would have] to be seized if necessary" because "Pensions Office could no longer grant services to rightly owed to beneficiaries."¹³⁰ More research is required to fully understand these industrialists' predicament, but the corrosive forces of bodily

¹²⁸ E. P. Thompson, *Costumes em comum*. Trans. Antonio Negro, Cristina Meneguello, and Paulo Fontes (São Paulo: Companhia das Letras), 1998, 18, 152, 159; Ana Beatriz Ribeiro Barros da Silva, "Brasil, o 'campeão mundial de acidentes de trabalho': controle social, exploração e precarização durante a ditadura empresarial-militar brasileira," *Revista Mundos do Trabalho* v. 7 n. 13 (janeiro-junho de 2015): 151-173.

¹²⁹ *n.d.* "Em situação difícil os aposentados do IAPM" *Correio do Povo*, July 10th, 1964, 13; *n.d.* "Relatório apresentado ao presidente do IPE" *Correio do Povo*, July 16th, 1964, 9; *n.d.* "Instalada agência do IAPC em Santa Cruz, RS" *Correio do Povo*, July 26th, 1964, 17; *n.d.* "IPE colocará em dia os pensões dos aposentados" *Correio do Povo*, July 30th, 1964, *n.d.*

¹³⁰ *n.d.* "Indústria paulista deve trinta bilhões ao IAPI" *Correio do Povo*, July 6th, 1964, 1.

precarity and work-related impairment appear to have seeped into the core of Brazilian industry.

Finally, the widespread crisis of the welfare system in 1964 could provide another avenue to challenge standard narratives of the Goulart administration and its overthrow. The Organic Law of 1960 uniformly expanded and regulated Pensions Offices nationally, took away the power of each sector to self-regulate, but left private insurers intact, and stopped short of total federal control of pensions offices and their capital.¹³¹ Once in office, Goulart adopted the same cost-saving measures used before World War II and tried, but failed, to enforce company payments to Pensions offices. As workers' demands grew, Goulart did not have sufficient funds to pay out welfare and medical benefits. Goulart's deficit, at least in relation to pensions and healthcare, was not a result of the demagoguery of populism, nor the bumbling of an inept leader, but the unwillingness of companies to pay into a labor welfare system their representatives approved. Scholars of Brazilian welfare point out this tension in theory; my research supports it in practice.¹³² In fact, Gen. Castelo Branco, not João Goulart, eventually legislated state control of welfare and medical services in 1966. The socialist system of administration that business leaders so feared came at the behest of their military allies.

Conclusion

Miners, their bodies forever changed by industry, left an indelible mark on São Jerônimo—not just with their presence, but through their actions. Technocrats reduced these bodies and the environment around them into numbers. The court's study ignored the fluidity of bodies in gruesome motion within an excavated environment. CADEM left a gaping wound open in the form of continued risk and injury that propelled workers to strike. Technocrats in the court denied workers their rights, but bureaucrats in daily life stood as proof of the Law's promises.

¹³¹ Oliveira and Teixeira, *(Im)previdência Social*, 165-167; Faleiros, *O trabalho da política*, 190.

¹³² Oliveira and Teixeira, *(Im)previdência Social*, 195-196; Faleiros, *O trabalho da política*, 173, 179, 188-189, 191.

Able-bodied miners struck to avoid the fate of their retired peers. Impaired miners, on the other hand, fought for more dignified treatment and support for themselves and miners that would meet similar fates. “Invalids” turned resources and positions that often stigmatized them into sources of resistance. They participated as neither victims or heroes, but their efforts benefited all residents of São Jerônimo. The strike’s aftermath also demonstrated the power of the political economy of disability in São Jerônimo. CADEM could no longer support the bodily destruction it wrought on miners. Federal oversight grew with workers’ autonomy. Miners won a partial victory in 1964.

The 2015 Rio Doce Crisis and the 2017 Labor Law Reform bear a striking resemblance to the saga in São Jerônimo. Thousands of families still struggle with exposure to toxins and physical impairments, while even more victims have been swept up in a tide of mental illness.¹³³ Judges in São Paulo’s Labor Tribunal have declared many heavy industry jobs unfit for disabled workers. Not only will disabled people be denied jobs, but companies will force out these workers.¹³⁴ Now, leaders of a majority far-right Congress have proposed pensions reforms to address a deficit supposedly created by previous center-left government PT viewed by some as fiscally irresponsible and demagogic. They argue that the age of retirement must be raised and benefits limited. Meanwhile, Vale, the company responsible for the Rio Doce Crisis, and other companies embroiled in scandal owe a combined R\$426 billion, roughly \$106 billion USD.¹³⁵

¹³³ Sumaia Villela, “Tragédia de Mariana: moradores sofrem com depressão e outros problemas de saúde” *Agência Brasil*, March 11th, 2017. <http://agenciabrasil.abc.com.br/geral/noticia/2017-11/tragedia-de-mariana-moradores-sofrem-com-depressao-e-outros-problemas-de-saude>

¹³⁴ Carlos Aparício Clemente, “Trabalho de pessoas com deficiência: ameaças e oportunidades,” (TCC in Work Science, DIESSE-SP, 2018, in progress); I have not read the work in its entirety yet, but discussed its implications several times with the author during my research in the Osasco Metalworkers Union Archives in August of 2018.

¹³⁵ Laura Naime, Luiz Guilherme Gerbelli, and Tais Laporta, “Reforma da Previdência: entenda a proposta ponto a ponto” *Globo G1*, February 20th, 2019 <https://g1.globo.com/economia/noticia/2019/02/20/reforma-da-previdencia-entenda-a-proposta-ponto-a-ponto.ghml> ; *n.d.* “Vale, Friboi, Itau e outros devem R\$ 426 bilhões para a Previdência Social” *Carta Campinas*, February 20th, 2019 https://cartacampinas.com.br/2017/02/vale-friboi-itau-e-outros-devem-r-426-bilhoes-para-a-previdencia-social/?fbclid=IwAR1h-Flc6jeOS_qoP9poAZVCWs37hBir0iQmN5WPufHV4caiMGqNr03_lk8

Industry produces impairments and, in large proportions, impairment produces volatility.

Unaddressed suffering unleashes popular unrest. This crisis remains in flux.

Momentous legal, medical, and political changes flowed from the strikes of 1945, 1946 and the attempt in 1964. Yet, one irreducible fact remained, like an iceberg amidst raging seas: Impairment was as central to capitalist production as labor activism. Workers' bodies sat at the center of Brazilian labor disputes at every stage in São Jerônimo. Marx intuited, but never fleshed out, this phenomenon at the root of capitalism. Impairment, disability, and labor were, and are, intertwined with production, but also contribute to political and economic crises borne of bodily exploitation.

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