

**End of the Line**  
**State Infrastructure, Material Ruin, and Precarious Labor along Romanian Railroads**

by

Adrian Deoancă

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
(Anthropology)  
in The University of Michigan  
2020

Doctoral Committee:

Associate Professor Krisztina E. Fehérváry, Chair  
Professor Dario Gaggio  
Associate Professor Matthew Hull  
Professor Stuart Kirsch  
Professor Alaina Lemon

what chains were strung; what ditches dug across  
your path that, once you'd come upon them, caused  
your loss of any hope of moving forward?

Dante Alighieri, *Divine Comedy*

Purgatory, Canto 31, Verse 25

Adrian Deoancă

adeoanca@umich.edu

ORCID iD:0000-0001-5101-2720

© Adrian Deoancă 2020

## **DEDICATION**

To my parents, Ana and Viorel,

It's all thanks to you!

To the loving memory of

Vintilă Mihăilescu (1951-2020)

Florin Faje (1984-2020)

## ACKNOWLEDGEMENTS

It is fitting to begin a dissertation concerned with infrastructure and people's expense of labor in maintaining it by acknowledging those persons and organizations who made the project possible in the first place and whose material, intellectual and emotional contributions have helped me mend my own moments of brokenness.

This work was possible thanks to the acceptance, friendship, and encouragement of the rail technicians from the Bucharest Locomotive Depot who shared with me their time, knowledge, life stories, food and drinks, and jokes and laments: Adrian, Copilu', Costel, Dan, Eugen, Fane, Florin, George, Ghiocel, Gioni, Julian, Lipi, Luci, Marin, Mihai, Migală, Mioara, Petruța, Sile, Stelică, Tudor, Vali, and Victor. Special thanks go to Mitică and Speedy, two highly respected and seasoned repairmen who took me under their wing to show me the ropes of repair and have remained dear friends ever since. In Târgoviște and the neighboring localities between which I commuted for fieldwork, I have benefitted from the help of Aghilă, Ana, Bebe, Cristi, Costel, Dan, Dorel, Florin, Gigel, Ioan, Ioji, Laurențiu, Mihai, Mircea, Ropo, Stelică, and Viorel. I am particularly thankful to Marian and Tomiță, two old-school station masters, who accommodated both my incessant requests for documents, and took the time to answer what I can only imagine were quite annoying questions. To all these fine folk and to all others who do those essential jobs that make modern life a tad easier and keep all of us a bit safer, yet are all too often robbed of rewarding wages and symbolic recognition, I dedicate the opening lyrics of "Worker's Song," by the Dropkick Murphys: "This one's for the workers/Who toil night and

day/By hand and by brain/To earn your pay." I would not have met many of these wonderful people had it not been for the support of Andrei, a brilliant locomotive engineer, and the help of Ionuț, a young politician. Banking on his close relationships with the women and men at the Bucharest Locomotive Depot, as well as on his privileged connections with those in the upper echelons of the public rail companies, Andrei introduced me to the electricians' crew at the Bucharest Depot, lobbied the management of Locomotive Repair ltd. on my behalf, and helped me secure interviews with railroad top brass to whom I would have not have had access. Ionuț, a Dâmbovița representative in the Romanian Parliament, has done similar phatic work. Although he did not know me save for a brief meeting for an interview, he forwarded me the contacts of many railroad managers and transportation specialists, putting a good word for me without asking for anything in return. Alina Predescu, Dorina Litra, Adrian Vlaicu, and Iosif Szentes, all from the management of CFR Călători, saw value in my research project and secured me legal access to worksites otherwise inaccessible.

Much of the data gathered from various sources in various places might have remained unintelligible to me had it not been for several experts whose shared their knowledge with me. Mircea Dorobanțu, director of the Rail Museum in Bucharest and self-professed train aficionado, opened the doors of his institutions archives, helped me navigate the materials stored there, lent me reading materials, and regaled me with "war" stories, anecdotes and smutty jokes from his time as depot manager. Viorel Lucaci, a state inspector for the Romanian Railroad Authority, provided me with a map for understanding the legal structure of the public rail system, and shared with me some very insightful materials of his own that shed light on recent transformations of the industry. Ștefan Roșeanu, an ex-manager of CFR Călători who remains a vocal militant for railroad mobility of people and goods, guided me through past and present

histories of rail development and underdevelopment. Octavian Udriște, a true veteran of tracks and trains, gifted me with stories from back in the day, when things were done differently. These four knowledgeable experts helped me clarify political, organizational, and technical matters that would have otherwise stifled me.

Many other people in Romania enabled my research in many different ways. Rebeca Dan, Ionuț Dulămiță, Mădălin Nicolaescu, Radu Maniți, Tudor Rogojanu, Monica Stroe and Bogdan Iancu have opened the doors of their homes for me, hosted me when I was in need of a place to sleep or write, and generally bestowed their company upon me. Thanks are due to them both for putting a roof over my head, and for covering me with the warm blanket of friendship.

My advisors at the University of Michigan have played crucial roles especially during the phase of preparing for fieldwork, and then later in the grueling times of swimming through an ocean of patchy data and partial interpretation. I am profoundly indebted to Krisztina Fehérváry, Dario Gaggio, Matthew Hull, Stuart Kirsch and Alaina Lemon. Having finished this dissertation is equally a testimony of their success in guiding me through the elaborate process of acquiring theoretical knowledge, preparing for fieldwork, doing the research and making sense of the massive volume of data that I have accumulated on the field.

In addition to the valuable help of my advisors, I was lucky to be part of a vibrant intellectual community and be surrounded by a welcoming group of friends at the University of Michigan's Department of Anthropology. I would certainly not have gone so far had it not been for Obed Garcia, Warren Thompson, Prash Naidu, Georgia Ennis, Matan Kaminer, Barry Brillantes, John Doering-White, Nama Khalil, Adrienne Lagman, Sandhya Narayanan, and Niku Tarhechu. In addition to my cohort mates, I will always cherish the friendship and company of Lindsay Ahalt, Anna Antoniou, Maja Babic, Ian Beggen, Adeli Block, Allison Caine, Ainash

Childebayeva, Chantal Croteau, Jordan Dalton, Katherine Dimmery, Bree Doering, Gene Estrada, Andrew Foster, Soren Frykholm, Simeneh Gebremariam, Zehra Hashmi, Drew Haxby, Randeep Hothi, Geoffrey Hughes, Dia Karamaniola, Ozge Korkmaz, Maire Malone, Scottie McLochlainn, James Meador, Brett Meyer, Cyrus O'Brien, Davide Orsini, Heath Pearson, Rachna Reddy, Bruno Renero, Kimberly Sanchez, Julian Schultz, Samuel Schuman, Perry Sherouse, Alex Sklyar, Stuart Strange, Nikolas Sweet, Eryn Talevich, Akbar Tirmizi, Nishita Trisal, Laura Yakas, and Cheryl Yin. A special shout-out goes to Luciana and Bogdan Nemțanu who fed me, got me drunk out of my skull, and provided me with much needed company and friendship while I was wrapping up the dissertation in Ann Arbor during the hardships of the 2020 coronavirus pandemic.

Many of my colleagues read and commented on individual chapters, including co-participants in the Ethnolab seminar majestically run by Stuart Kirsch. In Romania, Călin Cotoi, Magdalena Crăciun, Bogdan Iancu, Gabriel Jderu, and Cosmin Popan read parts of this dissertation, providing me with valuable feedback and inspiring conversation. Liviu Chelcea in particular has been an avid supporter of my work and a sobering voice that nudged me to keep it simple, tone down textual infatuation, and write with the possibility of publishing in mind. Alina Cucu, a brilliant historical anthropologist of labor, has helped me tremendously in conceptualizing the arguments in Chapter 5 of this dissertation. Ongoing conversations with Alec Bălășescu, Cristian Binder, Florin Faje (1984-2000), Ștefan Guga, Florin Poenaru, Ivan Rajković, and Warren Thompson have provided me with an extended bibliography, and helped me refine my understanding of political economy, labor history, and theorizations of work, infrastructure, and materiality.



Many comments from co-panelists at EASA 2018 in Milan, especially from Stephanie McCallum, Gabriella Körling, Mateusz Laszczkowski, Olga Povoroznyuk, Peter Schweitzer, Sigrid Schiesser, and Heather-Ann Swanson made their way into the body of the dissertation adding plus value to it. The same goes for comments from participants at the Technosciences of (Post)Socialism conference that took place in Budapest, Hungary in September 2015, where I presented a paper that grounded the theoretical focus on infrastructure, temporality, and state politics of this dissertation, especially Johanna Bockman, Martha Lampland, and Sergiu Novac. A modified version of that paper informs parts of Chapter 3 of this manuscript and is forthcoming in an edited volume curated by Zoltan Ginelli for Palgrave's Studies in the History of Science and Technology. Equally useful were the very insightful comments made by Michael Fisch at the AAAs in San Jose (2018), and by co-panelists and attendees at a panel on practices of repair at the Maintainers III conference in Washington D.C. (2019).

A generous Wenner-Gren Dissertation Grant funded the bulk of my field research in Romania. This offered me temporary shielding from precariousness and enabled me to work with peace of mind. Additional funding was provided by summer research grants from the Weiser Center for Emerging Democracies, the Center for Russian, East-European and Eurasian Studies, the Rackham School of Graduate Studies, and the Department of Anthropology at the University of Michigan. A Rackham Humanities Fellowship and a Marshall Weinberg Dissertation Fellowship provided financial support while I was writing my dissertation in Bucharest and Ann Arbor. This work would not have been possible without their assistance, but I assume full responsibility for the result.

During my last months of graduate school, I have lost two persons that had been influential in my intellectual life, leaving empty spaces in my heart that will never be covered.

Dr. Vintilă Mihăilescu, "Dom' Profesor" as his students, myself included, called him endearingly was the supervisor of my MA dissertation at SNSPA in Bucharest, and one of the main reasons why I turned to the discipline in the first place. A "professor" in the old-school meaning of the term, Dom' Profesor mentored me on how to read, write, entertain arguments, but also eat, drink, and be merry. I will never match his intellectual acumen or charisma but aspiring to it cannot hurt. Dr. Florin Faje, a fellow anthropologist of infrastructure who had been writing about roads and highways in Romania, was a refreshing presence in my life ever since we befriended at the Central European University in Budapest. Although we lived in different cities, different countries, and often even on different continents, Florin and I did our best to meet at conferences (in Bucharest, Budapest, Cluj, Milan or Stockholm), and cherished one another profoundly. Florin never missed any of my presentations or public talks and was always prepared to ask the most tickler questions possible. In heaven or hell, or anywhere in between, I vow to pay him back with due measure. Negroni cocktails will be on me!

While researching and writing this dissertation, it has dawned on me that I come from a working-class family whose members have been involved in various forms of maintenance and care work: Mărioara, my maternal grandmother - a homemaker; Valeria, my paternal grandmother - a janitor; Vasile and Nicolae, both miners, the latter having died an atrocious death while servicing a clogged up feeder pipe; Viorel, my father - a repair technician of household appliances, heavy duty industrial machines, and medical equipment; Ana, my mother, an accountant at the hospital, and general caretaker of all family members, keeper of social relations, and good doer. By taking up teaching, I can only hope to honor my family's penchant towards caring for others with the same determination and dignity. I am especially thankful to my parents, Ana and Viorel Deoancă, to whom this dissertation is dedicated, for a lifetime of

support and encouragement, even when my intellectual pursuits led me to work in proletarian environments from which they wanted to safeguard me. Alas, class habitus dies hard.

It is only appropriate to conclude my acknowledgements by thanking Ioana Bobe for the gift of her love and company throughout this journey, including her moving to Michigan on two occasions. During the time of the research, she challenged my methodology and helped me refine my ethnographic eye and ask more penetrating questions. While writing, she read and critiqued my drafts, always knowing how to strike a balance between bolstering my confidence and tempering my enthusiasm when it risked becoming unbound. Like the forms of affective care and nitty-gritty labor described in this dissertation, Ioana's work alongside me has been a crucial element of stability. When everything is in disrepair, one can only hope to have such a solid maintenance crew to help out with fixing.

## TABLE OF CONTENTS

DEDICATION .....	ii
ACKNOWLEDGEMENTS .....	iii
LIST OF ILLUSTRATIONS .....	xi
ABSTRACT .....	xiv
NOTE ON PSEUDONYMS, PHOTOGRAPHS, TRANSLATION AND LANGUAGE .....	xiv
INTRODUCTION .....	1
Snapshot: "Where's the progress? Where's the evolution?" .....	39
CHAPTER 1. Making and Breaking the Railroads .....	41
Snapshot: Apart, yet still together.....	88
CHAPTER 2. "Cinderella(s) of the Romanian Economy" A Tale of Rail Labor Transformation .....	91
Snapshot: An Eventful Train Journey.....	144
CHAPTER 3. Tracks of Postsocialism Qualities of State, Infrastructure, and People .....	148
Snapshot: "No Such Thing as 'Can't'" .....	208
CHAPTER 4. "Turning Shit into Gold" Embodiment, Bricolage, and Workmanship .....	216
Snapshot. "Had it with all the filth" .....	270
CHAPTER 5. Maintainers' Skin Filth, Exposure, Abjection, Resistance .....	276
CONCLUSIONS.....	325
BIBLIOGRAPHY .....	333
APPENDIX.....	349

## LIST OF ILLUSTRATIONS

Illustration 1. Fieldwork at the Depot. Note differences in clothing between the worker and the ethnographer.. .....	6
Illustration 2. Railway map of Romania. Source: <a href="http://www.interferente.ro">www.interferente.ro</a> . .....	19
Illustration 3. Morning socializing outside the roundhouse.....	30
Illustration 4. Makeshift grill for Codruța’s and my birthday in a dilapidated building at the depot.....	35
Illustration 5. The iconic winged wheels of CFR. Detail from the façade of the Railway Palace. Source: <a href="http://www.uar-bna.ro">www.uar-bna.ro</a> .....	51
Illustration 6. CFR Palace during socialism. Source: <a href="http://www.palatulcfr.ro">www.palatulcfr.ro</a> .....	51
Illustration 7. Logos of CFR. 1. Integrated CFR; 2. Splintered CFR Călători (passengers); 3. Splintered CFR Marfă (freight). Note that the iconic acronym CFR was maintained. Source: <a href="http://www.feroviarul.ro">www.feroviarul.ro</a> .....	52
Illustration 8. Infrastructure and socialist modernity. Source: <i>Lupta CFR</i> , August 1966. ....	56
Illustration 9. The organization of the transportation system in socialist Romania. Note the centralization under the Ministry of Transportation (M.T.Tc). The Railroad Department is featured on the far left. Subordinated to it are the Railway Districts. Source: Mașala and Raicu 1981.....	57
Illustration 10. The organization of the rail district. Source: Mașala and Raicu 1981 .....	58
Illustration 11. The breaking of the rails.....	66
Illustration 12. Map of Grivița Neighborhood. Source: Google Maps. ....	99
Illustration 13. After hours drinking in Grivița.....	103
Illustration 14. After hours drinking in Basarab Station. In the background, an electrical locomotive (left) and a Diesel one (right).....	104
Illustration 15. Stamp commemorating the twentieth anniversary of the 1933 Grivița Strike. Source: <a href="http://www.pinterest.com">www.pinterest.com</a> . ....	105

Illustration 16. Uncovered plaque commemorating Grivița ‘33.....	106
Illustration 17. Map of the Depot: 1. Roundhouse. 2. Overhaul plant. 3. Square shed. 4. Administration building. 5. Electrical technicians’ break room.....	110
Illustration 18. Street view of carcasses at the Bucharest Depot.....	112
Illustration 19. Eroded supporting pillar at the roundhouse. ....	112
Illustration 20. Lunch in the break room. ....	115
Illustration 21. Degradation in the square shed. ....	117
Illustration 22. Work conditions in the welding shop.....	119
Illustration 23. Operational electric locomotive with carcasses in the background. ....	123
Illustration 24. Tardiness in Bucharest. The last column to the right displays the delays expressed in minutes. Source: <a href="http://www.brasovultau.ro">www.brasovultau.ro</a> .....	160
Illustration 25. Disgruntled passenger pretending to push-start the locomotive of a train that had broken down in Bucharest’s Gara de Nord. Photo by Bogdan Iancu. ....	165
Illustration 26. Complaint sample. The petitioner complains about constant delays and ends by claiming that “this doesn’t happen in any other EU country.” .....	169
Illustration 27. Repairing the spring leaf. The red instrument to the right is the defective jack. ....	210
Illustration 28. 1955. Replacing a spring in 8 minutes. Source: Lupta CFR, March 1955.....	213
Illustration 29. Old-style notations on locomotive equipment.....	226
Illustration 30. Shortage of parts force train engineers to drive locomotives with cracked windshields. ....	231
Illustration 31. Use of bodies in repair work. ....	237
Illustration 32. An electrical system’s diagram. ....	241
Illustration 33. Repairing a locomotive’s gearbox.....	242
Illustration 34. A repair manual from Valentin’s tool cabinet.....	246
Illustration 35. T-shaped “Gypsy” spanners. ....	248
Illustration 36. Cannibalized carcass. ....	250
Illustration 37. Building a replacement part from scratch. ....	254

Illustration 38. Electrical improvisation. ....	256
Illustration 39. Valentin in action repairing a space heater. ....	257
Illustration 40. Still from the Dorel advertisement series. ....	258
Illustration 41. Meme mocking “Dorel from CFR.” Source: <a href="http://www.facebook.com">www.facebook.com</a> .....	259
Illustration 42. Meme attributing shoddy improvisational work to “Dorel.” Source: <a href="http://www.facebook.com">www.facebook.com</a> .....	259
Illustration 43. Still from Jobzz.ro advertisement. In this scene, the two mechanics exchange dumbfounded glances. ....	261
Illustration 44. Rooftop power system on a locomotive. ....	266
Illustration 45. Copilu’s hands after replacing graphite brushes. ....	273
Illustration 46. A locomotive’s power switch. ....	282
Illustration 47. Popică’s hands working on the power switch. ....	283
Illustration 48. Accretion of filth. Note the imprint of feet on the soot and oil covered floor of the shop. ....	286
Illustration 49. Writing reads “Attention. Slippery terrain.” .....	286
Illustration 50. Discarded soiled cloth used for cleaning equipment. ....	290
Illustration 51. De-greasing hand cleaning paste. ....	293
Illustration 52. Writing on toilet stall reads: “Maintain cleanliness. Civilize yourselves!” .....	303
Illustration 53. Chalk reads: “European Workman.” .....	311
Illustration 54. Undertaker services ad in first aid box. ....	313
Illustration 55. Nostalgia. Portrait of Nicolae Ceaușescu in a work shed. ....	322
Illustration 56. Nostalgia. Picture of Ion Iliescu in a work shed. ....	323
Illustration 57. Protest sign: "You have turned all railroaders into cleaning women" .....	324

## **NOTE ON PSEUDONYMS, PHOTOGRAPHS, TRANSLATION AND LANGUAGE**

Throughout the thesis, I used pseudonyms to refer to people with whom I worked, and I occasionally changed some of their biographical details in order to preserve their anonymity. I use real names to refer to public figures and to those who explicitly asked me to do so, but in those cases I do not mention the surname.

I am the author of all photographs, maps, and illustrations that are not attributed to nor are courtesy of another party.

Every translation of my interlocutors' words or of citations from the literature published in the local language, is mine, unless otherwise specified. In some cases, the translations of citations from the literature are followed by the original text in the footnote.

I have used letters with diacritical signs for the names of people and places throughout the manuscript. Romanian language is phonetical, which means that each letter of the alphabet represents one sound, although there are a handful of exceptions.

Basic rules for pronunciation are as follows:

c - /k/ - like c in "scan"



- /tʃ/ - like ch in "chimpanzee" when it appears before letters "e" or "i", "ceapă"="onion",  
"cimitir" = "cemetery"

g- /g/ - like g in "goat"

- /dʒ/ - like g in "general" when it appears before letters "e" or "i", "minge" = "ball" ,  
"pagină"="page"

h - /h/ ([h], [ç], [x]) - ch as in Scottish "loch"(but less guttural), or h as in English "ha!"

- (mute) - not pronounced when it appears between letters "c" or "g" and "e" or "i". In  
these cases, "c" and "g" are palatalized, "chin" = "torment," "chemare" = "calling,"  
"Gheorghe," "Ghiță."

x - /ks/ - like x in "six"

- /gz/ - like x in "example"

The letter with diacritical marks are:

ă - /ə/ - like a in "above"

â - /i/ - close central unrounded vowel with no English equivalent. The best way to approximate  
this sound is to attempt to make the vowel in "ski," then retract your tongue toward the center of  
the mouth. In writing it is used inside the word, "pâine" = "bread"

î - /i/ - phonetically identical to â, but used in writing in the beginning and at the end of the word for aesthetic reasons. "a întoarce" = "to turn"; "a urî" = "to hate"

ș - /ʃ/ - sh as in "shopping"

ț - /ts/ - zz as in "pizza"

I use Anglicized forms for place names as these are in common usage (Bucharest instead of București), and local ones for those less familiar (like Târgoviște). For persons and relatively unknown places I use the original spelling, including the use of diacritics.

## ABSTRACT

This dissertation investigates the contemporary nature of public infrastructures in Romania in a postsocialist context of public ownership, chronic underfunding, and enduring disrepair, by focusing on the railway industry. It does so by proposing the notion of "infrastructure regime" as a conceptual framework that captures the concurring articulation and the contradictions of three dimensions of infrastructure: governance and organization, the political entanglements of citizenship, affect, and mobility that socio-technical systems afford, and the material practices of maintaining and repairing these systems.

The Romanian Railways (CFR) were chief vectors of industrial coordination and state-sponsored welfare in the state-socialist substantive economy. Deemed the nation's "main circulatory system," they were hyper centralized and designed to provide universal access to collective mobility. Policy makers tried to repair the subsequent postsocialist decline of CFR by relaxing state control and breaking up the enterprise into smaller public companies at the behest of the EU and international lenders. I argue that the so-called "breaking of the rails" has introduced new contradictions within a now disjointed system that is simultaneously disaffiliated from the state and partially encompassed by it. These contradictions are mediated by and materialized in the degraded qualities of the railroad, which, in turn, underpin the symbolic devaluation of rail services and the work and identities of its servants.

Ethnographically, this study focuses on how passengers and repair workers experience and make sense of these ruined, albeit functional, material technologies politically and

symbolically. While inherently degenerative, brokenness also appears to have generative powers, as passengers and workers deploy varied practical means toward mending brokenness or demanding that it be fixed by the state. Methodologically, this approach required access to both the user's end and to the hidden abode of repair. This was done through mobile ethnography and archival research in the passengers' complaint records filed at Bucharest's North Station, and through participant observation of labor practices at the Bucharest Depot, Romania's most important rail repair shop. Here, at the Depot, technicians at the firm Locomotive Repair maintain machines owned by the firm CFR Călători, the public operator of passenger services. Both firms cohabiting at the Depot have emerged from the splintering of CFR and exhibit the functional contradictions that pervade the system.

By focusing on people's embodied experiences with the degraded material qualities of public railroads, this study investigates the affective, semiotic, and practical consequences of brokenness to understand the politics of infrastructures after Communism. It thus speaks to three domains of anthropological interest: 1) the constitution of modern societies through socio-technical systems, 2) the experience of the enduring effects of post-Communist transformations of the state, and 3) the role that materiality plays in everyday politics. In this dissertation, I specifically ask what the postsocialist desolation of a railroad system, one deeply imbued with socialist modernist ideology, tells us about the contemporary fate of the commons. It also explores how train passengers and rail service technicians reify the state through their encounters with public railroads on the one hand, and on the other, how they strive to negotiate their relations to the state and their identities by presenting themselves as subjects worthy of care and recognition. Ultimately this manuscript demonstrates how public infrastructures remain

embedded in a specific social, political, historical, and economic context, making them ambiguous signs of postsocialist destruction and resilience.

## INTRODUCTION

In 1987, Sandu Popescu began work maintaining train engines for Căile Ferate Române ("Romanian Railways," hereafter CFR) at Depoul București - Călători ("Bucharest Locomotive Depot," hereafter DB-C) in the Grivița neighborhood. Descending from a male line of *ceferiști* ("railroaders"), he landed this job with the national railway enterprise at the same depot where his father was working. Dirty but important work, being a maintainer was a promising introduction to the world of railway employment for an ambitious and technically gifted worker fresh out of trade school. Sandu was hoping to climb his way up the promotional ladder, one rooted in an entrenched seniority system lubricated by an economy of favors, as countless generations of railway servants had done before him, to the level of locomotive driver ("mecanic de locomotivă"). An incomparably cleaner job than a maintainer's, driving passenger trains was an elite position that came with great responsibilities paired with significant financial and social advantages.<sup>1</sup> Two years into his tenure at DB-C, at the end of 1989, Sandu had already graduated from deputy driver's school, the first step toward becoming head driver and having a rewarding career in the public service. He was fulfilling his mandatory military service when Communism suddenly collapsed later that year, as Nicolae Ceaușescu was ousted and killed. There was no way of anticipating the ensuing socio-economic changes that were to alter drastically the railway

---

1. Financially, a train driver made twice or three times more than the average salary of a manual industrial worker, and many supplemented their income by carrying and delivering parcels. Among the social benefits, of particular importance were the military-like uniform, the flexible hours and a sense of freedom, early retirement, and the possibility of traveling within and outside the country.

industry and thwart his prospects. Sandu never made it to train driver and ended up keeping the same job as electrician-fitter for three long decades.

For most of the 1990s, it was more or less business as usual in the rail industry, and a maintenance job at the most important state-run locomotive depot in the country was not all that bad. Sandu earned a good monthly paycheck and enjoyed significant benefits. This was partly thanks to the strength of the railroaders' trade union, one of the most aggressively militant in the country. Benefits included free rail travel for railroaders and their family members (a perk that came quite in handy for someone like Sandu and his wife who commuted to Bucharest from a village 23 miles away), the option of early retirement, and a state-guaranteed pension. A flexible work schedule at the depot also left him with enough free time to supplement his income by working the land and selling produce on the side. With little money but plenty of free time, Sandu painstakingly erected a new family house from scratch within the span of a decade. His job with DB-C also contributed to his self-actualization as worker in a dignified position. It allowed him to do a masculine work that he relished thoroughly, to realize his love of heavy industrial machines, and to earn the reputation of a "super-mechanic" (Mellström 2002: 462; Sanne 2010: 56). Sandu basked in the respect of his bosses and peers and took pride in the social value of his job that provided a vital, if unglamorous, public service.

His fortunes changed beginning in the late 1990s, as the fall from grace of the industry unraveled the stability of his working life. During his career, he worked for four different firms without ever switching jobs. He started at CFR (the socialist-era national enterprise), was then employed by SNCFR (the public monopoly that inherited CFR in 1991), was then transferred to CFR Călători (the breakaway public company running passenger services since 1998), and finally ended up at Locomotive Repair, established in 2001 as a repair subsidiary of CFR

Călători. Cuts in public spending enacted after the 2008 financial crisis and Locomotive Repair's insolvency since 2013, meant that Sandu was making roughly \$400 a month, around half the average wage in Romania, by 2015 when I met him. He also had to spend more on transportation, as the curtailment of job benefits and the deterioration of rail services forced him to commute by car instead of train. His work became more difficult as a growing scarcity of equipment, spare parts, and adequately trained labor made it increasingly impossible to meet the standards demanded from technicians. To add insult to injury, the utter neglect of repair facilities made the job much dirtier than it used to be. Underpaid, undersupplied, and working in a deteriorating physical and social environment, Sandu grew disenchanted with his job. Wary that he might not find another job very easily and unwilling to abandon the beloved machines that were in his care, he held on year after year. He finally quit in 2018. The last straw was an argument with the branch manager over wages, when the boss insulted him harshly to his face. Soon after hanging up his overalls, he took up a driver position with Metrorex, the public company running the Bucharest subway. Last time I saw him, he was wearing a white button-up shirt under a navy-blue V-neck sweater as he waved from the cabin of an underground train. Sandu had finally got the clean job of manning the throttle of an electric train operated by a state-run company to which he had always aspired.

Minus the happy-ending, Sandu Popescu's career and his resilience in struggling with dwindling wages, increasingly more difficult work, and decreasing job satisfaction is a metaphor for what has occurred in the Romanian railway industry from 1989 onward, and tells us something wider about the sweeping transformations of the nexus of state governance, citizenship and labor that public infrastructures mediate materially, symbolically, and politically. This story reveals the continuing consequences of the economic downfall and institutional



unraveling of a deeply embedded socialist-era industrial powerhouse on the labor, livelihood, and social prestige of the manual workers who take care of public infrastructures, as well as on the other Romanians who depend on these amenities for their mobility. "The breaking of the rails" ("spargerea căii ferate") is a commonly used phrase that captures the violent effects of the de-stigmatization and splintering of CFR: the financial ruin, organizational disarray, infrastructural and technological erosion, and the worsening working conditions. One can think of the postsocialist reform of Romania's rail industry as a partially botched surgery. The patient indeed survived the operation performed to rid it of its ailments: gigantism, debt and inefficiency. However, the amputations that it has undergone, and the prosthetics added turned its body into an unrecognizable patchwork mix of policies, institutions, firms, and materialities that functions poorly, suffers from similar symptoms as before, and needs to be kept on life support by a runaway state. Sandu and many other railroaders consider this bungled "breaking" an act of national sabotage on the part of politicians and rail managers, and blame it for the decline of their industry, their estrangement from their jobs, and their loss of social status.<sup>2</sup>

While Sandu's occupational history is a textbook illustration of the degeneration wrought by this breaking, it also exemplifies the generative power of brokenness (Martinez and Laviolette 2019; also, Jackson 2014, and Howe, Lockrem et al. 2015). Public infrastructures necessarily act on the bodies and emotions of passengers who rely on them for transportation, as well as on the workers who are responsible for taking care of them, in ways that engender specific experiences of mobility and labor. Such brokenness can also spur people into action, regardless of whether they share Sandu's commitment to rail machines. Politicians and technocrats might seek reforms, managers might scramble for funding and supplies, disgruntled passengers may protest the

---

2. For similar findings on the effects of British Rail privatization on work identity see Strangleman 2004; for a pattern of adaptation to the market economy different from the disarrayed Western-style division, privatization, and liberalization, see Westwood 2002 on Russian Railways).

quality of service, and technical workers may act as *bricoleurs* and invent improvisations to ensure that infrastructures live another day. Finally, Sandu's persistence in a precarious state job for three decades, and then his sudden move to a better job still in the public sector, illustrates something often overlooked in the study of the former socialist countries in Central and Eastern Europe: the peculiar endurance of the state. In spite of the way the public sector was delegitimized by the pitfalls of centrally-planned economies under state-socialism, and the opprobrium heaped onto it by postsocialist apostles of the free market (who lambasted public companies and their servants as over-manned, inefficient, unproductive and incompetent), the state remains a key presence in the lives of many Romanians and other Eastern Europeans (Jansen 2014; Rajković 2017). The state continues provisioning public services, mobility rights, and forms of employment that amount to a bare-minimum, yet nonetheless existing social safety net for many citizens, Sandu and his former colleagues from DB-C included.

This dissertation is an attempt to understand the contemporary nature of public infrastructures in Romania in a context of public ownership, state disinvestment and chronic material disrepair, by focusing on the railway industry. My long-term fieldwork did not coincide with major calamities in the system, but rather with a long series of non-disastrous but significant technical failures, the steady displeasure of train passengers regarding the quality of rail mobility, and the growing discontent among railroaders regarding salaries and work conditions. The situation of rail transportation in Romania at the time of fieldwork is best captured by Lauren Berlant's notion of slow death: a "physical wearing out" that circumscribes the "condition of [its] experience and historical existence." (2007: 574). For this reason, the dissertation is especially focused on the forms of ruination (material decay, time-space depression, and abjection) and on the ways various actors cope with these material realities.



*Illustration 1. Fieldwork at the Depot. Note differences in clothing between the worker and the ethnographer.*

I use the term "ruination" writ large (*pace* Stoler 2008) to capture the financial, physical, and social degradation of an infrastructure system that had been a central and much celebrated flagship industry during state socialism and even in previous regimes. Under this heading, I consider the unwanted and often contradictory effects of institutional breaking and material

brokenness on the operation, use, and maintenance of collective mobility infrastructures. Specifically, I dwell on an array of antinomies that are simultaneously at play: state withdrawal alongside state encompassment, institutional separation but lingering interdependence, infrastructural survival amidst chronic disrepair, heightened need of maintenance services but the devaluation of repair labor. These contradictions, I argue, are mediated by and materialized in the material qualities (Peirce 1955; Keane 2006; Munn 1977, 1992; Fehérváry 2009, 2013; Robbins 2007) of railroads. Among these qualities are the rail tracks in disrepair making trains go slow and be late, the decrepit machines and second-rate supplies forcing technicians to improvise fixes, and the sedimented layers of filth that pollute unkempt rail repair shops, making workers feel abject and anxious about their status.

By focusing on the ways infrastructural disrepair is produced, experienced, and remediated, this study builds in the space opened up by STS attention to the works of institutions and to the relations between loosely connected elements of infrastructural networks, while retaining a phenomenological sensibility to embodiment, and a semiotic focus on materially-inspired political narratives, labor practices, and social differentiation. It asks: 1) How was the "breaking of the rails" enacted, why, and to what organizational and material effects? 2) How do passengers experience postsocialist rail mobility, and how do they interpret the material qualities of infrastructures in disrepair? 3) What is the role of service workers in keeping technologies in a semblance of a working order? and 4) How do they cope with the material and symbolic degradation of their labor and of their working-class identities? In exploring the struggles of passengers and workers confronted with disrepair, their frustrations and their moments of breakthrough, I employ the bifurcated understanding of experience promoted by American pragmatists. As synthesized by Richard Sennett in his study of the craftsman, experience has two

indivisible dimensions. The affective meaning of experience, the "how it feels," entails the making of an emotional impress. The practical meaning, the "means-to-ends" dimension, involves an event, action or relationship that turns one outward and requires skill (Sennett 2008: 288). Throughout this manuscript, I follow how these two dimensions unfold in relation to broken materialities. We will meet people who are angered, disappointed, offended, or feel belittled, and who then turn to various forms of practical and symbolic action ranging from grumbling and gossiping to writing petitions, making up machine parts from scratch, and cleaning or dirtying workspaces.

### **Literatures: Regimes of Infrastructure and State(s) of (Dis)Repair**

In this dissertation, I propose the notion of "infrastructure regime" as a conceptual framework that captures the concurring articulation and the contradictions of three dimensions of infrastructure: governance and organization, the political entanglements of citizenship, affect, and mobility that socio-technical systems afford, and the material practices of maintaining and repairing these systems. Drawing inspiration from Zsuzsa Gille's treatment of waste regimes, namely how waste is produced, conceptualized, and politicized (2007: 9), an infrastructure regime stands for the nexus of social institutions, culturally governed patterns of use and interpretation, and the practical labor that underpin working order. These constellations of relations can be arranged in various ways depending on political circumstances and the socio-economic outcomes toward which they are geared. In the Romanian case, a state-socialist regime of infrastructure emphasized centralized ownership, unitary regulatory standards, universal access to public services, and the importance of a well-trained and adequately supplied industrial labor force, whereas a postsocialist regime of infrastructure is more likely to be associated with

reduced and flexible state control, differential access to amenities, the privileging of individualized means of transportation, and with a devaluation of manual labor. In the same way, infrastructural regimes in market social democracies like France and Sweden are configured differently than in the diehard capitalist UK or U.S.A. An ethnographer's job is then to explore *in situ* how these constellations are structured in different places and what are their culturally mediated consequences.

Addressed in this manner, the subject of public infrastructures of transportation mediates between several bodies of literature. I draw evidence from and contribute to wider scholarly debates on anthropological and STS approaches to infrastructures, the role that materiality plays in how post-socialist transformations have been enacted and experienced by ordinary citizens, and a burgeoning literature on human responses to brokenness and the values of repair. Ultimately, this dissertation raises important questions about the ways that the material qualities of technologies and the built environment generate affective reactions, symbolic interpretations, and practical solutions as a way to understand the politics and poetics of infrastructures (Larkin 2013).

First, in targeting the governance and organization of complex socio-material systems, my research draws on systemic theorizations that bring humans and nonhumans into the same analytical framework and stress their networked interactions and traceable effects. The primary concern of these perspectives falls on how materiality constrains and invites the effects of things and their uses by people (Hull 2012a: 27). STS (Bowker and Star 2000; Edwards 2003; Hughes 1987; Star 1999), actor-network theory (Callon 1986; Latour 1986, 1996, 2005), and assemblage vitalism (Bennett 2005) have approached infrastructures as socio-material systems that underpin the circulation of goods, knowledge, people, and power in time and space, and that are held

together by a combination of international politics, finance, state policies, and management and labor practices (Dunn 2004b; Collier 2011: 132-133; Ong and Collier 2004; Rogers 2012). From this perspective, railroads are not simply machine ensembles (Schivelbusch 1986), but complex systems of relations (Kockelman 2010) between humans and materials, and technical, administrative, and financial techniques (Larkin 2013: 330). For example, Latour noted that the functioning of the French *train à grande vitesse* requires the perfect coordination of all human and non-human actors (atoms of steel, brakes, gates etc.), and the logistics, management and labor of the train company (1996: 175-177). If harmonious, these alignments act as intermediaries that "transport meaning or force without transformation," whereas misalignments (i.e. defective tracks or striking railroaders) act like unpredictable mediators that "transform, translate, distort and modify the meaning or the elements they are supposed to carry" (Latour 2005b: 39). My analysis of postsocialist railways benefits from this networked approach, as it provides insights into how changes in the socio-material configuration of the system may influence its overall functioning and transform both the experience and meaning of rail mobility. Much different from the French TGV, and for that matter from many other harmonious systems in the West that have captured the attention of STS scholars, railroads in contemporary Romania witnessed the proliferation of intermediaries that hinder smooth processes of travel and labor and have significant political, material, and symbolic consequences.

With respect to the second element of infrastructure regimes, namely how selves represent and understand the materiality of public infrastructures, this dissertation is better served by scholarly works that focus on the social and symbolic functions of socio-technical systems (Larkin 2008, 2013). In these works, material infrastructures are conceptualized as structures that organize meaning (Kockelman 2009) and mobilize affect (Williams 1977).

Infrastructures can thus be conceptualized as privileged material sites of political encounters mediated by material technologies, cultural conventions, and embodied experience. This means that changes in institutional layouts and material alignments are likely to transform the ways that people experience infrastructures physically and emotionally, and the ways they make sense of them politically and morally. As a wealth of anthropological literature (Hull 2012, Ingold 2007, Kaplan and Kelly 1991, Kockelman 2013, Kohn 2013, Laidlaw 2010, and Lemon 2000, 2015) has convincingly demonstrated, actor-network theory tends to sideline such rich cultural specificities of human interaction, affectivity, and interpretation. As Tim Dant put it,

[w]hat ANT fails to do is to study closely the interaction or the lived relationship between human beings and material objects. [...] It is noticeable that there are very few accounts of the perceptual or tactile interaction between humans and objects in the network, few detailed field observations, photographs or use of video to study the process of the network that would allow the material objects to have a presence in the accounts. What are found in the published studies, are textual forms that are produced sometimes by the human participants - engineers reports, publicity statements, transcripts of discussions, summatory diagrams - but often by the sociologist. These can be excitingly irreverent, entertainingly laden with irony and wit and full of interesting conceptual moves - but these textual devices keep the sociologist in control of the play of interpretations and keep the reader at a safe distance from the lived workings of the network. (2010: 81)

Anthropologists, on the other hand, while traditionally less equipped to analyze infrastructures *qua* technical systems ethnographically, are more inclined to consider the ways that material qualities shape what things mean to people (Hull 2012: 27). They are thus more prone to engage with the ways that humans experience infrastructures, and how they socialize, "read," and subvert their workings (i.e. Anand 2011, 2012; Appel 2012; von Schnitzler 2008, 2013). In addition to the insights into the interplay of political rationalities and material technologies of government that the literature on networks and techno-politics affords, my investigation draws on scholarly works that address the symbolism of infrastructures and the memories, desires and fantasies that they encode (Anand et al. 2018; Dalakoglou 2012; Harvey



and Knox 2012; Larkin 2013), especially when they are incomplete or ruined (Benjamin 1999; Gupta 2015; Gordillo 2014; Mains 2012). To answer questions about the ways that encounters with the material qualities of trains and railroads invite political readings, I build on semiotic theories that ground meaning in material forms (Bakhtin 1981; Gell 1998; Jakobson, 1985; Keane 1997, 2003, 2006; Laidlaw 2010; Munn 1992; Peirce 1955). A focus on materially grounded affective and semiotic relations will serve to apprehend how people make connections between the functioning of the rails and political actors, ideas, and social categories. For example, the sensuous qualities (color, texture, smell, speed etc.) of objects can produce powerful affective responses and morally infused judgments of value from their users (Fehérvári 2013; Lemon 1998; Manning 2012). As Fehérvári's research demonstrates, everyday interactions with the all too often poor material qualities of state-provided goods and infrastructures informed Hungarian consumers' conviction that state-socialist planners undervalued them and backtracked on the promise of delivering a superior social modernity. Consequently, the embodied experience of shabby materialities led to the citizens' alienation from the Communist Party, and to the idealization of Western capitalism as provider of a "normal life" (2009: 428-429).

Materialities in disrepair can be understood as qualisigns that have the potential of becoming affective and meaningful (Manning 2012: 7). However, these relations of signification are not automatic (Gell 1998; Peirce 1955; Silverstein 1976) but mediated by semiotic ideologies. These are historically contingent assumptions about what material qualities are recognized as socially significant and about who and what can be an agent (Keane 2003). The historical construction of such semiotic ideologies has particular relevance with respect to how ordinary citizens imagine large-scale entities like states and corporations and how the latter respond to their critics (Kirsch 2006, 2014) and provides an avenue into exploring the

post/socialist social life of the state (Ssorin-Chaikov 2003). In Soviet-style socialism, the state took on the role of sole provider for the satisfaction of human wants (Berdahl 1999; Fehér *et al.* 1983), and with infrastructures playing a pivotal role in what might be called the socialist state effect (Mitchell 1991). For instance, Soviet electrification programs precipitated particular state-sponsored images of modernism in Mongolia and Buryatia (Humphrey 2003; Sneath 2009; for postcolonial settings, see Barker 2002,2005; Mrázek 2002, and Thiranagama 2012). This overbearing presence of the state that left little outside of its purview also made it vulnerable to citizens' criticism of the goods and service provided (Baumann 1991) and to alternative imaginaries of society (Humphrey 2005). As this dissertation will show, the historically built agentive relation (Laidlaw 2010) between infrastructures and the state underpins the reification of the state by citizens (Laszczkowski and Reeves 2017).

It is crucial to note from the start that unlike many affect theorists (most notably Massumi 1995, Stewart 2007, and Thrift 2008; for a systematic critique see Leys 2011), I do not treat affect - *qua* embodied and emotional experience -, and semiosis - the culturally-mediated processing of signs and the production of meaning - as fundamentally mutually exclusive (Harkness 2015; Keane 2008; Lemon 2008, 2015; Munn 1992). Rather, I draw inspiration from Sasha Newell's (2018) attempt to bridge the gap between a growing scholarly interest in affect and embodiment and the semiotic engagement with the role of material things in generating meaning. Specifically, he proposed the notion of "affective signs" as a way of enabling anthropologists to "trace both the ways signs affect the body and how the body affects semiosis, producing feedback loops" (2018: 3). The reader will learn from each chapter of this dissertation about how decrepit infrastructures galvanize the bodies and emotions of passengers and railroaders: there will be people whose backs and limbs ache, whose aesthetic and olfactory

senses are offended, who are angry, disgusted, disappointed, or demoralized. These individually experienced affects, however, will also be shown to take on a rich semiotic life. They are translated into loud grumbling that animate other disgruntled passengers, into written complaints to which rail service operators are compelled to respond by creating new written signs, into improvised technical fixes that technicians use to keep technologies working and that force other workers to heed such novel material conditions, or in the petitions and placards that workers use to voice their protests and to spur rail administrations and the government into action.

Finally, a discussion about the politics of maintaining and repairing degraded infrastructures is in order. Anthropologists have theorized how promises of infrastructural modernization can mobilize feelings of desire and pride, but can also stand for the foreclosing of progress, generating experiences of frustration and abjection (Anand 2012; Appel 2012). Most often, these functions are addressed from the vantage point of the moment when infrastructures are completed and functional. Contrary to this tendency, Akhil Gupta (2015) suggests that ethnographic inquiries are better situated in the liminal phases of infrastructure, between a project's inception and completion, between functionality and disrepair, wherein the generative and degenerative potentials of material structures are laid bare. In focusing on the liminality of disrepair, this dissertation also highlights how brokenness and failure compel people into practical action guided by ethical commitments (Carroll et al. 2017; Martinez and Laviolette 2019; Sormani et al. 2019). This literature provides a general framework for understanding the resources, skills, and material interactions (Dant 2008, 2010a; 2010b) that go into the process of maintaining and repairing vulnerable material infrastructures.

Following Christopher Henke (2000), I use the term "repair" in its ethnomethodological meaning: the practice of mending the social order, whatever that order is composed of. As

ethnomethodology's "breaching experiments" illustrate, social order is an empirical phenomenon of everyday life that emerges from practical interactions (Garfinkel 1967). Scholars with an interest in maintenance and repair practices have sought ways to extrapolate Garfinkel's principles from the order of words to the ordering of objects as well (Denis and Pontille 2014; Henke 2000). Much of the literature on repair (Harper 1987; Orr 1996; Drazin 2019) depicts this type of work as an artisanal form of labor that draws on the imaginative creativity and skill embedded in what Marx called species being (Dant 2010, Ingold 2000). Imagining repair workers by analogy with artisans who are "dedicated to good work for its own sake" (Sennett 2008: 20) and who feel rewarded "with the pleasure and satisfaction of having achieved mastery over the tools and objects" (Dant 2010: 7) foregrounds a romanticized version of repair that gives technicians a "greater sense of agency and competence" rooted in feelings of self-reliance (Crawford 2010: 6-7, 51) to the effect of erasing any structural factors that may underpin, invite, or constrain such work.

Many ethnographic inquiries investigate work practices situated in private firms in the developed West (see Henke 2000 on building maintainers in the USA; Dant 2002, 2008 on car mechanics in Britain; Denis and Pontille 2017 on maintainers of Paris subway signs), where the availability of technologies is often taken for granted (if not by workers themselves, at least by ethnographers). Others highlight the tremendous creativity of repair amateurs and specialists in the emerging global South (Verrips and Meyer 2001; Houston et al. 2016). I suggest that anthropological knowledge of repair and maintenance practices can be greatly enriched by shifting the ethnographic lens onto the Eastern European semi-peripheries of global capitalism, where the plenitude of resources is far from guaranteed, and where the work of maintainers in charge of critical infrastructures is both increasingly crucial and more degraded than ever.

## **Why the railways? Theorizing infrastructure from the East**

Why bother in 2020 with studying a clunky infrastructural technology born out of the Industrial Revolution? The late historian and train buff Tony Judt answered this question best. "More than any other technological design or social institution, the railway stands for modernity. No competing form of transport, no subsequent technological innovation, no other industry has wrought or facilitated change on the scale that has been brought about by the invention and adoption of the railway" (Judt 2010). Over the past half-century, railways have yielded much ground to other forms of transportation like cars and planes that are faster, more flexible, cheaper to make and to run, and less difficult to govern. Nonetheless, we all live, willy-nilly, in a world that has been shaped by the power of tracks and trains. The global decline of a once awe-inspiring industrial technology that revolutionized statehood, political authority, modern corporate management, the experience of time, space, and of collective sociality (Chandler 1965, 1977; Schivelbusch 1977, 1978), speaks volumes about the political and economic changes of the last decades and their impact on the material substrates of collective life. Drawing on empirical evidence from Romania's rail industry, I aim to contour a theory from the East (Kalb 2015) of infrastructure that can help address the role that the built environment has in the political enactment of the (post)socialist state (Fehérváry 2013; Humphrey 2003, 2005; Verdery 1991), and the specific affective and symbolic effects of the contemporary condition of public infrastructures that is characterized by permanent disrepair and provisionality (Khalvashi 2019).

Romanian railroads are a particularly revealing site for exploring the unplanned effects of neoliberal-style transformations of the state sector on public infrastructures and on the people who use and take care of them for a number of reasons. First, rail industry developed as a state institution and remains, to a great extent, under governmental control even in the aftermath of

post socialist de-statization and institutional reform. Practically and symbolically central to the nation-building project of the 19<sup>th</sup> and early 20<sup>th</sup> centuries, railroads have been intimately linked with ideals of political sovereignty, economic modernization and social and cultural emancipation. Communist governments perfected the centralization process that had begun seven decades earlier. They nationalized the few remaining lines that were not already under state control and integrated the rail system into the centrally planned substantive economy as a backbone of industrial development and social welfare. The frequent use of organic metaphors during the state-socialist period to describe railroads illustrates best the social and economic embeddeness of the industry and the importance invested in it. As party secretary Nicolae Ceaușescu proclaimed soon after he took power in 1965, "Railroads represent the main circulatory system of the country. The supply of all economic facilities with raw resources, the efficient and ample satisfaction of the population's needs with consumer goods, and the flawless circulation of passengers depend on their good functioning." (Ceaușescu 1967: 6)

The neoliberal onslaught against state dirigisme in the wake of Nicolae Ceaușescu's overthrow in 1989 put the rail industry through a gradual process of de-statization, but without the actual evacuation of the state from its governance. This process began with the transformation of CFR into a public monopoly, followed by the shedding of many of its social functions, and finally by the organizational splintering of the monolithic enterprise into state-run firms and the introduction of corporate governance into their management. While still alive, the rail system is now a radically different beast from the tightly knit organism of the socialist era. It consists of a mix of public and private elements that relate to one another in heterogeneous ways that produce new forms of interdependence as well as functional imbalances and disharmonies between the new firms. Therefore, such a focus on the institutional reshuffling of a historically

integrated system is able to reveal key alterations in the public sector associated with state contraction, disinvestment and liberalization, and their spiraling unforeseen effects. The effects of this dynamic process of state divestment and continued encompassment by the state, the result of what Karl Polanyi (2001[1944]) labeled the double movement of dis-embedding and re-embedding, are simultaneously political and material. In this dissertation, I strive to reveal the new messy, dysfunctional mixture of forms that have emerged since the late 1990s in the rail industry (for a counterexample, see Gaggio 2006 on the workable horizontal economic integration of jewelry firms in Italy following the industry's vertical disintegration).

Secondly, railroads are not only institutions, but also public infrastructures of mobility that act as an interface between people and the state, channeling power, citizenship and consumer's rights, and thus focusing political contestation. Public infrastructures, as tangible manifestations of the relationship between people and otherwise abstract state and supra-state authorities, public infrastructures, are a realm where the state or the market materialize or fail to materialize a great proportion of the social contract (Dalakoglou 2017; Jovanović 2019). Unlike in the capitalist West where infrastructures were expected to be out of sight and out of mind, functioning as reliable systems of substrates that become symbolically visible only upon breakdown (Robbins 2007; Star 1999), they are rarely silent and invisible in (post)socialist countries where the material environment has been deeply politicized historically (Fehérváry 2013; Humphrey 2003; Schlegel 2016), and presented as "emblematic of the state and the political community itself" (Coleman 2014: 461; also see Collier 2011: 28 and Dalakoglou 2012: 585). Throughout most of the 19<sup>th</sup> and 20<sup>th</sup> centuries, modern forms of state governance all over the Global North promoted what Graham and Marvin (2001) called the "infrastructural ideal": centralized infrastructures and universal access to the amenities of modern life. Under

state-socialist developmentalism, infrastructure was thought to be both a precondition for social progress and an index of its achievement (Humphrey 2005; Sneath 2009; Pedersen 2011). Alongside a guaranteed job, housing, education, subsidized food, healthcare and culture, the provision of infrastructural amenities (mobility, electricity, plumbing, heating etc.) had been pivotal economically and ideologically to the welfare of the socialist social contract (Jovanović 2019) and to the construction of a social modernity. Such amenities were made available very cheaply, or downright free to all working citizens, thanks to the ideological imperative of fostering a sense of equality and solidarity of the collective (Tuvikene et al. 2019). As such, the wide availability of lavishly subsidized infrastructural amenities was pivotal to the enactment of a social modernity that socialist states promised would be superior to Western capitalism (Fehérvári 2009; Verdery 1996).

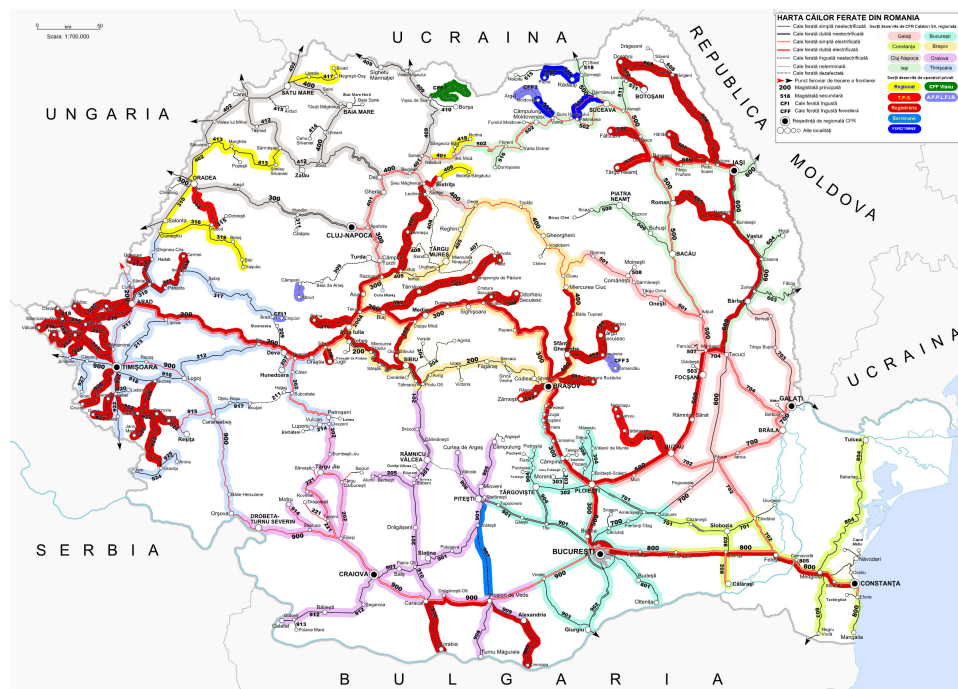


Illustration 2. Railway map of Romania. Source: [www.interferente.ro](http://www.interferente.ro).



In keeping with this contract, state-socialist governments greatly democratized rail transportation, which were seen as "one of the most important means of showing the regime's strength and empathy towards ordinary people" (Ştefan 2013: 215-6). Communists deemed mobility a universal right. They kept fares low through massive state subsidies, had factories pay for workers' commutes, and made trade unions shoulder leisure travel costs for workers (Ştefan 2007: 122). The splintering of unitary infrastructure governance that began in the West as early as the late 1970s, and encroached upon socio-technical systems in Eastern Europe beginning in the 1990s, involved not only the emergence of novel institutional forms that rely to a lesser extent on central governments and introduced marketization and liberalization in some sectors of infrastructure provisioning (Collier 2011: 206). It also remade rather than revoked mobility rights. At the same moment the state was relaxing its control over infrastructural development and mobility provisioning and was disbanding the tightly integrated rail company in charge of railroads, legislators also reaffirmed the state's commitment to provide mobility welfare. This was done by passing legislation that defined rail transport as a "social service." While train transportation became more expensive, the state upheld discounts, and in some cases expanded the gratuity schemes. Unlike the universality of yesteryear, mobility rights have become more differentiated, with only those categories deemed worthy or in need (schoolchildren, students, pensioners, disabled persons, etc.) enjoying them (Haney 2002).

Thirdly, railroads are not only state institutions and public infrastructures, but also material structures that enable the mobility of people *en masse* and influence their embodied experience of time and space. The state's disinvestment from the rail system led to a correlate reduction in the quality and status of public services. Krisztina Fehérváry noted, for example, that one of the ways that modern socialist citizenry had been dismantled in Hungary was "the

erosion of quality of public spaces, facilities, and services with the loss of state subsidies" (2013: 166). Throughout Central and Eastern Europe, public transportation became increasingly associated with the underclasses (manual workers, pensioners, Roma people etc.), as the emerging middle classes had grown to own personal cars which they use both as means of mobility and as symbols of class status (Curteanu 2013; Patino 2008; but see Lemon 1998 on the Moscow metro for a valuable counterexample). The devaluation and neglect of public transportation in Romania materialized in unkempt tracks, slow speeds, and staggering delays is but one symptom of broader processes of state transformation. The restructuring of state activities toward subsidizing the private sector and the middle classes (Stenning et al. 2010-34) is manifested in massive investments in types of technologies that are structured to promote individual participation to the detriment of established state forms that united people together in and through collective infrastructural systems. The transition from rails to cars is actively supported by the Romanian government through investments in roads and highways and through several state-sponsored programs that incentivize the replacement with old cars with new ones. This transition from collective transit to individualized auto-mobility is analogous to the rise in prominence of other kinds of atomized infrastructures like cell phones and solar panels that are less reliant on massive gridded infrastructural commons.

As material objects with specific qualities, rails, trains, and other machines present themselves to the senses of their users and of those workers who take care of them. At the same time, these qualities afford interpretation, often cast in political terms. I focus on a crumbling contemporary infrastructure system that had served as a chief vector of social modernity and state-sponsored welfare in state-socialism, and that continues to function to this day, albeit in a substantively transformed guise, thanks to the affective and semiotic potentials of its materiality.

Encounters with broken materialities engender embodied experiences and emotional reactions among infrastructure users and maintainers. Affectively speaking, passengers may feel stuck in trains that are frequently tardy and often so unkempt that it offends their senses, making them grumble to one another, confront rail servants, or write strong-worded complaints demanding the recognition of their experience through official apologies, as well as that the system be repaired or privatized. The ruin of machines and workplace amenities leads to the accruing of material residues in rail workshops that technicians experience as "filth" that dirties and sickens their bodies, leaving them feeling undervalued and demoralized (Douglas 1966; Hankins 2014; Mollona 2009), as well as nostalgic for a past when they were both better equipped to take care of a vital infrastructure of modern life and better taken care of as citizens and workers (Archer 2018; Carrier and Kalb 2015; Kojanic 2014, 2015; Petrovic 2010). Semiotically-speaking, the qualities of infrastructure not only affect people's bodies and their minds, but also inspire interpretation. In broad terms, infrastructural qualities index ideas about governance, citizenship and consumption among their users. Romanians often take the poor qualities of infrastructures as signs of governmental neglect and corruption, societal disorder, and cultural and economic backwardness. The logic linking infrastructures with state provisioning and the expectations of modern life baked into these systems was fostered during state-socialism and has continued to be a major animus of politics since. Rail workers tend to interpret economic and material ruination of their workplaces as indicative of their declining status as railroaders and workers more general. For technicians, filth and other ambiguous materialities they encounter on the job connect the dots between the transformation of work as a practical, fundamentally transformative and value-generating activity, and that of labor as a category of political economy. This dissertation thus emphasizes the links between one's political subjectivity and the sensory

engagements with the materiality of the railroads. Passengers stuck at a junction in a stinking train car, the drivers who steer the tremendous power that locomotives unleash, and the workers who wrestle with their deafening noise, grime, and crushing weight, are part of a necessarily interdependent and totalizing system of trains, tracks, engines, and human bodies.

In sum, public railroads are important to study, and to do so ethnographically, because they allow us to examine closely: 1) the changes in the political economy of the state through a new lens, that of infrastructure management, use, and repair; 2) the ways that postsocialist macro-economic processes shape everyday life in terms of the affective impact that the material qualities of infrastructure bear upon the experience of citizenship, and its relationship to the spatial mobility of persons; 3) the practical knowledge, material interactions, and social relations allowing for the survival of these decaying structures. Put differently, Romanian railroads are a privileged site where the political-economic production of disrepair, the embodied experience of decaying materiality, and the efforts to keep destruction at bay are laid bare. Exploring the affective and semiotic generative power of railroads in disrepair, I contend, is key to understanding the politics and poetics of infrastructure (Larkin 2013; Lemon 2018; Nolte 2016; Graham and Thrift 2007; Schwenkel 2013, 2015) in a postsocialist context marked simultaneously by enduring politicization of the built environment and by a widening infrastructural gap (Dalakoglou 2017).

### **Methods: Fieldwork, Labor and Commute**

Although I had read many studies about macro-level changes in Eastern Europe and the global economy and fine-grained ethnographies of ordinary people coping with these momentous changes before starting fieldwork in Romania, understanding how the relations of citizenship and

labor mediated by state-sponsored infrastructures shift in relation to larger scale political-economic changes required that I gain firsthand experience of the everyday life of public transport commuters and of railroad workers who are differentially affected by these structural transformations. As I was developing this project in preparation for fieldwork, I grew interested in the ways that organizational transformations and austerity policies impact the material functionality of vital systems, and how this materiality influenced patterns of use, on the one hand, and the work practices that go into maintaining them on the other.

My theoretical commitment to approaching infrastructures in this way thus required access to both the front- and the backstage of infrastructural systems, namely the behind-the-scenes workings of the rail yard system in contrast to what is seen and experienced by passengers. This led me to spend twenty months spanning between 2015 and 2017 in Romania studying the post-socialist lives of state-run railroad enterprises by doing mobile ethnography with train commuters and undertaking participant observation of machine maintenance and repair. I spent the bulk of that time at the Bucharest Locomotive Depot (DB-C), where I shadowed manual workers employed by Locomotive Repair Ltd., who were tasked with taking care of locomotives that pull passenger trains operated by CFR Călători. When not at the depot, I was either traveling along with commuters and occasional riders or doing archival work at the Public Relations Bureau in Bucharest's Gara de Nord (North Station).

Deploying these research methods in the aforementioned sites enabled me to accumulate roughly 250 pages of handwritten field notes, approximately thirty hours of audio-recorded interviews and free-form discussions, and thousands of pages of petitions and complaints. In addition to these primary sources, I put together a considerable stock of media articles ranging from the weekly paper of the socialist-era railroaders' trade union, *Lupta CFR* ("Railroaders'

Struggle"), to chronicles of post-socialist reforms published by daily newspapers like *Evenimentul Zilei* and *Romania Liberă* in the 1990s, and to contemporary features concerning infrastructure and railroads published in a variety of Romanian and international outlets. These methods gave me access both to the frontstage of infrastructure – its organizational history and regulatory regimes, its public representation, and the experiences of everyday users who encounter technological systems through the mediation of their bodies – and to the backstage of socio-technical systems, or the hidden abode of maintenance and repair (Goffman 1959; Henke 2000).

### *Frontstage: Regimes of use*

I approached the front stage of rail passengers' experience through two interlinked methods. Mobile ethnography is a means of conducting participant observation that involves the participation in patterns of movement while conducting ethnographic research (Sheller and Urry 2006). It consisted of me traveling on a multitude of long and short-distance routes using a variety of means of transportation, either on my own or accompanying my research collaborators on their commute.<sup>3</sup> During these trips, I attempted to grasp the material, affective and social qualities of transportation: I took careful note of spatial arrangements and material qualities, recorded my own embodied sensations, and paid attention to how other passengers interacted with one another and with transportation staff, how they navigated the material environment, and to the conversations they entertained. Using my own body as research tool provided me with

---

3. For nearly a year, I commuted several times each week between Bucharest and Târgoviște by riding both state-operated and privately-owned trains, as well as by road alternatives provided by private firms. In the summer of 2018, I took several research trips to Grădiștea and Giurgiu, two localities that have been disconnected from rail infrastructure after a rail bridge had collapsed in 2005. As a means of investigating what forms of mobility ruination begets, I travelled back and forth in cramped shabby minivans ran by hawkish private transport firms that charge extortionate fares, and I accompanied blue-collar commuters employed in Bucharest who preferred hitching rides. Additionally, I took several long-distance trips from one corner of the country to the other so that I could immerse myself sometimes painfully deep into both the material and social universe of Romanian trains.

firsthand sensorial perspectives into the material aspects of mobility, into the embodied experience of infrastructure use, and into the affective vibrations of moving with others (Bissell 2009).

Archival research complemented immersion into patterns of movement and into the material universe of public transportation. Examining the petitions and complaints filed against CFR Călători, the state-run passenger services company, with the main train station in Bucharest, the busiest rail terminal in the country, afforded me a welcome glimpse into other passengers' narrations of their material encounters with public infrastructures in ways that expanded and challenged my own assumptions and experiences that were undoubtedly inflected by my class position and habitus. In November 2016, the company granted me access to the passenger's logbook ("jurnalul călătorului"), a dossier that contained all the claims introduced that year by passengers at Gara de Nord. By November, the logbook that was kept at the station's Public Relations Bureau contained over 700 entries that totaled roughly 1200 pages of handwritten text and justificatory evidence such as photocopies of train tickets, pensioners' and students' discount coupons, and photographs taken by passengers.<sup>4</sup>

Petitions and complaints proved heuristically valuable thanks to both their content and form (Hull 2012). I mined the content of these documents to understand how passengers translate into writing their individual and collective experience of the qualities of state-operated trains (such as timeliness and cleanliness), and how technological malfunctions and other material misalignments intersect affective dispositions (such as anger, shame, fear and disappointment) and inspire political narratives (such as critiques of the state and demands that the rails be privatized). Petitions also provided insights into the ways the company responds to problems

---

4. I am aware that, like any archive of complaints, the passenger's logbook gave me access primarily to instances of disappointment. Nonetheless, the themes of complaints match my own firsthand ethnographic experience traveling and talking to passengers, and praise was rare.

raised about the quality of its services, and into its own logic of explanation that eschewed political interpretations in favor of neutral descriptions of technical causes for material failure. Attention to the material form of petitions and complaints and to their circulation also revealed how the relationship between various state-run companies and between different branches of the same company is structured. Finally, the form of documents also provided clues into the ways the state, through one of its networked institutions, interpellate citizens/consumers through the use of official documents.

### *Backstage: Regimes of maintenance*

Gaining access into railroad facilities like this one is not easy. Official regulations restrict the access of outsiders to railroad settings that are deemed spaces of national security and zones of transportation safety. Company top brass, branch managers, and workers are also not particularly keen on allowing people in, as they are wary of potential undercover journalists embarrassing the company by exposing the advanced ruin of workplaces. Their caution is also rooted in fears that Ministry or company inspectors may seek to penalize transgressions of labor discipline, or that law enforcement may be investigating the theft of fuel and spare parts.<sup>5</sup> These circumstances turned my quest to gain entry to the Depot into a convoluted process that involved cultivating political relations, navigating company hierarchies, and negotiating social and kinship networks. In many ways, the very roundabout motions I had to go through to get in illustrate how things work in state-run companies and how relations between them unfold.

---

5. While not without a kernel of historical truth, these fears are misplaced in the contemporary context. For many years, stealing diesel fuel had been a lucrative side-business in which many workers dabbled, often at the behest of managers or with their tacit approval. The phenomenon was so widespread, especially among those who lived in the countryside and could put the fuel to use in agriculture, that transfers from Diesel locomotives to electrical ones (dubbed "barren" in depot jargon) were powerful disciplinary measures. During my stay at the depot, I have heard people being suspicious about theft, but never witnessed such practices. Technicians insisted that increased surveillance and dwindling fuel resources made appropriation difficult to undertake and to conceal.



The public relations manager of CFR Călători, who was adamant about promoting the "human side" of the company, took an early interest in my project. After acting as an intermediary in an interview with the company's strategy manager, she agreed to facilitate both my access to passengers' petitions and complaints and my research at the Depot. The PR director was an entrée into a network that I had been building for months, with various degrees of success. It started with an ex-colleague from my journalism years who provided me with the personal phone number of an elected representative from Târgoviște who had taken a position against the planned closure of a rail line in his constituency. After granting me a brief interview, the parliamentarian furnished me with a long list of phone numbers belonging to rail bureaucrats and stationmasters along the Bucharest-Târgoviște route, and recommended I mention his name when calling them. This granted me access to employees from Târgoviște station working both for CFR Infrastructură (the firm that administers rail infrastructure) and CFR Călători (the state-run passenger service operator) where I did the bulk of my preliminary research. Through this interaction, I learned that the local stationmaster was a friend of the company's PR manager. She was herself from Târgoviște and stemmed from a railroad family that included her father who, incidentally, had preceded the incumbent stationmaster. The acting stationmaster put me in contact with his friend, the PR director, who then put in a good word for me with the CEO of CFR Călători and with representatives of the Ministry of Transportation, who finally signed off on my official letter requesting access.

The letter of approval designated me as a "visitor,"<sup>6</sup> and only granted me access to the depot spaces occupied by white-collar clerks working for CFR Călători, not the workshops where blue-collar technicians from Locomotive Repair Ltd., the maintenance and repair

---

6. Getting an actual job at the Depot was out of the question given my utter lack of qualification, the hazards of the job, and the critical public importance of repair (i.e. the possible consequences it may have on future passengers).

subsidiary, worked. For this reason, I spent my first month at DB-C almost exclusively with clerks in the central administration building, following bureaucratic procedures, the trail of documents, and the conflicts that often emerged over the procurement of supplies and spare parts, the work schedule of train drivers, as well as over instances of labor conflict occasioned by management's investigation into alleged misconduct by train drivers. This was not my ideal research site. I soon began making inroads into the maintenance and repair part of the depot, thanks to some unexpected circumstances. My arrival coincided with troubles for the administration of DB-C, as rumors had it that the director was about to be sacked for mismanagement. Due to this tense climate, I was dumped onto Alexandru, a young and affable clerk with whom I was to become close friends. The reason he was stuck with me was because he was the son of the company strategy manager whom I had interviewed before and was relatively shielded from any trouble that my presence and reporting might cause. Fortunately, the young clerk had befriended many of the workers, and was thus able to introduce me to Popică and Valentin, the depot's superstar electricians who agreed to take me under their wing and show me the ropes. Alexandru also persuaded the Locomotive Repair Ltd. managers at the depot to tolerate my presence without demanding any additional permits.

To say that Locomotive Repair managers were not happy with my presence would be an understatement. Not only did they avoid talking to me, but the head manager snapped at me several times for always being around, while one of his deputies warned workers that I was a spy for CFR Călători, the main client of the repair enterprise. While management's attitude did shut some doors, it opened others rather wide: the hostility of bosses earned me the sympathy of workers. During my first weeks there, technicians mocked me in a friendly tone for acting like their supervisors; that is, for observing passively instead of actually being useful and for wearing

"civilian" clothes rather than coveralls during working hours. Some of their suspicions that I was a transportation official, a spy, or an engineer preparing to take over the workshop were dispelled after a moment of *ad hoc* solidarity. One day, when some workers were smoking cigarettes and sharing gossip in a locomotive cabin, I caught a glimpse out of the corner of my eye of the much-reviled shop manager who was approaching. I alerted the crew immediately to put out their smokes and get back to work, then, in a Geertzian fashion (Geertz 1973), I ran out of a back door, fearing that my presence would tip off the manager to the slacking and that I might get once again scolded. News of the event spread like wildfire through the depot, with one worker who was quite the chatterbox telling stories about how I was good at keeping watch and mocking the cowardliness that made me "bolt out like [my] ass was on the line." Regardless of how embarrassing the process of building rapport was, it enabled me to overstay managers' welcome as well as to shake off the time constraints specified in the terms imposed by CFR Călători.



*Illustration 3. Morning socializing outside the roundhouse.*

Not being particularly welcomed by the bosses of the repair enterprise, I tried to minimize both my exposure to their suspicious eyes and consequently the amount of trouble workers might get into because of me. I spent most of my time with one team of 16 technicians (2 women and 14 men) who specialized in electrical engines. The crew operated in the main repair building - the so-called “roundhouse” -, on fixed 8-hour long shifts from 7 am to 3 pm. They were tasked with periodical check-ups and the occasional unscheduled repairs. Locomotive repair requires skilled labor and involves great responsibility, since the locomotives serviced pull passenger trains. For this reason, I was not able to immerse fully into the highly complex industrial work that technicians perform by actually working alongside them. Instead, research consisted primarily of shadowing workers while doing their job (i.e. taking note of hierarchies on the shop floor, following the unfolding of work tasks, and paying attention to the materials they used or lacked), and interviewing them on the spot about what they were doing. Although the bulk of my time was spent with workers from this workshop, following one or the other around the Depot as they went about their daily jobs enabled me to become familiar with other work sectors, including the so-called square shed where repairmen worked around the clock, and the overhaul plant where heavy duty mechanical repairs were done.

While hanging out with the electrical repair crew, I spent many hours watching technicians taking care of locomotives. Work mainly consisted of periodical check-ups, when all electrical, electronic, and mechanical components of a machine had to be verified visually, by touch, or with the aid of special measuring equipment. Ideally, these inspections involved checking whether all electronic parts were properly connected to their slots, and that electrical sub-assemblages were clean, insulated, and in proper working order, that mechanical moving parts were properly sealed and lubricated. Given that most locomotives were old and worn-out,

and that spare parts and equipment were in short supply or outright missing, inspections rarely worked smoothly. Often workers were faced with broken down machines that had to be fixed rather than simply verified and let go. This involved troubleshooting efforts followed by attempts to find solutions to fix the problems discovered. The lack of spare parts forced workers to cannibalize other machines for recyclable parts and to improvise temporary fixes by repairing faulty pieces. In effect, the majority of locomotives were being green lighted despite not everything within them being fully operational.<sup>7</sup>

My lack of qualifications did not mean that I was a fly on the wall, but rather that I only intervened when and if technicians asked for my help. These tasks were most often the "feminized" ones that involved supportive, or affective labor (Hardt 1999), and that were usually assigned to trainees or the lesser skilled. This meant holding lamps so that workers could see better, retrieving and handing them tools, cleaning spare parts and equipment, serving as messenger between workers and foremen, doing the dishes after lunch, taking the rubbish out, and running various errands inside and outside the depot. Since labor is never only about toil and drudgery, research also entailed engaging into the social practices and rituals associated with work. I participated in bureaucrats' and workers' daily rituals of commensality, gambling, gossip, banter and practical jokes. I also partook in the occasional moment of celebration (i.e. barbecues occasioned by birthdays and namesake days) or memorial ceremonies (i.e. of a relative's death) organized at the workplace, and in episodic sessions of after-work drinking either in the shop or in a run-down tavern in the immediate vicinity of the depot. Socialization occurred in other spaces as well. Some of the workers took me along on their commute home, invited me to dinner, and introduced me to their families and friends. Socializing while on the job gave me access to a

---

7. This recalls a scrap yard kind of repair process rather than a national railroad warehouse where one might imagine new parts would be made available and workers would only have to worry about the diagnostic and replacement.

distinctive masculine working-class pattern of work and personhood. While did I get the chance to interview and shadow the two women electricians on the job, the powerful gendering of the workplace precluded my ability to gain similar access to their lives. They never had lunch at the same time as the men, and either ate alone or in the company of women from other divisions. They rarely participated in celebrations, and I never saw a woman hanging out for drinks after the shift. Throughout the dissertation then, unless I specify otherwise, "workers" are male.

Workers were at best partial to granting me formal interviews. Not in spite of our rapport, but rather because of it. "Can't we just talk like friends?" Popică would say in response to my suggestions that we should have a proper sit-down and get his life story on record. Instead, we had conversations shouting over the whirring of live engines in locomotives' machine rooms, in the break room over lunch, and over smokes. Nevertheless, neither Popică, nor his colleagues, objected to me recording conversations while working and over the duration of meals. To do so, I would place a digital recorder in my chest pocket, ask for permission to turn it on, then stick a red dot sticker above it so that people knew it was on and could tell me to turn it off. When managerial or clerk staff were around, I would usually turn off and conceal my recording equipment to avoid having my interlocutors or myself questioned about it. Whenever I could take a break, I would jot down a few key phrases, words or events in my notebook or in my phone that I also used to record snippets of talk and interviews. At the end of the workday, typically around 3:30 pm, unless the workers would invite me for drinks or to accompany them on their daily commute, I would go home and write detailed descriptive field notes by hand in a notebook. Every week I would type these notes into a word processor, adding transcribed fragments of conversation where suitable. This technique of recording allows for the verbatim citations of oral speech throughout the dissertation.

Understanding the effects that macro-level organizational changes had on the infrastructures that were being serviced and on the very infrastructures (i.e. workshops and technical workers) that underpinned the functioning of these systems required research in some secondary sites operated by other firms that have emerged from the break-up of CFR. In Târgoviște (Dâmbovița County, 50 miles north-east of Bucharest), I shadowed two track inspectors (“revizori de cale”) employed by CFR Infrastructură on several day shifts between September 2015 and May 2016. The work of these inspectors consisted of walking on the tracks on foot for 19 kilometers every day to assess the integrity of the line.<sup>8</sup> Most of the tasks required of the track inspector used to be done with the assistance of specialized machinery, but due to the chronic underfunding of CFR Infrastructură, the job has reverted to the embodied knowledge of workers, primarily on secondary, less-traveled lines, where the speed of trains is limited. In Petroșani (Hunedoara county, 230 miles west of Bucharest), I spent several day and night shifts each summer with a team of wagon repairmen (“lăcătuși de revizie”) who were on the payroll of CFR Marfă, the national cargo carrier. Their work entailed checking the condition of the wheels and bogies<sup>9</sup> of cargo wagons, shunting cars and checking the continuity of the pneumatic brake system, and undertaking occasional mechanical repairs (i.e. the replacement of a broken wheel spring).<sup>10</sup>

---

8. Major problems (i.e. dangerous distancing of track segments, heavily damaged lines, the presence of trees or other obstacles on the tracks, theft of metal parts from the safety system etc.) were to be reported to the dispatcher, who would then send a team of workers to remediate the problem. Minor repairs (replacing damaged nuts, tightening loosened bolts, cutting protruding bushes or tree branches etc.) were to be attended on the spot by the inspectors themselves. For this reason, inspectors always carried with them a bag of basic tools (hammer, wrenches, nuts and bolts, handheld saw).

9. A wagon bogie is the metallic under-frame to which the axles and the wheels of a vehicle are connected.

10. As is the case with locomotive electricians and track inspectors, the work of wagon repairmen is heavily reliant on workers' bodies and their senses, and the persistence of the job testifies to the underfunding and technological underdevelopment of the rail system. Both the freight company and the passenger company use aging and outdated rolling stock that, with a handful of exceptions, have not been either replaced with newer models or retrofitted with electronic, computerized systems of performance monitoring. To this day, the primary way in which wagons are verified involves repairmen hitting the wheels with a calibrated hammer to assess whether the resulting metallic sound indexes a wholesome or cracked wheel using nothing but their trained sense of hearing, and touching the bogies' oil well with the back of their hand to sense whether the unit is overheating or not.

Ethnographic work across multiple sites, firms, and professions afforded a broad understanding of the technical expertise and practical reasoning involved in the actual course of maintenance and repair work, as well as the entangled background of material conditions, procedural knowledge, and social circumstances that such work discloses *in situ* and *in vivo* (Sormani et al. 2019: 4). The social proximity and the affective closeness achieved in the process of working, dining, and drinking with repair technicians also made it possible to probe workers' own subjectivities, feelings, and senses of value that were closely linked to the condition of the machines, with the built environment of their workplaces, and with the postsocialist transformations of their industry. Doing so allowed me to witness the unglamorous, yet vital labor processes by which the vulnerability of critical infrastructures is addressed and by which their constant material decay is kept at bay, and, sometimes, even reversed.



*Illustration 4. Makeshift grill for Codruța's and my birthday in a dilapidated building at the depot.*



### *Social media*

Finally, a note must be made on the considerable role that social media has played as source of information for this research. I had initially paid little attention to media such as Facebook, although this platform is the primary one Romanians use to tell personal stories of success and failure, to manifest political subjectivities and to organize social movements. After getting caught off-guard in March 2017 by a massive nationwide wildcat strike<sup>11</sup> that was organized online, I grew more aware of alternative sites of professional socialization and labor organization. One particularly compelling aspect of the informally organized strike was that it had cut across the boundaries of companies, professions, and specialized trade unions. The organizers' call for "railroaders' unity" sought a return to the universalizing form of labor activism that existed before the 1998 breaking of the national railroad company and the subsequent atomization of union representation.<sup>12</sup> Since this episode, I have followed closely debates on Facebook groups such as CFR Anonimu - the group where the 2017 strike originated -, and CCM CFR - Statutul Feroviarului (CFR Collective Labor Agreements - Railroaders' Statute) - a group largely dedicated to debates concerning labor contracts and to providing updates on the evolution of a legislative initiative demanding the passing of a new statute law concerning the rights and duties of rail workers.

---

11. The strike was directed against the underfunding of rail industry, low wages, and poor work conditions. Striking workers also demanded the reinstatement of some of the rights stripped away from them in the past decades, and the immediate passing of a bill that would clarify the duties and rights of rail workers, and recognize the special nature of their work and the health risks that incur from it.

12. One of the effects of the strike was the establishment of a new independent trade union, Sindicatul Mișcarea Feroviară (The Rail Movement Trade Union) that professes to represent railroaders beyond their divisions into various unions, companies, professions and activity sectors and to foment labor unity.

## Dissertation overview

I have grouped my ethnographic and archival material into five body chapters framed by an introduction and conclusion. Intertwined between the more conceptually developed chapters there are shorter snapshots consisting of detailed vignettes: a rail servant's questioning of postsocialist "progress," the compassion of a railroader for his former colleagues scattered in other enterprises, a passenger's anger with the state caused by a massive delay of a train from Moscow, a crew of wagon repairmen's struggles with a wagon spare part which they eventually fixed using improvisation and sheer body power, and a young electrician's exasperation with the filthiness of the workplace and his rigorous efforts to cleanse himself of the marks of working class status. These snapshots encapsulate, usually in one single scene, the main theme(s) that the chapters they precede explore at length. Read on their own in succession, the snapshots should convey the most important arguments of the dissertation in condensed form.

The first body chapter chronicles the organizational history of the Romanian Railroads from its centralization in the late 19<sup>th</sup> Century to the splintered institutional structure of the present. I employ Karl Polanyi's notion of double movement to follow the dynamic between forces advocating for greater dis-embedding of the railroad enterprise and those promoting forms of re-embedding, and the *sui genesis* forms of organizational integration that have emerged from this tug-of-war. Chapter 2 focuses on the consequences of these processes on the rail labor force. It focuses on the shifting symbolic geography of the Grivița neighborhood (the home of the Bucharest Depot), and on the material environment, the labor relations, and the wages at DB-C. In so doing, it highlights the patchy relations of interdependence and subordination between CFR Călători and Locomotive Repair; the two state-firms that operate within the Depot's premises, and the ways that workers employ discourses of ruination to bemoan the material and symbolical

degradation of railway enterprises. Chapter 3 looks at petitions and complaints filed against the public rail passenger services operator to investigate how train passengers experience the quality of service, how they critique the public company and the state, and how the latter processes and responds to such complaints. The final two chapters move the ethnographic focus closer to the shop floor of DB-C as they consider the practical and symbolical dimensions of locomotive repair work. Chapter 4 chronicles the embodied skills and the techniques of *bricolage* that Depot technicians are forced to deploy under conditions of shortage of supplies and personnel, and the ambivalent valuations of labor that are informed by such effective, yet hazardous compromises on quality. Finally, chapter 5 theorizes maintainers' skin as a canvas onto which the signs of work and stigma are inscribed, and as site for the negotiation of self-image and class identity in the context of decaying work conditions and abject working-class identities. It shows that while repair work is characteristically dirty, the postsocialist abandonment of workplace order and cleanliness standards makes workers experience dirtiness as "filth," which they take to be a symptom of their abjection. At the same time, it shows how practical and symbolical acts of cleanliness and contamination enable workers to challenge and subvert their subaltern position in the hierarchy of the Depot, and to cast their working-class identities in a positive light.

### **Snapshot: "Where's the progress? Where's the evolution?"**

The following passage reproduces verbatim a post from December 2016 on the Facebook site for the Railroaders' Club of Romania (Clubul Feroviarilor din România), a group for rail trade union discussions. The author is a railroader employed by CFR Călători, one of the public companies that had inherited the socialist era integrated Romanian Railroads ("Căile Ferate Române," CFR):

CFR 1989 Definition: A well-organized structure (the second army of the country!), functional, with approximately 250000 wage earners, all resolute, hardworking, and precise people, approximately 4400 locomotives in good working order, roughly 6500 passenger coaches and 142000 cargo wagons, running on an average speed of 38 miles/hour, and with 4 million passengers shipped over the year.

CFR 2016 Definition: An intentionally well disorganized structure, with major functional problems, divided into three companies with roughly 23000 employees each, people just as resolute, hardworking, and precise who now live worrying about tomorrow and are stressed by "inspections," 1800 locomotives the majority of which are derelict, with 4000 passenger coaches and 40000 freight wagons, with an average speed of 28 miles/hour, and roughly 600000 passengers shipped.

Given all this data, I'm asking, idiotically perhaps, where's the progress, where's the evolution? (Florea 2016)

This railroad servant's thoughts express in a nutshell the contemporary condition of public infrastructures and the anxieties of many Romanians, in particular rail workers. Not only has there been no evolution in the past three decades, but the regress has been staggering. If we consider the dynamic nexus of future-oriented promise, frustrated present, and past-oriented sense of loss, we should be more able to understand the double bind of the postsocialist condition that circumscribes national anxieties in Romania and elsewhere in the region: not having achieved Western infrastructural standards while having lost much of what was built under state-socialism.

The following chapter investigates the organizational history of CFR from its early centralization in the 1880s to the atomized institutional structure of the present. In so doing, it attempts to make sense of the *sui generis* institutional forms that have emerged following the unmaking of the national railway system.

## CHAPTER 1.

### Making and Breaking the Railroads

The railroad system in contemporary Romania is a prime example of the mixture of public and private, state and marketization, care and abandonment, and functionality and disrepair that Romanian sociologist Vladimir Pasti (2006) labeled "the grey area of the [post-communist] economy." Martin Demant Frederiksen and Ida Harboe Knudsen conceptualized "grey zones" as "an alternative vantage point [that] encapsulates the intriguing and confusing developments that have taken place in the region of Eastern Europe" in a way that elides the traditional binaries that have characterized scholarship about the area (2015: 2-3). Contrary to early evolutionary theorizations of "transition" that translated political economic and social changes in the area as leading to an idealized pure form of market capitalism, to conceptualizations of postsocialist transformations that trade in analyses of how the state-socialist order was "unmade," and to theories of "Europeanisation" *qua* uniformization, "grayness" allows for a radical orientation toward an ambivalent and diverse present that is here to stay. I operate with a notion of "grayness" that is simultaneously an analytical tool that enables conceptualizations of ambiguous formations that challenge pervasive polarities, and as a designation of concrete corporate entities, spaces, and objects that engender ambiguous social relations, uncertain subjectivities, diffuse affects, and dubious states of material (dis)repair. What makes "gray" a powerful metaphor for such patchwork hybridity is its chromatic indeterminacy. Gray is not simply a mix of pure forms (black and white) but a jumble of all colors. This is

analogous to the ways this dissertation captures the mixture of various components of public and private, socialist and neoliberal, social service and profit seeking, state and market, nostalgia for what was lost and aspiration for the future, separation and imbrication, dependence and independence, disrepair and functionality, shame and pride, cleanliness and filth, security and precarity, Eastern and European. In other words, I approach Eastern Europe not as a liminal form, oriented away from something or toward something but as a *sui genesis* order in itself where the provisional is no longer transitory.

What makes railroad companies outliers of the post-communist market economy is their complicated ownership: they are neither fully owned by the state (as is the case with France) nor are they fully private (as in the United Kingdom). Nor have railroad companies emerged as public-private partnerships by the traditional way of outsourcing public services to private-held firms. Instead, post-socialist governments have restructured the monolithic socialist-era Căile Ferate Române, which held monopoly over rail transportation in the country, to enable the emergence of private operators and to foment market competition on the national track network. In doing so, it has unraveled the historic social embeddedness of the railroad system and has divided the institutional integration of CFR in ways that have generated new forms of autonomy and dependence from/on the government, institutional imbrications between state companies, and functional discrepancies in the system. These companies are "grey" inasmuch they exhibit a heterogeneous mix of autonomy and dependence, corporate governance and state control, and marketization and welfare. Similar to David Stark's (1993) observations regarding state enterprises in Hungary, the post-communist restructuring of CFR has pursued simultaneous processes of de-statization and corporatization that saw the same state agencies responsible for privatization acting as agents of partial re-nationalization.

Railroaders ranging from rank-and-file technicians employed by Locomotive Repair to top brass managers of CFR Passengers refer to this process of restructuring, liberalization and marketization as *spargerea căii ferate* ("the breaking of the rails"). "Breaking," in this context, is not simply a descriptive term that denotes the division of the socialist-era rail enterprise, but also an affective and morally charged idiom that connotes sabotage, breakdown, failure, and destruction. Railroaders blame this process of breaking for the contemporary plight of their industry: the poor financial performance, the lack of investments in modernizing tracks and machines, the disrepair condition of infrastructure, the lack of spare parts, the reduction of their status as laborers, their tense labor relations, and the physical ruination of their workplaces. Given this dissertation's focus on processes of breakdown and the political, material, social, and affective forms that human responses to breaking engender, this first chapter is dedicated to a historical analysis of how the CFR was made, broken, and remade.

The two stages of "making" and "breaking" to which I attend laminate onto the phases of modern infrastructural governance defined by Stephen Graham and Simon Marvin (2002). One phase that ran from the mid-nineteenth century throughout most of the twentieth century was characterized by the "infrastructural ideal:" modern forms of state governance that promoted centralized infrastructures and universal access to the provisioning of public amenities. Institutionally, this manifested in the bundling together of different functional parts of infrastructures in unitary institutions that operated under uniform regulatory regimes. A second moment of infrastructural modernity was spurred by the global rise of neoliberal governance, and "splintered" the ideal. Unitary systems of regulation and bundled infrastructures being replaced by more differentiated regimes of governance that unbundled the functional coordination of infrastructure and introduced liberalization and marketization in some sectors. Whereas the



modern infrastructural ideal had produced infrastructures deeply imbricated in state governance, the splintering of the ideal has curtailed the role of the state in infrastructural provisioning and has led to a correlate reduction of the status of public infrastructure services (Collier 2011). Nonetheless, as this chapter will illustrate, infrastructural reform was not a zero-sum game between state and private forms of ownership but has produced *sui generis* organizational forms.

In analyzing the formation of the modern infrastructural ideal in Romania and the patchwork forms of governance produced by its unraveling, I seek to foreground a more nuanced take on the nexus of state, infrastructure, and welfare by investigating 1) how various socio-political configurations influence infrastructural policy and enterprise organization and 2) the concrete organizational and material effects that post-socialist reforms have on the functioning of an infrastructural system that has been imbued historically with nationalist ideals of development and with modernist ideologies of state-sponsored welfare. In studying the various degrees of infrastructural embedding and dis-embedding, I draw inspiration from Karl Polanyi's substantivist take on modern economic as a dynamic "double movement" by which market expansion engenders counter reactions of political institutions designed to check the action of the market (1957[1944]: 132). Throughout this chapter I show how this "double movement" has produced various degrees of integration in the history of railroads in Romania.

The chapter is organized as follows. It begins by chronicling the inception of the Romanian railway project and follows its co-evolution with the development of statehood. At this early stage, the Polanyian double movement was manifest in the conflict between an international railroad consortium and the Romanian state that ended in the establishment of Căile Ferate Române (CFR), one of the first national railroad administrations in Europe. The second section deals with Communist-era infrastructural governance. It discusses how railroads were

embedded in the state-socialist substantive economy as vector of the planned economy and of state-sponsored welfare. Institutionally, the state-socialist governance of railroads had built on the pre-existing infrastructural network and national administration structures to create a hyper-centralized enterprise. I then analyze the post-Communist trajectory of the railroad industry, showing how attempts to reform the socialist-era monolithic company have been influenced by political forces advocating for liberalism and national developmentalism respectively, as well as by the influence of labor movements, international lending agencies and European Union legislation. The patchwork organization of the contemporary rail system is shown to have emerged at the intersection of historical path-dependence and volatile post-socialist political configurations. I conclude by illustrating the effects of splintering over railroad ownership and institutional relations.

### **Infrastructure, state building, and national consolidation**

Throughout the nineteenth and twentieth centuries, railroads came to epitomize progress, nationalism, and capitalism in both Europe and America, and contributed to the formation of a new sense of time and space (Schivelbusch 1976, 1978; Cronon 1992; Whyte 2011). In the United States the initiative had primarily belonged to private interests with the state acting as a crucial but secondary agent (Bowker 1995; Cronon 1992: 66-74; Whyte 2011: 511-512). In Europe, on the other hand, central governments had acted as initiators of railroad projects as early as the nineteenth century. Nationalization had begun as early as the late 19<sup>th</sup> century in some parts of the continent and have become widespread after WW2. Different from American corporatism, the European model in the organization of railways had been the nexus of public ownership, state monopoly, vertical integration of operations, and functional interdependence.

This was especially the case in Germany where political and military rationalities motivated railroad construction. Friedrich List, a German-American liberal economist who advocated protectionism and rejected Adam Smith's *laissez-faire* doctrine, is credited with a decisive influence over the development of German railways. To List, rails were to serve for defense and for national cultural advancement, for safeguarding the community from dearth, and for strengthening the power of the state (Heinze and Kill 1988). Consequently, he proposed a national system of railways that promoted a unified Germany with routes radiating out from Berlin (Turnock 2006: 123). These lines were initially run by private concerns organized as joint stock companies but were later superseded by state companies in the 1840s. Later, Otto von Bismarck integrated private and public rails into one rail system for each of the larger German states. The unification process initiated by Bismarck was completed in the 1920s with the formation of Deutsche Reichsbahn as a single national administration (Heinze and Kill 1988: 126).

As a newly emerged sovereign state in the mid nineteenth century, Romania's political conditions were similar to those of Germany. In addition to a weak and unstable state and cultural nationalism as driving political engine, Romania was lacking transportation structures capable of supporting the industrialization of its overwhelmingly agrarian economy. The "Romanian railway project" (T. Popescu 2016) had emerged under such circumstances of underdevelopment and dreams of political and social emancipation (Silvestru 2010). Developing a rail system to link Walachia and Moldavia, the two principalities that had achieved political union in 1859, and their connection with the Danube and with the rail lines in the Austro-Hungarian and Ottoman empires emerged as crucial conditions for the political project of state sovereignty and for enabling capital development.

If there was a general political consensus over the need for railroads, there was no agreement regarding how exactly to proceed. One line of discord was whether the state should commission an entire network from the start or begin with a short line. Another topic of contention was whether the country should come up with its own development model and proceed with domestic resources, or to appeal to foreign capital and technological know-how. It took a great deal of power-wielding by high-ranking officials and by the liberal governments in power during that period, as well as a great deal of influence from foreign capitalists that had direct access to the ear of international powerbrokers and of local crowned heads. Eventually, the camp proposing a bridgehead line connecting Bucharest to Giurgiu that was to be constructed under the regime of state-backed concessions offered to international companies won the debate in 1866. What followed the temporary resolution of this conflict was an incipient phase of infrastructural development that saw the emergence of public-private partnerships that was shortly followed by the complete de-legitimation of private involvement and the establishment of one of Europe's first national rail administrations.

#### *The Strousberg Affair and the Emergence of CFR*

The regime of concessions involved the Romanian government granting land concessions for rail building to international companies like TJ Barkley Consortium from England and Offenheim and Strousberg from Germany. The building companies were authorized to raise the needed capital by issuing bonds that promised a fixed annuity that was guaranteed and paid by the Romanian government. Upon finishing the project, the building company would administer the railroad and channel a relatively small part of the revenue to the state budget. Once the concession contract expired, all infrastructure and machines were to become state property.

This regime of public-private partnership enabled foreign capitalists to take advantage of a state in its infancy. One consortium in particular, the one constructing the trunk line linking the two principalities with one another and with the Austro-Hungarian network, was so fraught with problems that the saga of the line went down in history as the "Strousberg Affair." Considered at the time "the German king of iron roads," Henri Bethel Strousberg was granted the concession despite fierce parliamentary opposition<sup>13</sup> thanks to his influence over the Prussian Hohenzollern-Sigmaringen Royal house that held the Romanian throne (Botez et al. 1977: 82). Investors from all around Western Europe and the Ottoman Empire bought shares thanks to Strousberg publicizing them as issued by the Romanian state, although the latter only guaranteed a generous 7.5% annual interest rate for these investments (Iordănescu and Georgescu 1986: 636).

Whereas the partnership enabled massive accumulation of capital for Strousberg and his associates, the many dubious actions of the consortium fomented political strife at home<sup>14</sup>. Technical problems with the project included fictive scopes of supply, fake measurements of track length, a slow pace of construction, delays in execution, and a generally poor quality of works<sup>15</sup>. Upon discovering that the consortium had also issued bonds the value of which had surpassed the total value of the project, the Parliament in Bucharest voted to annul the concession in 1871. This decision caused panic among international investors and prompted Otto

---

13. Some politicians and journalists, denounced the deal, claiming that the concessionaires "are nothing but bargain-makers: The Germans bring no monetary input, and the Romanian state pays for everything".

14. Allegations of corruption and administrative incompetence marred the liberal government, which was forced to resign, in favor of the conservative opposition. A growing anti-dynastic feeling among the citizenry, given the open support lent by the King Charles to Strousberg, pushed Carol I one step away from abdication. The Stroussberg Affair also led to a renewed wave of anti-Semitism and anti-Western sentiment (Silvestru, personal communication).

15. For instance, instead of a train station in Bucharest, H.B. Strousberg had built a mere shed made of wooden boards. In 1870, the government denied acceptance of the line between Roman, Galați and Bucharest due to the existence of unfinished works on the line that was already open for traffic in December 1870. A few months later, in 1871, the line had to be suspended after spring rains had washed away several bridges and large swathes of railway bed along the route.

von Bismarck, the German chancellor, to lobby the Ottoman Sultan for protection of rail investors against the vassal Walachia.

The scandal found temporary resolution following Strousberg's bankruptcy. A new "Society of Romanian Railroads Shareholders" was established under the leadership of a German financier to complete the outstanding constructions (I. Popescu 1987: 101). The financial crisis of 1873 pushed the new company to bankruptcy, which prompted Bismarck to demand that the Romanian government bought back the line entirely. Since Germany, France and Great Britain had conditioned their recognition of the country's sovereignty gained after the defeat of Ottoman forces in the Russo-Turkish War (1877) on the solving of the rail crisis, the Romanian government agreed to the buy back in 1879 under deeply unfavorable conditions<sup>16</sup>.

The Strousberg Affair generated a massive political attack on the government, with some politicians and journalists casting the scandal as a conflict between the nation and profiteering capitalists acting as invaders. This was the case of Nicolae Fleva the mayor of Bucharest. "Strong [due to] their support in their home countries, private companies rose like a state within a state, and armed with significant capital they only aimed in their exploitation [of the railways] their own private interests, to the great detriment of taxpayers." Liberal politicians in power also framed the buy-back in terms of national sovereignty. Liberal prime-minister Ion Brătianu, for instance, claimed that "the mission of iron roads [...] is the driving engines of all social activity," and could not be left in the hands of foreigners. Vasile Boerescu, the foreign affairs minister, backed up the deal as means of political and economic emancipation. "Precisely because we do not wish to be vassals to anyone, it is that we want the emancipation of the railroads, and we

---

<sup>16</sup> The Romanian state had to mortgage the newly acquired rail network and was forced to use the revenues of the national tobacco monopoly as collateral to guarantee the payment of interest rates to bond holders.

desire that this economic emancipation be as real as our political emancipation." (Botez *et al.* 1977: 86)

Buying back the Strousberg lines in 1880 was the first step toward the building of a rail monopoly. Over the following eight years, the government gradually moved to unify the majority of the network. First, it fused the three directorates that administered state-owned lines into one administrative entity. It then pursued the ownership of the remaining lines through various means. Some concessionaires willingly sold their lines to the government, while other lines were first commandeered and later redeemed. Following the annexation of the South-Eastern province of Dobrogea, the Ottoman-built lines here were simply bought. By 1888, all lines that had been constructed and operated by international capitalists had become state property under one administration.

The end of the concessionaires' era saw the formation of one of the first national rail monopolies in Europe: Căile Ferate Române ("Romanian Railways"). The acronym C.F.R. (Căile Ferate Române, "Romanian Railways") that stands, to this day, for all train-related things in Romania, and the iconic logotype depicting a winged iron wheel that still adorns the letterheads of public rail companies, as well as locomotive bumpers, wagon walls, train window curtains, and staff uniforms date from the period. Other symbolic figurations of centralization were the radial arrangement of railways branching out from the capital Bucharest, and the erection of the Railways Palace in the interwar period to host the administration of the system.



*Illustration 5. The iconic winged wheels of CFR. Detail from the façade of the Railway Palace. Source: [www.uar-bna.ro](http://www.uar-bna.ro)*



*Illustration 6. CFR Palace during socialism. Source: [www.palatulcfr.ro](http://www.palatulcfr.ro)*





*Illustration 7. Logos of CFR. 1. Integrated CFR; 2. Splintered CFR Călători (passengers); 3. Splintered CFR Marfă (freight). Note that the iconic acronym CFR was maintained. Source: www.feroviarul.ro.*

The improved coherence stemming from the concentration of all mechanisms of planning, building and exploitation in the hands of the state paved the way for a so-called "golden era" of rail building. A frantic period of construction led by Romanian engineers trained abroad and executed by local labor force increased the network to 3233 kilometers by 1911, all at greatly reduced investment costs.<sup>17</sup> The end of WWI led to the augmentation of the national railroads through the incorporation of the networks existing in the former Austro-Hungarian territories annexed by Romania.

During this period, the economic impact of the railways was profound. Economically, they stimulated the expansion of industry. Not only did heavy industry correlate with railway centers, but rail development contributed to a massive increase in economic output through its demand for fuel and building materials<sup>18</sup>. Socially, a technical technocracy emerged, and industrial proletarian class<sup>19</sup> soared. The lengthening and densification of the network accelerated train journeys, fomented mobility, and bolstered tourism. At the same time, it allowed

---

17. Public-private partnerships constructed railways at very high average costs of 320,000 lei/km for the 1337 km build by concessionaires.

18. Modernized infrastructure and the subsequent diminished costs of commodity transportation, but also brought the threat of imported manufactures from Central Europe (especially from Transylvania and other parts of the Austro-Hungarian Empire) (Turnock 2001: 147). In response to this threat posed by the markets opened by rail development, the government adopted protectionist policies against imports (1886) and passed the first billed intended to encourage industrial production (1887) (Murgescu 2010: 141).

19. The number of industrial workers increased from 6900 in 1889 to 27000 in 1910.

for greater infrastructural reach in small towns and rural areas, which fomented outward migration and urban expansion. Such was the extent of the rail business that CFR had "the largest operating expenses of any enterprise in the pre-war Balkan states" (Lampe and Jackson 1982: 274).

### **Socialist Infrastructuring**

Following the takeover of power of 1948, communists nationalized all remaining private railroads, and invested the national rail system with new ideological dimensions. Like in the case of the USSR where, as Humphrey noticed in relation to electricity (2003: 93), people were encouraged to believe that infrastructure was a product of the socialist state, the Romanian Communist Party did its fair share in claiming itself as the *sine qua non* modernizing force, and downplaying the contribution of previous regimes. For example, when the Museum of Romanian Railways in Bucharest, originally established in 1939, was re-opened in 1953 under the jurisdiction of the Transportation Ministry of the Socialist Republic of Romania, the declared aim of the permanent exhibition was to illustrate the undeveloped state of transportation under the bourgeois-landlord regime. According to the exhibition, "the local capitalists in close cooperation with foreign capitalists transformed the railway infrastructure into a means to rob the wealth of the country." By contrast, in socialism "through the care of the Party and of the government, [the railways] were serving the interests of the people, and the rapidly developing national economy" (*cf.* Silvestru 2011).

The backbone of the substantive economy under state-socialism was the sedimented products of socialist institutions of industrial coordination, social welfare, and territorial planning. In Romania, as in the majority of state-socialist countries in the world "coordination,

as element of centralized management of transportation activities, [was] realized on the base of national unitary plans, the allocation of tasks on kinds of transportation serving the interests of the entire society.” (Maşala and Raicu 1981: 42) The ultimate goal of transportation policies in state-socialist Romania was “the creation of an optimal transportation system that ensures the most rational service for the entire national economy” (*ibid.* 15). The railway system was seen as a “critical factor of social life” (*ibid.* 5). Fully integrated in the centrally planned economy, railroads linked urban and rural areas, connected different regions of the country to one another and all of them to Bucharest, carried raw materials and workers to factories, and distributed finished products to industrial and domestic consumers. With transportation seen as a “continuation of the production process” (*ibid.* 13), railways thus served as a crucial element of the centrally planned economy. Nicolae Ceauşescu, for example, illustrated in one of his speeches, the embeddedness of railways in the state directed economy with the aid of the organic metaphor of the circulating system of the human body:

It is well known to everyone the peculiar role that transportation has in the national economy. [...] Any delay or derangement of rail traffic has strong repercussions over the entire ensemble of social life. In the same way that derangements in the human circulatory system endanger the very life of the human, failures and derangements in the circulatory system of the society - the railroads - produce severe disturbances in all compartments of production and consumption, in the normal unfolding of public life” (Ceauşescu 1967 *cf.* Maşala and Raicu 1981: 6)

Railroads provided not only a solid pre-constructed base for the state-socialist project of industrialization. They were also integrated in the moral economy of the socialist state. Communists’ control over railroads greatly democratized mobility, as mobility was deemed a universal right (Ştefan 2013: 215-6). Transportation fares were kept generally low, the government furnished children, students, and pensioners with gratuities, and designed state-sponsored schemes that had factories pay for workers’ commute, and trade unions cover leisure

travel costs (Ștefan 2007: 122). On top of the universal rights of mobility, railroaders enjoyed broader benefits. Rail staff was considered state servants and were awarded a range of privileges in terms of salary, uniforms, welfare, healthcare, transportation services for their families and a pension system, many of them inaccessible to other industrial workers (Tanczos and Bessenyei 2009: 45). This prioritization of railroad workers had to do with the industry's proletarian consciousness. Since the Party was profoundly unpopular with the peasantry, it had to rely on the support of the urbanized proletariat. Rail workers were the largest industrial group, were aggressively militant and had demonstrated openness to communist influences as early as the 1930s. Thanks to their legacy of activism and to the importance placed by state-socialism on industrial infrastructure, usage of the rails continued to grow throughout the communist period.

In late socialism, the austerity policies of the Ceaușescu regime greatly undermined the predictability of the railroads for passengers, yet the industry continued functioning as a unified system. In the aftermath of the 1973 Oil Crisis, soaring fuel prices coupled with the unreliability of auto-transit prompted a switch from state-sponsored automobility (in 1966 Romania began domestic production of cars) back to the rails. Both passenger and freight traffic continued to hike in the 1980s, as fuel for domestic consumers and interurban bus transport was rationed due to the propensity of state planners to allocate resources primarily to industrial and agricultural production combined with massive exports of fuel in exchange for the hard currency needed for Nicolae Ceaușescu's plan to curb the national deficit by extinguishing all foreign debt. Yet, the spike in freight and passenger traffic were not met by corresponding increases either in the production of engines and coaches, or in investments for building and maintenance of rail tracks, which led to extreme overexploitation of machines and infrastructure (Murgescu 2010: 384). Despite running on vastly curtailed schedules, trains remained the most reliable means of

transportation throughout the austerity of the 1980s (Verdery 1992). Nonetheless, the tardiness of trains that were central to mobility, their overcrowding and shabbiness (i.e. their poor lighting and heating) turned them into signs of the state forfeiting on delivering the promised social modernity, and further alienated citizens from the Party (Fehérváry 2013; Verdery 1992; Deoană forthcoming).



*Illustration 8. Infrastructure and socialist modernity. Source: Lupta CFR, August 1966.*

*Planned transportation, bundled railroads*

Institutionally, the socialist-era infrastructural ideal was realized by the bundling together of different functional parts of infrastructures: production, distribution, operation, maintenance, and tariff settings (Collier 2011).

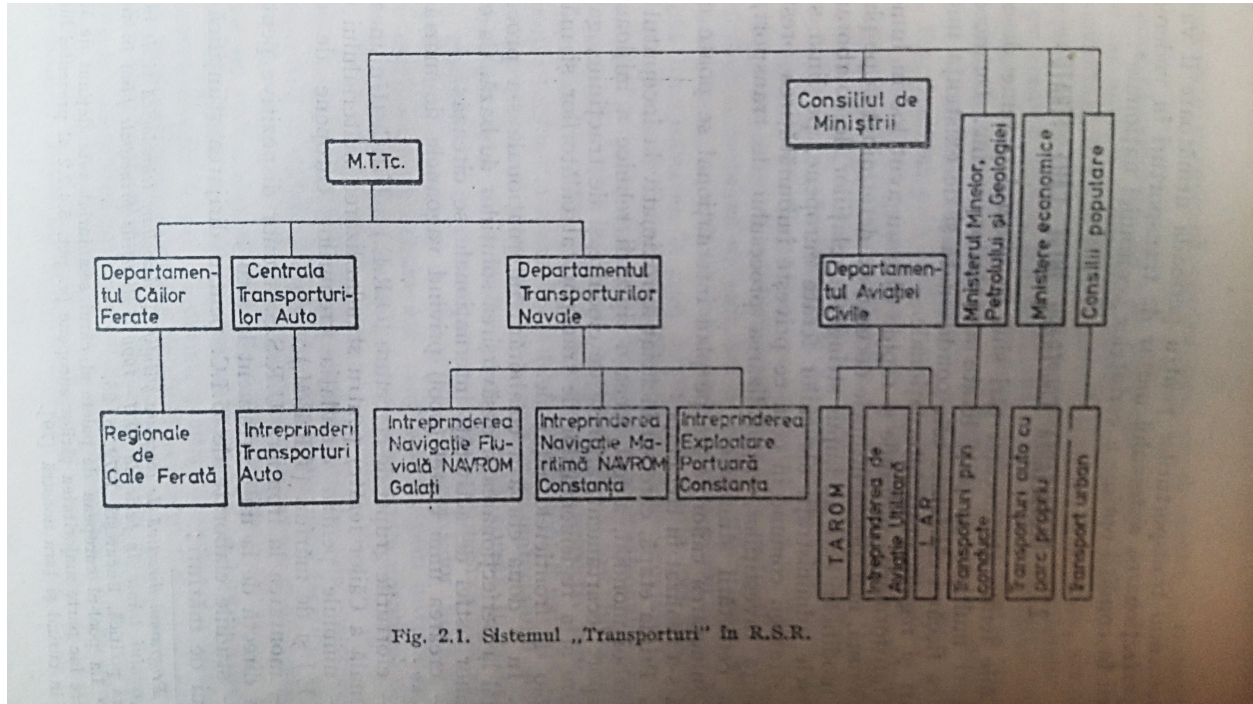


Fig. 2.1. Sistemul „Transporturi” în R.S.R.

*Illustration 9. The organization of the transportation system in socialist Romania. Note the centralization under the Ministry of Transportation (M.T.Tc.). The Railroad Department is featured on the far left. Subordinated to it are the Railway Districts. Source: Mașala and Raicu 1981.*

As Illustrations 8, 9, and 10 illustrate, the railway system was a vertically integrated enterprise that compounded a variety of administrative, technical, and social functions (planning and development, construction, services, education, medical services). Central planners also endowed it with a high degree of institutional interdependence between segments (i.e. passenger and cargo operations were undertaken by the same firm) and integrated it functionally with other modes of transport (central plans assigned a quota to each mode of transportation and sought to

maximize complementarity and minimize overlaps between the various modes). In this sense, the XIth Congress of the Romanian Communist Party that was held in Bucharest in 1974 defined the entire transportation system as "unitary and coordinated." It was unitary in that it carried out "the functions of management, planning, development and efficiency for all kinds of transportation." It was coordinated in the sense that "there [was] sufficient elasticity in the repartition of tasks on kinds of transportation" that "ensured adequate efficiency for each mode of transportation as well as for the system as a whole." (Mașala and Raicu 1981: 43)

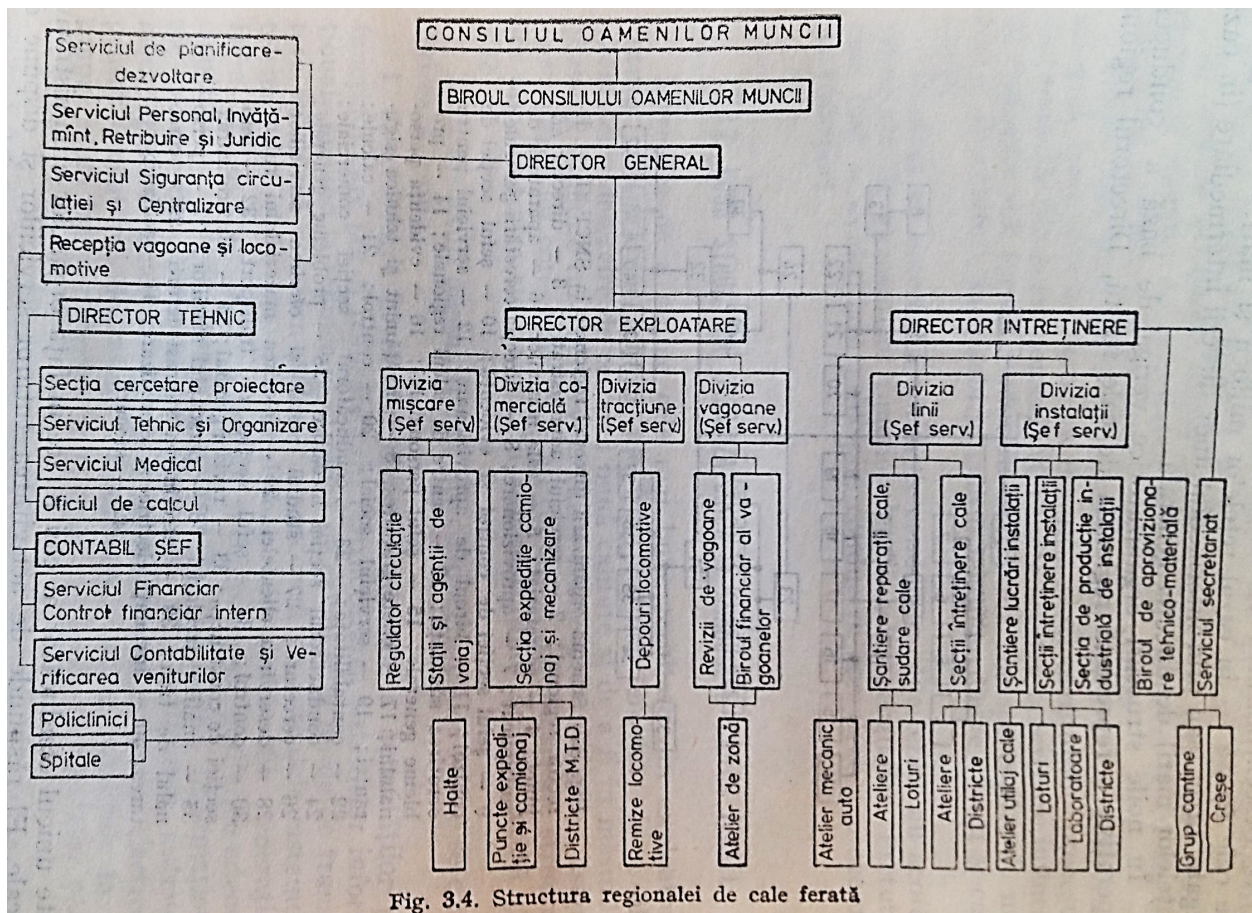


Fig. 3.4. Structura regională de cale ferată

Illustration 10. The organization of the rail district. Source: Mașala and Raicu 1981

The bureaucratic centralization of economy was deeper in Romania than even in the Soviet Union. Most decisions were taken at the top levels of the chain of command, usually by the State Planning Committee, the organism that drew legally binding targets for production and transportation and decided on how resources were allocated. Centralization left enterprise managers with very little decision power. As Carson (1975) noted with respect to the USSR, enterprise managers had powers similar to those of a foreman in an American capitalist firm. This was the case with socialist-era CFR as well. This fully bundled enterprise was integrated institutionally as a department of the Ministry of Transportation, and thus subordinated to political management and control exercised by the government.<sup>20</sup>

Embedded enterprises ran as state monopolies like the railways with a captive market for both freight and passenger functioned on criteria of performance other than profit. Communist planners defined rationality not in terms of maximizing surplus value but rather in terms of fulfilling the planed quotas for transportation in relation to the social and territorial division of labor, and to industrial inputs and outputs. Illustrative of non-market ideas of efficiency underpinning the management and operations of the railways is the fact that performance was computed in yearly transportation plans in terms of passengers/kilometer and ton/kilometer, rather than in numbers of passenger tickets sold or in revenue from freight transportation charges. As was the case with industrial factories, the railway system's efficiency was

---

20. The organization of the industry was the following: The Ministry of Transportation and Telecommunications encompassed within it the Department of Railways (as well as the Directorate for Auto Transportation, and a Department for Nautical Transportation). The Department of the Railways was organized in six Regionale ("regional districts"). The management of each regional district was enacted by a General Director whose activity was overseen by the Council of Workers and a Bureau of the Council of Workers. Under the general director's authority operated a series of services and divisions, each led by a deputy director. Technical deputy directors oversaw the activities of the research and design bureau, the accounting bureau, as well as the medical service with its regional hospitals and outpatients' departments. The track division (rail line maintenance) and the installation division (production, maintenance, and repair of rail traffic equipment like signal lights and switches) was run by a deputy director for maintenance. Finally, the deputy director for rail exploitation coordinated, among others, the so-called "traction division," helmed by a "chief of service," that consisted of all locomotive depots in the area of the regional district, and all locomotive sheds subordinated to larger depots.



constrained neither by demand, nor by tight budget requirements, but by the availability of resources and the limits of technology (Kornai 1980, Verdery 1996):

The current stage of development is characterized less by the multiplication of economic centers, than by the development of those existent. This leads to the intensification of transportation infrastructure usage under conditions of keeping the network extension unchanged. (Maşala and Raicu 1981: 10)

Technocrats at the helm of the system focused primarily on the development of cost-efficient technologies and on exploiting them to the fullest potential. With some exceptions, industrial development did not require massive extensions of the railway network. For this reason, by 1989, the rail system consisted of 11.348 kilometers of tracks, an increase of only 15% from 1938. Nevertheless, massive efforts were put instead into widening the narrow-gauge rails, into doubling the tracks to support two-way traffic, on electrification, and on the renewal of motive power and rolling stock. Electrification, a project proposed and abandoned by the interwar governments, was rejuvenated in the 1960s, and over a third of the track network was powered by electricity by 1989. Most of the locomotives and the rolling stock were imported from the Soviet Union and Czechoslovakia at the beginning of socialism, while after 1965, given Ceausescu's drive to push for economic autonomy, the production of machinery was established as a key domain for the state heavy industry. Romania began producing its own Diesel and electrical-powered rolling stock under foreign licenses (Turnock 2005).

### **Postsocialist double movements**

The post-socialist governments inherited one of the most centralized economy in the Eastern Bloc supported by vast infrastructures that were themselves managed in a centralized fashion and deeply embedded in the substantive economy of the state. Subsequent reforms

unraveled much of this tight integration over the following three decades. Since market capitalism had been established early on as the *telos* of transition, what differentiated between Romanian political players throughout the 1990s and early 2000s was the pace of this process, and the role that political power, the state, international financial institutions, and local and global capital had to play in it (Poenaru 2017: 32). One camp that consisted of ex-communist politicians, heterodox economists, factory technocrats, and industrial trade unions, were critical of international lending agencies' one-size-fits-all structural adjustments, and rejected shock therapy in favor of a mixed post-Communist economy in which the state would hold a significant degree of control over industrial production and over the infrastructural base. The opposing camp that united new-wave liberal politicians, marginalized Communist-era econometricians, new financial elites educated at neoliberal institutions abroad, and representatives of the antipolitical civil society advocated for the privatization of state assets as an end in itself, and thus advanced policies that mirrored more faithfully the recommendations put forward by the IMF, World Bank and the EU.

The conflict between these highly volatile political forces that stood on the same continuum of reform, albeit at different ends of the state/market gradient, and their rotation in government gave contour to the political economy of transition. In broad strokes, Romania is considered as having had two transition periods (Ibrahim and Galt 2002: 105), which involved different outlooks on transforming state-owned enterprises and bundled infrastructural systems and on how the potentially deleterious social effects of these changes were to be managed. A gradual transitional phase from 1990 to 1996 saw important, yet vastly limited steps toward marketization and liberalization. Gradualism was then followed by a delayed shock therapy administered to the economy after 1997, which later culminated in a strong neoliberal

consolidation after the 2008 financial crisis (Ban 2014). The contemporary grayness of public companies such as the Romanian Railways, their organization, and ultimately their material conditions were forged in the tug of war between these forces advocating more embedding or more dis-embedding.

With respect to the domain of infrastructure ownership, organization structure, and service provision, the two phases of political and economic transition described in the previous section of this chapter correspond to two stages of dis-embedding from the state that gradually eroded the infrastructural ideal, without displacing it completely. In a first stage, a process of *vertical dis-embedding* took place by which state-enterprises had been taken out from under the direct ownership and regulatory control of the government, but have retained much of their integrated structure, and benefitted from financial backing from the state budget. In a second stage, these companies had undergone a process of *horizontal dis-embedding* (division of monolithic organization) and *unbundling* (shedding of social functions) (Collier 2011).

While these moves were intended to reduce governmental ownership of the railroad system and to unravel the managerial and functional interconnectedness of the different sectors, the state remains the most prominent actor in the industry. On the one hand, none of the splintered firms that have emerged from the division of *CFR* have been privatized, nor are there any prospects of privatization in sight. Splintered firms remain to this day in a relation of quasi-dependence on their mother companies, themselves controlled through various mechanisms by the government through the Ministry of Transportation. Passenger transportation is overwhelmingly sustained through subsidized public service contracts, as well as through direct and indirect subsidies. On the other hand, concomitant with policies of dis-embedding and unbundling, national legislators have taken measures that have re-embedded these firms in the

social economy of the state. Laws have been passed that reaffirmed that infrastructural development and operations must underpin national economic and strategic interests.

Furthermore, legal provisions were made to reassert that passenger rail transportation remains a social service. In some cases, social benefits associated with rail mobility have extended from the socialist period, as post-socialist governments have often used gratuities as means to bolster their political capital<sup>21</sup>.

### *Train Trouble: Infrastructure reform in Europe*

Dis-embedding, unbundling and splintering are phenomena that have affected, to various degrees, the majority of integrated infrastructural systems with the gradual encroaching of neoliberal economic ideas and policies worldwide. In addition to the general diminishing of state involvement in economy and welfare which translated in massive cutbacks in public investment, integrated railroad systems had also suffered from the absolute decrease of industrial output and the rise of alternative means of individualized mobility. In this sense, the erosion of the infrastructural ideal in post-socialist Romania and the decline of public railroads are inscribed in a wider continental and global trend. Understanding how infrastructural reform came into being in Romania then requires attention not only to the political and social dynamics of post-socialist transition and to the forms of capitalism they begot, but also to the hold that history, and entrenched symbolic meanings and cultural practices keep on these material systems.

Beginning with the late 1980s, the traditional modernist model detailed in the previous sections had yielded much ground to privatization and long-term concessions, competitive restructuring, and vertical unbundling (Pittmann 2001: 2). All the national railways companies in

---

<sup>21</sup> Most recently, in 2017 the National Alliance of Student Organization in Romania has successfully lobbied the government to pass a law that granted university students free unlimited travel with both public and private rail operators.

both Western and Eastern Europe had been plagued by state divestment and public spending cutbacks in the past decades, and, as a result, they had undergone some degree of institutional reorganization, opening to the market, and enterprise privatization. Whereas all public rail enterprises in Europe are nowadays less integrated and benefit from less support from central governments than before, the extent of their dis-embedding from the state, and the degree of organizational atomization achieved vary substantially from one country to the next. Sweden privatized the rail network as early as 1988, and British Rails were completely privatized in the 1990s, and many other European countries later initiated railway reforms on their own. Since 1991, the reform process has been taken forward through European legislation aimed at enhancing the competitiveness of train transportation. Among the key elements of European Union policies targeting the rail sector have been the promotion of a gradual market opening, the introduction of some degree of vertical separation of infrastructure management and operation of services, the unbundling of other railway functions (such as machine maintenance and repair facilities), and the introduction of infrastructure access charging (Holvad 2009: 24-25).

The adoption of Directive 91/441 EC in 1991 provided the first legislative step at EU level to liberalize the railway market. Management independence of railway operators, the separation of accounts for infrastructure management and transport operations and the improvement of the financial situation through debt restructuring ranked among the key proposals. Building on this terrain, the EU put forward in 1998 the so-called "First Railway Package," consisting of three directives. The most important of them was aimed at ensuring that any railway operators within the EU would have the right to obtain equal access to the national sections of the trans-European rail freight network, and required that independent organizational

entities must be established for transport operations and infrastructure management.<sup>22</sup> The package was adopted in 2001, and member states were required to adopt it by 2003. In 2004, a "Second Rail Package" came into force. It aimed to strengthen interoperability for railways, develop a common approach to rail safety regulation across the EU and to open further internal markets for freight services. Finally, the "Third Railway Package" was adopted in 2007. A requirement for opening the market in international passenger rail services by 2010 was among the chief provisions of the latter set of directives and regulations.

These railway packages promoted by the EU materialized in the national legislations of the member states to various degrees, with significant differences among countries regarding the implementation of the principle of accounting separation, and of the requirement to establish independent organizational entities for transport operations and infrastructure ownership and management. In particular, EU laws allowed member states to achieve separation either through the organization of distinct divisions within a single operator (the integrated model, i.e. holding company) or the management of infrastructure by a completely separate entity, known as the fully vertical separation model (Holvad 2009: 37).<sup>23</sup>

#### *1990-1997. Vertical disembedding and dependent autonomy*

Between 1990 and 1992, the Romanian government's economic philosophy was closer to a liberal neo-developmentalism that weaved together drastic austerity measures aimed at macro-

---

22. According to this directive, essential functions, such as capacity allocation, infrastructure charging and licensing, must be separated from transport operations and infrastructure management to enable new operators' fair access to the rail market. Railway operators were also required to set up separate accounts for passenger and cargo operations

23. The latter model was considered advantageous for it provided ensured non-discriminatory access to the network, given the lack of links between any railroad operator and the infrastructure manager. On the flip side, separation came with the disadvantage of making coordination between operations and infrastructure tenuous and more difficult to achieve. Bulgaria, Denmark, Norway, the Netherlands, Portugal, Romania, Spain, Slovakia, Sweden, and Great Britain opted for full separation. Austria, Belgium, Switzerland, Germany, Greece, Estonia, Ireland, Italy, Luxembourg, Latvia, Lithuania, Hungary, Poland and Slovenia retained a fully integrated model within a holding structure. France and Finland chose a third way in restructuring their railways, such that separate entities were set up, but a degree of coordination between infrastructure management and train operations was preserved.

stability with heterodox policies that safeguarded a large part of state companies by deeming them public services, and by providing cheap credit for industrial investments. The populist neo-developmental government that followed to power between 1992 and 1996 was more adamant in pushing forward developmentalist measures of retaining high employment through industrial consolidation, on the other hand. The government effectively halted the privatization of state-owned industry initiated by their predecessors, and deemed strategic industrial sectors (transportation, energy, etc.) not privatizable. These were considered vital for keeping in check the costs of envisioned infrastructural development and industrial re-launch, as well as symbolic pillars of political and economic sovereignty.

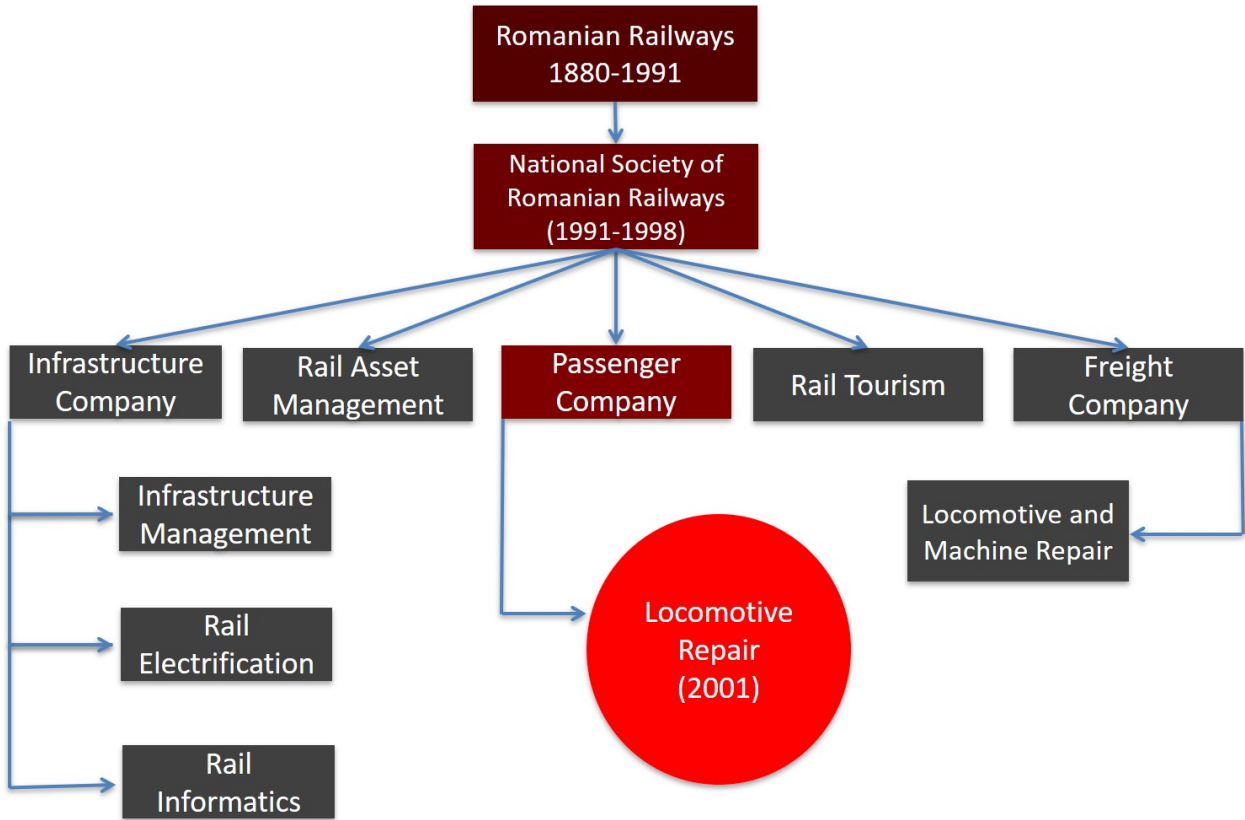


Illustration 11. The breaking of the rails.

During this stage, we thus see the initiation of privatization and liberalization followed by a contraction of these trends. The potential socially deleterious effects of neoliberal reform were mitigated by mechanisms designed to ensure the maintenance of a modicum of welfare and by protectionist measures that sought to safeguard industrial state enterprises deemed strategic for the purpose of bolstering domestic economy (Ban 2014). Transformations in state enterprise governance primarily had to do with a process of partial deregulation by which the state and its governmental agencies have abolished the fundamental mechanisms of the planned economy and have imbued industrial enterprises with a substantial degree of autonomy. This process was *partial* because the state retained formal ownership over economic enterprises and public services and kept a modicum of control over their operations and finances.

### *Vertical Separation*

The first attempt at engrafting market capitalism on Romanian economic realities took place as early as 1990, when a group of experts drafted a "Blueprint regarding the strategy to achieving market economy in Romania." The economic project of transition focused first on industrial re-launch. This meant that the state should retain ownership and control of state companies that operated in economic sectors deemed "strategic" such as infrastructure (transportation, energy distribution, communications, social housing, healthcare, military industry, large agricultural farms) and resource extraction (wood, coal, natural gas, and oil). State enterprises like C.F.R. (rail transport), Romgaz (natural gas production and distribution), RENEL (electricity), and RomTelecom (landline telecommunications) were not to be privatized, at least not immediately.



The first post-communist government (1990-1992) employed a more liberal reading of the Commission's recommendations for economic policies. It implemented drastic austerity measures and, at the same time, sheltered state enterprises, by transforming strategic enterprises into *regii autonome* ("public monopolies"). Institutionally speaking, public monopolies benefit from a high degree of institutional and functional autonomy, yet they are, to a certain extent, controlled and monitored by the public authority that established them (in the case of the railway sector, the Ministry of Transportation). Law 15/1990 provisioned that these enterprises operate like trust companies: they had financial autonomy, which meant that they sustained themselves primarily from their own commercial revenue and had their own private assets that they could alienate freely. At the same time, however, they could receive help to cover their losses from state subsidies and were allowed contract bank loans on conditions similar to those that govern the finances of public institutions.

With respect to CFR, the government liquidated the Ministry of Transportation's Department of Railways and translated the entire organization to a newly established enterprise (The National Society of Romanian Railways - SNCFR) with a management structure inspired from capitalist corporations. Complete subordination to the central government was characteristic of the time when the railways were a part of the Ministry of Transportation. Beginning with the early 1990s, it was replaced by a form of coordination between the state and the autonomous enterprise. The state was the sole shareholder, and had its interests represented in the company's board of directors by a representative of the Ministry of Transportation. The firm was also subject to financial regulations distinct from those governing private firms, more in line with those applicable to public institutions, and it was entitled to receive subsidies from the state budget to pay for expenses with technical endowment and capital repairs that it could not cover

completely from its revenues. The company had the liberty to establish five-year programs for development, modernization, and endowment investments, but these investment objectives had to be approved by the government and financed through budgetary subsidies. Its administration was entitled to set transportation fares but had to obtain prior governmental approval. SNCFR was something in-between a public institution and a private corporation. As an "autonomous public monopoly of national interest," SNCFR remained bundled. It administered the entire infrastructure network (tracks, power wires, installations etc.), and all the locomotives, coaches and wagons operating in the eight regional districts nationwide. It also owned eighteen maintenance and repair facilities, fifteen hospitals, eighteen high schools and technical schools, eight qualification centers, and a plethora of sports clubs.

*Dependent autonomy, technocratic rule, and risk aversion*

The following government (1992-1996) sought a more embedded form of capitalism. Railroads and other public monopolies were deemed unprivatizable for thirty years and the government endeavored to control prices in domains considered strategic for national industrial policy, including rail transport. With respect to the rail sector, this created a condition that I call dependent autonomy. SNCFR retained its formal independence, but government oversight was enhanced, and the national budget served as a parachute available to safeguard the too-big-to-fail company from financial free fall.

Most notably, dependence was realized through the government's decision to control rail transportation prices. Recall, for instance, that the law that had turned SNCFR into a public monopoly had also enabled it to set its own fares, but these fares had to be approved by the government. As keeping transportation costs low was seen as a prerequisite for industrial

restoration and as a vector of welfare, the Ministry of Transportation did not give the green light to any fare hikes over a number of years. This meant that SNCFR could not adjust passenger and cargo fares with inflation rates that were spiraling freely throughout the 1990s, which led to considerable decrease of commercial revenues (Simuț 2000: 102-103).

Combined with the fact that starting with 1991 it had received only meager funding from the state budget<sup>24</sup>, SNCFR was in a dire financial situation. Since fixed costs in rail administration are traditionally very high and salaries were programmed to rise automatically with inflation, reduced revenues forced the administration to lay off 22,500 employees in 1994, and to curtail spending with maintenance and repair in order to keep the company afloat (Buciuman 2002: 71 78-79). Since money was not nearly enough even in the aftermath of such moves, the company also had to turn to the state multiple times for subsidizing their losses and for getting bailed out of its debt arrears<sup>25</sup>. SNCFR was the largest beneficiary of debt forgiveness, as well as a main victim of outstanding debt. While many of its debts were cancelled by the state, there were also considerable enforceable debts that the company never cashed in from its state-owned clients<sup>26</sup>.

A significant consequence of this new blurry line of demarcation that rendered SNCFR autonomous, yet largely dependent on the state's already depleted coffers, was the quasi-

---

24. Although allowances from the state budget grew in absolute terms, they covered a continuously reduced share of all railroad revenues. For instance, in 1993, only 5% of SNCFR's revenues were coming from state participation, whereas in other European countries, central public participation averaged between 25-40%. (Buciuman 2002: 71)

25. Simply put, the state would often erase whatever debts a company might have incurred (to the state budget, to social welfare funds, to other state-owned enterprises - i.e. energy production), which meant that many firms either state-owned or privately owned would often simply acquire services or goods without paying for it in due time, waiting for the government to step up.

26. For instance, in May 1998, SNCFR was the company that had the highest outstanding debts to the state budget, followed by three public monopolies operating resource extraction (coal and copper), a steel production plant, and two industrial machine factories (EvZ 5/1/1998). Another report published in the media in July noted that, besides its debt to the state, SNCFR was 400 billion lei in debt to various economic agents, and it was waiting to cash in nearly three times more from its clients (EvZ 7/7/1998).

privatization of the bundled enterprise under technocratic rule<sup>27</sup>. For technocrats who had lived in the shadow of communist politicians and have then dominated the first postsocialist governments (Zamfir 2004), dependent autonomy was a gift, as it allowed them to assume power of decision and to build capital for themselves by plundering the public goods of the company for their own benefit (Poenaru 2018). As Romanian sociologist Cătălin Zamfir put it,

Management mechanisms of state enterprises were replaced by quasi-private mechanisms practically invested with absolute power. The managers of these enterprises were in a position to act in an absolutely unconstrained managerial environment, without control or responsibilities, and benefitting from lax budget constraints. [...] The independence of state enterprises, complementary with the weakening of state control over them generated corruption, inefficiency, and counterproductive management. (2004: 164)

Strategic actions taken by enterprise managers and other high-ranking clerks with political connections led to the furthering of privatization by informal means.<sup>28</sup> In simplified terms, benefitting from their position and the inside information that came with it in combination with lax government control, managers would set up private firms, usually ran by trusted intermediaries. The state-firm that they managed would then contract with the private firm for various products and services.<sup>29</sup> "Tick firms," ("firme căpușă") dubbed so in the media and in common parlance due their similarity to the blood-sucking parasite, enabled their owners not only to accumulate substantial capital by embezzling public funding and rerouting it to their own pockets, but also to control the procurement of resources for state companies. In the railroad

---

27. A wealth of analyses of Romania's "transition" note that enterprise technocrats were the first true winners of this first stage of transformation of the country's economy. Technical specialists had gained considerable autonomy under the quasi-liberalization period of state-socialism (1960s and 1970s) which they sought to safeguard from Party constraints by developing a form of political indifferentism that enabled them to focus on industrial growth. Anti-communism grew among technocratic ranks in the 1970s and 1980s, as the Communist Party tightened the grip on industrial policies (Zamfir 2004: 22-23).

28. Scholars of post-socialism in Central and Eastern Europe have vastly documented this process. See Lampland 2003 and Stark 1990 on Hungary, Staniszkis 1991 on Poland, Altschuler 2001 on the Czech Republic. For the Romanian case, see Pasti 2002; Stoica 2018; Zamfir 2004.

29. A news story ran by Romania's *Liberă* in July 1997 showed the scale of this practice. According to the newspaper, over 20,000 tick firms had operated countrywide in 1997. The majority of these parasite firms were discovered in the domains of public monopolies, and in the state-owned enterprises in the sectors of heavy industrial production and telecommunications. (RL 7/6/1998)

sector, the mushrooming of firms owned by former bureaucrats of the state company (firms specialized in the distribution of spare parts for locomotives and wagons, intermediation of infrastructure equipment sale, and even firms running road or rail transport in direct competition with SNCFR) is an illustration of this practice that continued long after the demise of any developmental-minded governments.

The story of Mihai Necolaiciuc, a former head of the rail infrastructure company dubbed "The Railway Tsar" by the media, is a case in point. Necolaiciuc turned (in)famous in 2004, a year after his removal from his managerial seat, as the press began to reveal some of his shady dealings. It was discovered that orders of supply for the works of renovation on a hotel owned by the company were grossly overpriced. For instance, the infrastructure company paid for each bag of cement 24 times the market price, and 8 times more for a square meter of carpeting, all to the benefit of a Romanian construction tycoon who had backing from both social-democratic and liberal politicians<sup>30</sup>. To add insult to injury, under Necolaiciuc's management two private cargo firms had a particularly privileged position that granted them access to infrastructure and to logistical services to the detriment of public rail companies.

Another consequence of dependent autonomy was that sheltered by state funding, most industrial enterprises did not feel pressure to reform and become competitive on the market. The enterprise's change of status had failed to introduce the public monopoly to hard budget constraints, and legislation provisioned a cushy budgetary pillow to fall back on in case of need. As long as SNCFR held complete monopoly over rail infrastructure and operations, performance criteria were diffuse, and the company was deemed too big to fail (in economic terms of market share, number of employees, and importance in controlling the costs of industrial development, as well as in social terms of welfare, and in geopolitical terms of military defense), managers had

---

30. These dealings reportedly prejudiced the company with more than \$100.000.000

little incentives to initiate substantial reforms in the rail system that would have potentially rendered it commercially viable, and preferred instead to pursue the same goals as before 1989, focusing on technological renewal purchased by tapping the pockets of the state.

*1997- present: Delayed shock therapy and neoliberal consolidation*

Early transition gradualism was followed by a delayed shock therapy since 1997. Between 1996 and 2000, the center-right coalition that ousted the social democrats aligned its policies more closely to the recommendations of the IMF and the World Bank. The main features of the ensuing “delayed shock-therapy” were dramatic reductions in state-sponsored credit for industrial growth, fiscal austerity and ample structural reforms in the economy, including the reorganization of state-owned industrial and infrastructural enterprises. (Ban 2014: 161). SNCFR was among the state enterprises slated for streamlining. Owing to poor government control, massive pilfering through the operation of “tick firms,” inefficient services, the loss of markets caused by industrial contraction in the 1990s, and an almost complete lack of capital investment to modernize or at least maintain the industry, the company had become a massive drain on the state budget. By 1997, SNCFR had already accrued 5 billion dollars in debt.

In response to this problem, SNCFR’s management and railroaders’ trade unions proposed the reorganization of the company following the holding-style of Deutsche Bahn that would have allowed for a significant degree of coordination between state-owned companies and rail branches. Two American consulting firms hired to help design strategies for rail sector, as well as Russell Pittmann, an anti-trust expert from the U.S. Department of Justice who acted as rail policy consultant on behalf of the World Bank also advocated for a degree of vertical integration that would have put infrastructure and freight under the same ownership. Contrary to

such proposals, the government, driven by a desire to ingratiate itself with the EU, tailored its rail reform policy on the First European Railway Package three years before the package was officially passed in Brussels, five years before the EU demanded member states to translate it into national legislation, and nine years before the country had become an actual member state.

### *Horizontal disembedding*

In 1998 the government ordered the immediate reorganization of SNCFR through "division into national companies and commercial enterprises [...] that function on commercial precepts, characteristic of the market economy, oriented toward the earning of profit" (OUG 12/1998, Art. 47, Paragraphs 1-2).

The company was divided into five separate enterprises that were still publicly owned. Three of them remain particularly important to this day. National Railways Company (CFR Infrastructură) administered and maintained the rail infrastructure owned by the state. National Society for Rail Freight Transport (CFR Marfă) handled cargo operations. National Society for Rail Passenger Transport (CFR Călători) was in charge of passenger services.<sup>31</sup> Three years later, the government furthered the breaking of SNCFR by ordering the separation of repair and maintenance services from the mother companies, and their establishment as joint-stock enterprises. This move led, for instance, to the establishment of Locomotive Repair as a subsidiary firm tasked with the maintenance and repair of locomotives owned by CFR Passengers that is also entitled to close maintenance contracts with private rail operators.

Splitting SNCFR was designed as a means to curb spending by getting rid of excess assets and by trimming personnel. It involved the division and transfer of buildings, facilities,

---

31. The other two firms established through the break-up were Society for the Administration of Railway Assets was in charge to manage the excess assets resulting from the split, and the Society for Rail Management Services that was put in charge of managing finances and providing accounting services for the newly established companies.

machines, and employees from the mother company to the new enterprises. CFR Passengers, for example, was allotted the depots and the wagon yards that housed its rolling stock before the split, a proportion of the defunct company's locomotives and all the passenger coaches, and the employees (bureaucrats, train drivers - usually the most qualified ones -, maintenance and repair staff, etc.) who activated in the passenger transportation sector of SNCFR. According to the reorganization bill, the emergent companies were to be allotted only "the strictly necessary assets for the undertaking of activities under conditions of efficiency considering the traffic existent at the time of the reorganization." (OUG 12/1998, art. 50). As far as personnel were concerned, the law stipulated that it would be transferred "selectively." The selection criteria were to "prioritize professional competence, work discipline, and the provisioning of a sufficient number of positions necessary for the security of railroad traffic." (*ibid.* art. 55, alin.1).

The restructuring bill had a triple purpose. First, by separating the administration of infrastructure from the provisioning of services, it aimed to dissolve the state's monopoly over rail transport and allow private operators to emerge. Another declared purpose of the move was to bolster the profitability of public rail transport by reducing the cost of state-sponsored rail operations. It did so by putting each company on their own balance sheets, which meant, for instance, that the losses of the passenger sector could not be offset any longer by the revenues of the freight sector. Finally, the break-up was to pave the way for privatization: shrunken firms would have been easier to audit by potential investors and cheaper to buy off.<sup>32</sup>

The division also entailed the financialization of the relation between infrastructure administration and train operations. Whereas before 1998, all these were sectors of the same enterprise, after the restructuring, the Freight Company and the Passenger Company had to pay a

---

32. It was only the Freight Company that was penciled in for future privatization, while Passenger Company was never considered given the social function of rail passenger transportation.



so-called infrastructure use tax to have their trains run on the public tracks. At the same time, the bill reaffirmed that "public rail transportation for passengers has the character of a public social service" that was to be given as concession through public auction to the firm that would advance the best offer (Buciuman 2002: 191). Public concessions for public transportation services meant that passenger carriers were entitled to receive the difference between the actual costs of transportation and the revenue from ticket fares from the national or local budgets, with the addition of a 3% profit margin (EvZ 7/7/1998).

A vision equating state ownership and control with inflexibility and wastefulness guided the Ministry's decision to accelerate the transformation. In the words of secretary Băsescu, "a holding type structure is a kind of organization in which railroad activity remains super-centralized, without flexibility in the activity of exploitation, and, especially, it allows financial politics geared toward the entire system, like some sort of common pot." (EvZ 10/15/1998).

Băsescu had found an ally in Viorel Simuț, the general manager of SNCFR who then went on to head the Infrastructure Company:

Although the management of railroads is largely accountable for their decline, the problems that railroads are confronting with are to an even greater extent caused by the relations between the state and railroad companies. In general, states have denied rail companies the freedom that commercial enterprises enjoyed. Besides political interferences underpinned by immediate purposes, the authorities had the tendency to demand the keeping of some services that were under the threshold of profitability. Railroad investments were often inadequate or had an inefficacious orientation, and thus weighed heavy on public finance. Governments have compensated losses through important subsidies, without any clear objectives regarding, for example, the improvement of their efficiency. (Simuț 2000: 34-5)

The antidote to this problem in the eyes of minister Băsescu and of general manager Simuț, the two key actors in the reform of SNCFR, was that "railroads [had] to be managed as a [commercial] enterprise [...] liberated from the burden of past heritage," and that "the laws of the

market must be allowed to function to a greater extent" (*ibid.* 35). Overzealously, the government went for the fully separated model, by establishing not only independent organizational entities for transport operations and infrastructure management (the fundamental requirement of the package), but also by separating freight and passenger operations into two different companies.

### *Labor dissent and acquiescence*

The succession of pro-state and pro-market political forces was not simply a matter of elite politics but was also tributary to the shifting allegiances of the main trade unions. Most notably, the same trade union blocs that had pushed back against the liberalizing reforms proposed by the center-left, and had obtained favorable pro-labor legislation as result, have later lent their support to center-right reformists in 1996, to the effect of rendering their industrial base vulnerable to pro-market machinations.

The story of rail trade unions' reaction to the reform of their industry is a textbook illustration of the rise and fall of labor activism in the 1990s. In the beginning of the decade, railroaders had gone on strike or took to the streets in protest on several occasions. In 1993, for instance, the Ministry of Transportation ordered an incipient form of unbundling, namely the separation of locomotive and coach overhaul repair enterprises from SNCFR, in prospects of their privatization. In response, repair workers held a massive protest in front of the Ministry of Transportation in Bucharest. The demonstration had turned violent quickly, as protestors threw stones at the building, and forced the gates of the institutions, some managing to break in. The police eventually broke the protest apart, but since then, a seven-foot tall cast-iron fence surrounds the building. In 1995, it was the turn of train drivers to make public their claims to

higher wages and better work conditions and to fight massive lay-off programs through strikes that halted all traffic for weeks on end.

However, railroaders proved powerless when confronted with the massive restructuring of their workplace in 1998. Although SNCFR was the first state company to have its status transformed radically and its organization divided in a process pushed through political backdoors, the reform happened without "much social convulsions, strikes and public protests of the scale of those staged by employees of RENEL (the state-run electricity company - *m.n.*), another mammoth on the verge of reorganization." (EvZ 10/15/1998) All that unions were able to do in response to the hastiness and radicalness of the bill was to stage a two-hour long token strike that did not even bring together the entire workforce. Reasons behind the switch from militant dissent to labor weakness and union acquiescence must be sought in the post socialist structural transformations of trade unions, as well as in their alliance with enterprise managers and in the cunning strategies employed by the authorities to undermine labor organizations and industrial workers' demands.

Besides buying social peace through pro-labor legislative policies, the authorities employed several other means to bring labor organizations in line. One particularly successful strategy was the political regimentation of trade union leaders. For example, Miron Mitrea, the leader of "The Brotherhood" (CNSLR - Frăția), the largest and most powerful trade union federation in the country, had served as minister of transportation between 2000 and 2004. During his tenure as minister of transportation, former union boss Mitrea had approved the co-optation of rail union leaders into the administrative structures of public railroad companies. When outright cooptation was not possible or desirable, another method of currying favor with the labor movement was the offering of economic incentives to trade union organizations. For

example, the Ministry of Transportation and the administration of SNCFR had offered, by ways of concession, the majority of the commercial spaces in train and subway stations to trade union organizations in exchange of the latter's support for restructuring and privatization. To this day, trade unions operate all the kiosks, shops and restaurants in Bucharest's Northern Station or lease them to private businesses.

Treachery and antagonism had also been chief means by which the government had pushed market policies to the detriment of labor. In exchange for electoral support, the Democratic Convention promised railroaders a substantial hike in the minimum wage by 1997 but backed out of the deal as soon as it got in power. One justification of this change of heart was that the financial situation of the company could not shoulder salary hikes, and thus labor demands were irrational and imperiled the very sustenance of the national railroad system. According to minister Băsescu, "the financial situation of SNCFR does not allow any pay rises, not even minor adjustments. Wages are paid from bank loans and also on the expense of pensioners, through the non-payment of health insurance, as well as on the expense of unpaid debts to suppliers and to the state budget." Some branch trade unions were indeed wary of going on a general strike that would have sent the company in financial havoc. Union members from Cluj, for example, told the press "a general strike would produce great financial losses that no one needs right now" (EvZ 7/23/1998).

Another efficient way of undermining railroaders' claims to welfare was to pit the workers against the general populace who still relied overwhelmingly on trains for everyday mobility. Discourses by government representatives depicted the wage hikes demanded by rail workers as detrimental to the general public. "There's absolutely nothing to negotiate [with the unions] because any wage adjustment would entail a rise in transportation fares," minister

Băsescu reportedly said. The politician in charge of transportation also depicted railroaders as an already privileged social category that placed their own interests above the public service they were supposed to provide. "Railroaders should know they are only wage earners, not owners of the transportation system, and must always be available to service the population," Băsescu declared. "The strike is illegal. It's inadmissible that during these days of heat wave passengers have to wait for hours on end in train stations because of the mood swings of some sindicaliști ("union members")" Such a strategy proved efficient. Unions were wary of going on a general strike that would have sent the company in financial havoc. Ordinary passengers were also averse to railroaders' claims. For example, this is how one commuter from Craiova answered a vox populi survey ran by Evenimentul Zilei daily newspaper about railroaders' actions: "So what if they salaries are <only> 1,500,000 lei? We make 500-600.000 a month. They are acting up!"

As a result of these strategies, both the power and the public legitimacy of railroad trade unions plummeted. In July 1998, days after the decision to break up SNCFR, rail trade unions announced a general token strike nationwide. Among their demands were: the delay of the restructuring process until impact studies were produced and until the Parliament passed a so-called "law of ministerial accountability" that would have made possible that government secretaries be held accountable for the potential economic and military risks posed by the radical reorganization. Additionally, railroaders also requested a 17% wage adjustment correlated with inflation, and a commitment from the government that those rendered redundant will be offered secure jobs at a later point (RL 7/21/1998). The general strike was a spectacular failure. National daily newspaper Evenimentul Zilei, for instance, ran a cover story titled "Cocoa Strike"<sup>33</sup> The report noted that only a few regional districts took part in the labor conflict, with workers from Bucharest, Craiova, and Galați, the regions closest to the administrative center both

---

33. In Romanian slang, "de cacao" ("of cocoa," "made of cocoa") stands for "shit" or "shitty."

geographically and symbolically, acting as strike breakers. Instead of impacting 400 trains that day as it was announced, the strike only interfered with 18% of the total volume of rail traffic. The day of the token strike, minister Băsescu raised the stakes in person. He stormed the platforms of Bucharest's main station in search of striking train drivers and threatened that all those who halted work would be legally sanctioned and sacked (RL 7/25/1998). Indeed, the ministry and the administration of SNCFR materialized the threats by opening legal procedures against 363 strikers. This pushed the unions in the position of promising to refrain from future actions if the charges were dropped (EvZ 7/30/1998).

## **Conclusion**

This chapter has followed the history of the Romanian railroad system from its inception in the nineteenth century to the present day as a means of understanding transformations in infrastructural governance and the ways that the national railroad system has operated as material and symbolic enactment of statehood, national pride, political sovereignty, industrial economic development, and social welfare. The spectacular failure of the short-lived public-private partnership experiment in the construction and administration of railroads (1866-1888) inaugurated a long period in which the system grew increasingly centralized (1888-1947) and then increasingly more embedded in the substantive national economy (1948-1989).

The fall of socialism prompted the need to reform and reorganize the large state-owned industrial and infrastructural enterprises that were in dire economic trouble. This was caused by a massive downturn in economic production and increasing poverty rates curtailing mobility for some segments of the population, and by substantial cutbacks in public spending that left the system unable to modernize or even maintain the infrastructure and machines running on it. The

poor quality of infrastructure and the symbolic depreciation of train transit combined with the growing accessibility of personal cars and the development of the road system to produce dwindling rail ridership.

Postsocialist reforms of the public railroads were bounded not only by economic conditions, but also by the intransigence of the modern infrastructural ideal. To this day, for instance, the government defines railroad infrastructure as a domain of "national security" and rail passenger transportation as a "social service." Given the great degree of state control, institutional interdependence, and social embedding, reforms targeting CFR have been particularly contentious politically. Unlike many state enterprises in the productive sector that had been sold for pennies, the rail system, went through a long and gradual process of transformation that was governed by the power struggles between political forces advocating in favor of a mixed economy with a degree of state involvement and those promoting laissez-faire liberalism. Often the political balance was tilted in one direction or the other by the shifting allegiances of the powerful trade union movements.

Throughout the so-called transition period from state-socialism, policy analysts and reformers have been concerned with the "correct mix of public and private property" (Stark and Nee 1989; Stark 1996). The result of these decades long effort is a more differentiated rail transportation sector that divided the monolithic CFR into a plethora of smaller companies, each with its own splintered subsidiaries, and the introduction of liberalization and marketization in certain segments of the industry. While these measures have indeed engendered the emergence of private initiative and market competition in the passenger and freight business, the majority of rail companies remain, to this day, under various forms of state ownership, and rely on funding from the state. By "grey area," I understand this hybrid condition of post socialist public

companies produced at the intersection of historical path-dependence with contemporary double movements.

In lieu of conclusions, I offer below some of the consequences of this process of reform. I dwell on the current ownership structure and property rights of public enterprises, the institutional relations between these companies, the material conditions of infrastructure and trains, and the power of labor representatives.

### *Ownership*

The legal ownership and property rights that have emerged in the aftermath of the break-up of CFR are best captured by the notion of recombinant property derived from David Stark's study of capitalism in Hungary (Stark 1998):

Recombinant property is a form of organizational hedging, or portfolio management, in which actors respond to uncertainty in the organizational environment by diversifying their assets, redefining and recombining resources. It is an attempt to hold resources that can be justified or assessed by more than one standard of measure. The distinctive variant of organizational hedging that is recombinant property in Hungary is produced in two simultaneous processes: Parallel to the decentralized reorganization of assets is the centralized management of liabilities. On the one hand, decentralized reorganization produces the crisscrossing lines of inter-enterprise ownership networks; on the other, debt consolidation transforms private debt into public liability. [...] The simultaneity [of these two dimensions] gives distinctive shape to Hungarian property. The class of competing ordering principles produces organizational diversity that can form a basis for greater adaptability but, at the same time, creates acute problems of accountability. (1998: 997)

Beginning with the 1990s, processes of splintering and unbundling had disbanded the vertically integrated organization of the socialist era monolith into a plethora of smaller firms. The overwhelming majority of these firms are nominally autonomous, and managed on principles of corporate governance, but this formal independence is vastly complicated by diffuse property rights and by various forms of cross ownership. Take for example the corporate



governance of CFR Passengers. The company is run by a general shareholder association (AGA), a council of administrators (CA), a general director and two deputy directors. Directors are proposed and named by the CA, but all members of CA are named and/or revoked by the AGA. The AGA of CFR Călători consists of two members, both executives from the Ministry of Transportation representing the Romanian state as sole shareholder. In theory, corporate governance means that the government cannot intervene in the administration of CFR Călători. In practice, however, the minister of transportation has a great amount of leverage that can be enacted either formally, through controlling the AGA, or through informal channels. The instruments of state ownership have changed from centralized control and juridical ownership by state ministries to complicated schemes of shareholding whereby state authorities retain a decisive say in how companies are managed.

#### *Institutional relations and material conditions*

Reforms that unbundled CFR sought to untangle the deep inter-enterprise interdependence that characterized the centralized company. While these policies have indeed created new semi-autonomous enterprises owned by the state, governed by public acquisition laws, and governed through corporate structures, they have also emplaced new forms of institutional interconnection. Often these new links produce dire economic effects. Take for instance the relations between CFR Infrastructure, the company that administers the national track network, and the two state-owned train operators, CFR Freight and CFR Passengers. The former owns the absolute monopoly over tracks. This means, on the one hand, that it has little incentives to update the network, and, on the other hand, that in order to be able to operate, the latter two have to pay the infrastructure use tax regardless of how bad the infrastructure is. The

poor quality of infrastructure (discussed below) contributes, on the one hand, to rising costs of maintenance and repair for business operators (deteriorated tracks break wheels and vice versa, loose power cables break locomotive's pantographs etc.), and on the other hand leads to increased transportation times which cause operators to lose contracts and money.

This dependence on poor infrastructure has deepened the crisis of CFR Freight and brought it on the edge of bankruptcy. With many of the giant enterprises like Oltchim Chemical Complex running on financial deficits that conduced to them deferring payments to CFR Freight, the latter had become unable to pay its accumulated debts to CFR Infrastructure. In its efforts to limit indebtedness and struggling to pay wages and immediate expenses, CFR Freight was forced to sell some of its locomotives and wagons. The financial disarray and the dwindling stock of machines lost the company other profitable contracts with sound firms, like car manufacturer Dacia and oil producer Rompetrol that were taken over by private freight operators, often using rolling stock bought from the crisis-struck state company. Under these circumstances, the state-owned CFR Infrastructure began foreclosing on the debts of the state-owned Freight Company, with the latter currently risking going bankrupt and shut down, unless the European Commission allows the Romanian state to wipe the balance clean.

Another example of toxic institutional interdependence is the relationship between Locomotive Repair, and its mother company, CFR Passengers. De jure Locomotive Repair is independent: it has its own management structure, a separate budget and balance sheet, and can provide services to both CFR Passengers and to any willing private firm. Yet, the firm was not showered with contracts on the open market which makes Locomotive Repair is de facto dependent on its mother company, its main shareholder and main client. This relation of dependence means that the financial problems that the mother company encounters will spill

over onto the subsidiary. For example, part of its efforts to keep losses at bay, the CFR Passengers stalled payments toward Locomotive Repair, which led the latter to incur massive debt to the state budget, but also, paradoxically, to the mother company (for outstanding repairs and rent fees). While the 1998 and 2001 divisions were intended to render the rail system efficient and equip the firms for the market, what it ended up creating was a cycle of indebtedness that moved money from one pocket of the state to the other, with delays that put both the state and the two companies at a loss. Locomotive Repair took a particularly heavy blow. Since January 2015, the firm has been undergoing insolvency procedures, which means, among other things, that it cannot hire new workers unless others retire, it had to cap wage growth, stopped paying outstanding wages to its employees, and is left with meager resources to buy equipment, tools, and spare parts or to maintain its workspaces.

### *Labor*

Changes in the organization of the defunct CFR impacted heavily the bargaining process that underpins collective employment agreements, by curtailing the negotiation power of trade unions already worn out by divergent political allegiances, and internal quarrels. One vital effect of the disbanding was the fragmentation of the powerful railroaders' trade union that had mounted substantial resistance to company restructuring plans in the 1990s. Today railroaders are represented by a plethora of trade unions that have proliferated after the break-up. Unions are affiliated to different nationwide trade union federations that often have conflicting interests. Furthermore, yearly collective agreements expire on different dates for each of the rail companies and for their branches, thus bargaining procedures do not coincide temporally. This provides little incentives for solidarity among different trade unions and between workers

employed by different firms. In this way, railroaders have become highly vulnerable to companies' administration moves to economize by keeping workers on duty for as many years as possible and by keeping salaries as low as possible. Workers from different companies have told me on a myriad of interviews that they consider the break-up of the monolithic company as a *divide et impera* tactic that splintered the workforce and diminished its means of resisting detrimental reforms.

### Snapshot: Apart, yet still together

"Have you seen in what conditions *ceferiști* (railroaders) work there? WOEFUL!" Marcu, the station master of Târgoviște, a city 50 miles northwest of Bucharest, had just learnt that I was beginning research at the Bucharest Locomotive Depot, the place that houses the locomotives that CFR Călători runs between Bucharest and his station. Marcu's words betrayed his compassion for rail technicians. "The entire thing is in rubble. It's about to collapse on their heads." At the same time, he was also aware that the dilapidation of that facility jeopardized the functioning of the entire railroad system, his own job included. "They don't have enough locomotives and all they do is patch them up over and over again. Calea ferată ["the railroad" *qua* system] can't go on like this for much longer."

Marcu's use of the collective syntagms "ceferiști" and "calea ferată" is particularly interesting. Marcu, an employee of CFR Infrastructură has ceased to be colleagues with train drivers working for CFR Călători and with locomotive technicians who work at the Bucharest Depot for Locomotive Repair, a subsidiary of CFR Călători. Yet his bemoaning of brokenness expresses the subjective position of many railroaders who continue to identify themselves as *ceferiști*. Derived from the phonetic pronunciation of the acronym C.F.R. - The historical name of the national rail company - *ceferist* remains the blanket term for railroaders in Romania. Collective terms points not only to a sense of fraternity and feelings of solidarity among public rail workers who have been allocated to different splintered firms, but is also indicative of the enduring material and economic co-dependence of the various firms that have emerged out of the splintering of the socialist-era unitary rail system.

Albeit theoretically separated, these companies depend on one another operationally and financially. CFR Infrastructură makes money by charging the so-called *taxă utilizare*

infrastructură ("infrastructure use tax," hereafter TUI) from all public and private operators that run trains on its track network. If CFR Călători withdraws from a route, say because Depot workers cannot prolong the lives of sufficient locomotives, then CFR Infrastructură risks losing its main source of revenue. CFR Călători, in its turn, is dependent on the quality of the infrastructure administered by CFR Infrastructură, as trains cannot run safely and timely on tracks suffering from disrepair. It is due to this inextricable interdependence that, when Marcu expressed his fears for the future, he did not refer specifically to the prospects of one company or the other, but rather to the railroads as a whole.

Tight interdependence may just as well generate technical frictions between companies. For instance, if locomotives and coaches run by CFR Călători are in a bad technical condition, they are very likely to damage the network on which they are running (i.e. iron wheels with flat spots can chip at the tracks which raises the risk of future derailment). Conversely, locomotives running on decaying infrastructure are more likely to break down (i.e. tracks with irregular surfaces can deform the wheels of machines, defective switches pose the risk of derailment, and loose power wires can tear up the electrical equipment on top of locomotives). Brokenness caused by infrastructure problems put even more pressure on the always strained maintenance budget of CFR Călători, and saddles Locomotive Repair technicians with technological failures that are difficult or outright impossible to mend.

Material frictions between technologies that, when in disrepair cause more disrepair, mediate these multivalent forms of dependence and conflict. Maintenance and repair workers who take care of the tracks and the machines running on them represent the silent and often overlooked workforce on which the qualities of these technologies depend. Regardless of who or what is to blame for the economic problems that underpin disrepair, it is their task to fend off

material decay and to keep infrastructures and machines in some semblance of working order so that these companies can sustain their relations mediated by technology. At the same time, maintenance and repair workers are constrained in their efforts by specific networks of knowledge, skills, embodied senses, tools, spare parts and equipment. As proclaimed by Marcu, it is often the case that they work in "woeful conditions," with quasi-ruined repair facilities threatening to "collapse on their heads." As it were, the very infrastructure that needs to be deployed against the wrecking of public infrastructure is in disrepair.

The following chapter focuses the ethnographic lens onto the effects that postsocialist transformations had on the backstage of infrastructure and opens the doors to the hidden abode of maintenance and repair.

**CHAPTER 2.**  
**"Cinderella(s) of the Romanian Economy"**  
**A Tale of Rail Labor Transformation**

Since the 1990s, the railway system and the railroaders working for it had fallen hard from their highly elevated status under state-socialism to their present state of economic, physical, and symbolic destitution. Doru, the middle-aged train dispatcher of a station in rural Romania described very poignantly how it feels to work for the public railroads nowadays. "Back in the day, being a railroader was a reason for pride. We used to be 'the second army of the country'. Now we're tired of being the Cinderella of the Romanian economy." By comparing the railroads with Cinderella, Doru implicitly described them as a thing of merit, undeservedly neglected or forced into a wretched or obscure existence. Unlike the fairytale, there is no triumphant reward after unjust oppression in this story. Rather, this is Cinderella written backwards: a former princess - a state-socialist flagship enterprise - turns soiled and wretched.

How did "cinderellization" happen? How does it impact the material environments of the workplaces, the organization of labor, and the livelihood of railroaders? Marcu's depiction of the Bucharest Depot as "rubble" about to collapse on the workers toiling inside is consonant with the vocabulary that Romanians use to describe the financial and material condition of many enterprises, infrastructures, and welfare amenities that linger on after state-socialism. Ruin ("ruin"), paragină ("desolation"), and morman de fiare vechi ("pile of scrap metal") are other popular descriptions of public enterprises that linger on in the ambiguous terrain between



scraping by on dwindling state support, and anticipating privatization, wholesale shutdown, or outright collapse.<sup>34</sup> While the overwhelming majority of socialist-era enterprises have been shuttered or privatized, the state has retained a substantial degree of ownership and control over those vital infrastructural services that it deemed "strategic" - transportation systems, telecommunications, energy, and healthcare -, and thus too big and too vital to give away or abandon. However, many of these surviving critical infrastructures are but shadows of their former selves and stand on unsteady pillars. They are kept afloat on more or less minimal life support by the state, their new organization is conducive to interdependence and dysfunctional tension between the splintered sectors, and they operate in various states of material and symbolic decay that impact both their users and the workers who sustain them, albeit in different ways. Public rail transportation, the economic sector made up of the state-run firms begotten by the vanquishing of the state's monopolistic hold on Romania's vast rail track network and by the division of their gigantic mother company, is illustrative of this dynamic of endurance and agony.<sup>35</sup>

In this chapter, I take a close look at the Bucharest Locomotive Depot (DB-C), Romania's most important train garage and also one of the most physically dilapidated in the country. The symbolic and material degradation of the particular state-run maintenance and repair shop where I did fieldwork also underpins the practical and symbolical efforts that workers deploy to do their jobs under severe conditions material deprivation and to maintain a sense of honor and

---

34. Many people credit Petre Roman, the first postsocialist prime minister, for first describing, in 1990, the Romanian industry as a "pile of scrap metal." According to his detractors, this proclamation was meant to legitimize his liberal-minded policies. Apocryphal as this statement might be, it was nonetheless an incredibly powerful self-fulfilling prophecy.

35. Hiring approximately 42.000 people nationwide, the three main public rail companies and their subsidiaries are Romania's largest employer. Taken together, state rail companies surpass the five largest private employers combined. Unlike most state-socialist enterprises in the productive and extractive industries, these companies have avoided both wholesale privatization and utter collapse, yet their current condition is far from enviable. CFR Infrastructură administers one of the poorest rail networks in Europe and CFR Marfă is undergoing insolvency. Confronted with declining ridership, poor and unreliable services, aging machines, and a dwindling skilled workforce, CFR Călători is treading water thanks to the designation of passenger transport as a social service. The former glory of the rails had plummeted deeply.

workmanship in a context of their labor being devalued. While the following chapters address the pragmatics of repair work and technicians struggles with their abjection, this chapter investigates how post-socialist changes have reshaped railroad labor in general, and maintenance and repair work in particular. It explores how the dynamic of endurance and ruination is encoded in the materiality, the organizational structure, the different microclimates of labor, and the wages of depot workers, whose work conditions Marcu deemed so firmly as "woeful." In addressing the physical erosion of machines and work environments in conjunction with the uprooting of shop floor hierarchies, and with the decline of workers' wages and benefits, the chapter draws inspiration from theorizations of post-Fordist neoliberalism (Berlant 2007; Muehlebach and Shoshan 2012), postsocialist dispossession (Harvey 2009; Kasmir and Carbonella 2008, 2014), and working class decline (Kideckel 2000, 2002, 2008), which it brings into conversations with literatures addressing materiality, ruination, and disrepair (Navaro-Yashin 2009; Schwenkel 2013). In doing so, it links the material and symbolic dispossession of rail workers with the fall from grace of their industry, the erasure of their historical struggles, the erosion of the physical environment of their workplaces, and the curtailment of their wages and benefits.

Empirically, the chapter makes two interrelated arguments. First, it argues that under conditions of postsocialist capitalism, material decay and labor precarity should not be defined strictly in relation to the notion of state withdrawal from economy and welfare (Harvey 2007). As the agony-in-survival situation of the Bucharest Locomotive Depot will illustrate, relations of state encompassment and dependency may underpin precarious firms, rundown infrastructures and dispossessed labor just as much. Secondly, it shows that while we live in a world of industrial withering and labor decline, the one-size-fits-all term "post-Fordist" requires further nuancing, as not all economic sectors and not all the firms in any given industrial domain are

equally afflicted. Decay has beset all Romanian public rail companies after the fall of state-socialism and the state reforms and institutional restructuring that followed, but it has done so in asymmetrical ways. Some firms are doing at least slightly better than others, with some earning a privileged position to access government subsidies and others becoming increasingly dependent and subaltern. Physical and economic ruination coupled with said inequalities testify to unequal patterns of development and underdevelopment between state enterprises under neoliberal-style late capitalism. It also shapes different labor conditions for employees of different companies, leads to imbalances in both wages and self-value between various categories of railroaders, and informs different political subjectivities. Against this backdrop, I raise in the following chapters a series of deeper questions that pertain to the embodied and improvisational nature of repair work, railroaders' feelings of abjection, and the ways they revalorize their degraded labor, skills, and their social relationships.

The Bucharest Locomotive Depot (DB-C) is a suitable case study for a number of reasons. The state-run depot houses and services most of the locomotives that haul passenger trains on the tracks administered by Regionala București ("Bucharest Railway District"), the busiest rail district in the country (Masterplan de Transport 2014). Consequently, a proportion of the delays that, as we will see in Chapter 3, are taken by the general public as icons and indices of post-socialist societal disarray and of state incompetence, are causally linked to the machines that are administered by the depot, and thus to the labor, the skills, the material resources, and the working conditions of maintenance and repair technicians. Secondly, it is an excellent example of the cascading organizational effects triggered by the restructuring of vertically integrated and socially embedded state-enterprises of the socialist era. Within the depot cohabit two enterprises begotten by the "break-up." CFR Călători owns the premises and the locomotives and runs

passenger trains, while its subsidiary Locomotive Repair handles the repair shops and employs the labor force. While the former firm is well connected to the lifelines of the state, the latter is insolvent. The two firms are under different degrees of encompassment by the state and function in a relation of interdependence. Thirdly, the condition of this facility is highly illustrative of the dynamic of continued importance attributed to repair and of rail physical and symbolic degradation of rail facilities and of railroad workers. Specifically, Bucharest Depot was designated as a Grade I depot. This ranking matters for the workers, although they get no money out of it, for it provides them with a sense of prestige, as working for a premium repair facility means that the work they do actually matters. They have a substantial volume of work in maintaining important machines, which means not only that they have a tremendous sense of responsibility, but also that their labor is serious and valuable. At the same time as being the most important repair facility of its kind, the depot is also one of the most dilapidated in the country. For many depot workers, the past glory of the depot and its high rank juxtapose with its current state of advanced decay and with the perceived under-recognition of their labor.

The chapter first provides a brief sketch of the deep embeddedness of railway enterprises into the welfare regime of state-socialism, and the subsequent alteration of these arrangements seen from the perspective of the physical layout of Grivița Borough, Bucharest's rail district, where DB-C is situated. In the second section, I zoom in on the depot itself, and present its historical transformation from its construction in the late 19<sup>th</sup> Century to the contemporary degradation of its machines, material environment, and workforce. The third section focuses on the two firms that operate within its premises: their recent history, their financial situations and different degrees of encompassment by the state, and the unequal relations between them. Section four describes the organizational structure of labor at the depot, the different activities

that take place here, and the physical layout of the workspaces that correspond to each labor process. In section five, I reframe the structural inequalities between workers and managers and between CFR Călători employees and Locomotive Repair technicians in terms of the different work conditions that affect differently employees' bodies and mind, and in differential wage scales. At the end, I draw some tentative conclusions on the ways that workers utilize tropes of ruination not only to describe their current condition, but also as a form of critique in which the past is revalued and the future is feared.

### **The Neighborhood: Grivița's waning labor flavor**

Before zooming in on the material environment of the Bucharest Locomotive Depot let us take a trip through its urban home. A peri-central neighborhood located within Sector 1, the wealthiest district of Bucharest, Grivița quarter developed in connection with the expansion of the railway industry in the 19<sup>th</sup> Century, and its physical and symbolical concentration in the downtown area of the Romanian capital city. As such, the accretion of pre-socialist and socialist material forms made it into an urban microcosm of industrial social modernity that became the ground for new forms of inclusion and exclusion following the demise of state-socialism. The spatial and material configuration of the quarter is indicative both of the tightly knit connections of the embedded infrastructural ideal, and of the massive effects of post-socialist transformations on infrastructural governance, railroad organization, and symbolic valuation of labor and workers. Walking up and down Grivița Avenue, a thoroughfare that links downtown Bucharest with its northern districts and bisects Grivița quarter, offers an illustration of the former glory and the current misery of what had once been a flagship national enterprise.

*A bastion of integrated railroads*

Grivița developed around Gara de Nord, Bucharest's main train station (opened in 1872), and gradually grew into a veritable rail district that concentrated administration functions, housing, hospitals, schools, canteens, and cultural amenities like cinemas) that were sponsored and organized by the national railroad enterprise. To this day, the quarter still hosts the core of the country's transportation administration. Palatul CFR ("Palace of the Railways") stands out among the multitude of rail-related administrative buildings in the area: The massive brutalist construction made of concrete, steel and glass, its facade decorated with winged train wheels cast in iron and bronze, the heraldic logo of C.F.R., sits opposite to Gara de Nord. Erected between 1937 and 1948, the Palace gathered under the same roof all the bureaucratic services of the railway administration that had been scattered all around the city in a move meant to consecrate the centralization initiated in the 1880s with the nationalization of lines built by foreign constructors.<sup>36</sup> The Palace remains the pinnacle of Romanian administration of infrastructure and transport to this day. It is home to the Ministry of Transportation and to the main offices of all state-run rail enterprises including CFR Călători, CFR Infrastructură, and CFR Marfă.<sup>37</sup> Although formally independent both from the state and from one another, these companies still share the same building where their headquarters were located in the past.

Bucharest is also Romania's largest rail transportation hub, with mainlines and secondary lines radiating out of the city's terminal stations in a cartographic representation of railroad centralization. In addition to its functioning as an administrative center, Grivița also hosts the

---

36. Changes in the ownership of the CFR Palace mirror the transformations of the once monolithic national railway company. Until 1998, it was owned by SNCFR, then inherited by CFR Infrastructură. In 2010, the building became the property of the Ministry of Transportation, after the government had foreclosed this asset on account of the debts that CFR Infrastructură owed to the national budget. The companies that have offices in the building now pay rent to the Ministry of Transportation.

37. Among the other transportation-related administrations that have their headquarters in the Palace are Metrorex (Bucharest subway), the National Roads Company, and the Ministry of Tourism.

city's two most important train stations. Gara de Nord, the largest and busiest station in the country, is primarily dedicated to international and long-range internal higher-ranking trains (called InterRegio according to EU train nomenclature). Following decades of decrepitude, the station was slated for renovation in 2009, but works have not begun yet. Nonetheless Gara de Nord, with its franchise restaurants selling burgers and deli sandwiches, upscale cafes, and chain supermarkets looks somewhat modern and caters to a more heterogeneous demographic. The same cannot be said about Gara Basarab ("Basarab Train Station"), a lower ranking train station located 1-kilometer northwest from Gara de Nord. If international and InterRegio trains circulate only through Gara de Nord, Basarab is dedicated to regional trains that stop in every station, and thus cater primarily to working-class *navetiști* ("commuters").<sup>38</sup>

The laboring heart of the district consists of Bucharest Depot and Atelierele C.F.R. Grivița (Grivița C.F.R. Workshops), two industrial compounds that were erected at the turn of the 20<sup>th</sup> Century to perform maintenance work and overhaul operations of railway machines and equipment. To this day, locomotives that pull passenger trains and, respectively, coaches operated by C.F.R. Călători are being serviced in these facilities. Both workshops have been restructured and have changed ownership in various ways since the 1990s. CFR Călători, following the 1998 partition of CFR, now owns the Bucharest Depot. A significant part of the Grivița Workshops complex - namely the chemical equipment manufacturing plant that was established in 1961 - have been sold to private investors, and another part - the facility that repairs, modernizes, and reconstructs train coaches - is owned by an employees' cooperative association. Although its activity has been curtailed vastly in the past three decades, Grivița Workshops remains a pivotal

---

38. Basarab station, with its run-down bodegas built from sheets of corrugated tin that serve *mititei* (a Romanian version of kebab), fried mackerel, and watered down beer, with its dilapidated main building and its filthy unheated waiting rooms where stray dogs sometimes find abode, and with its shabby coaches rarely, if ever, cleaned but constantly packed to the brim with commuters, is a veritable blue-collar hub of mobility. Many of these rail-commuting workers who pass through Gara de Nord and Gara Basarab are railroaders themselves. Commuting by train is most convenient for many them, thanks to the gratuity they are granted as employees of rail companies.

enterprise specialized in retrofit and repair and has maintenance contracts with the majority of public and private train operators.

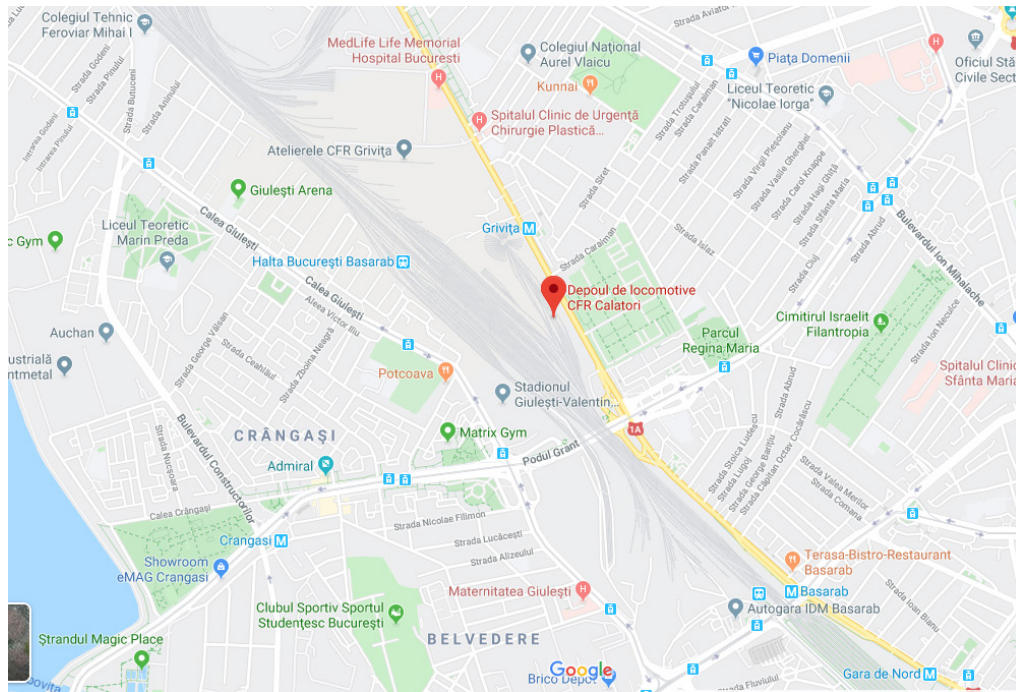


Illustration 12. Map of Grivița Neighborhood. Source: Google Maps.

In addition to administrative offices, train stations, and industrial facilities, Grivița is also home to a wide array of healthcare, education, and housing amenities constructed by and for the railroad enterprise. The Grivița Technical College of Mechanics, established in 1919 as an apprentice school, the place where the majority of railroaders working at the depot had earned their training and qualification, is located a few blocks away from the depot. Across the street from the depot lays "Steaua" allotment, the first railroaders' quarter erected in the city.<sup>39</sup> This

---

39. From the very beginning of its existence, the administration of the railroads was among the first public institutions to implement a coherent social assistance program for its employees. Initially, C.F.R. concerned itself with ensuring accommodation for its workers. In the first phase it provided locuințe de serviciu ("service housing"), usually located in the same building where the beneficiary worked (Popescu 2016). Starting with "Steaua" quarter in 1912, C.F.R. turned to developing public housing to be rented out or sold to its workers. In 1942, there were already 271 dwellings occupied by ceferiști in Grivița-Steaua (Popescu 2014: 179-180). The construction program in this area continued after WWII until the 1960s, when C.F.R. erected the last batch of blocks of flats on Grivița Avenue (Voinea and Dolghin 2014). After that moment, C.F.R. ended its



extraordinary concentration of administration, mobility services, industrial work, welfare and habitation in the center of Romania's capital city testifies to the historical centrality of state-sponsored railroads as both fulcrum of industrial development and as main means of transportation. Grivița's built environment and economic profile also illustrate the state's efforts to weaving together a coherent tightly knit railroad enterprise both physically and symbolically.

The railroad enterprise was deeply embedded in the urban structure of the city and into the social life of the neighborhood, catering to the needs of an expanding industrial working-class that was working and living here. Grivița had a distinctly blue-collar flavor during state-socialism. Luigi Ionescu, a popular music hall performer, famously celebrated its industrial modernity and its appeal to the urbanized proletarian class in his 1958 song "On Grivița Avenue," a paean to the commingling of work and social life in the quarter. The song describes the exploits of a young lathe operator who had traded his backward rural life for an industrial job in Bucharest that provided him with everything he "needed and dreamed of." At the same time, Ionescu's lyrics draw a blue-collar physical and affective geography of the neighborhood. The young machinist worked at the Grivița Workshops and lived in Grivița quarter. His social, amorous, and cultural life unfolded along the main avenue of the quarter. It is where he worked, hung out with friends, and strolled in the park, went to the cinema, and danced with his sweetheart at the workers' club. The rhythm of this urban life was circumscribed by industrial time discipline symbolized by factory sirens, and by the incessant motion of trains:

It's morning and the siren rang,  
But the railroaders are on the job - clocked in already  
I am among them, and I greet my lathe;  
Like the train station's clock, I am never late!

---

housing construction program in Bucharest, but continued supporting its workers by providing cheap credit and land allotments for them to build their own houses.

It's four o'clock, and the siren rang again,  
Another productive workday has ended.  
A refreshing shower, and on with the clothes,  
"See you in the morning," I said to the lathe  
And then...

I walk down Grivița Avenue  
And get together with the boys:  
"Cheers, Cheers!  
Cheers, cheers!"  
I stop and look at shop windows,  
I straighten my flat cap, and smile,  
"Cheers, Cheers!  
Cheers, cheers!"

Today I am at home here,  
There's no street more beautiful.

Up on Grivița Avenue,  
I get my girl, and then we're gone  
[...]  
To the theater we go,  
To the one in the park.  
Or to a movie  
At the cinema.

And then, to entertain her  
(It's Saturday evening, after all)  
I take her to the club,  
And only dance with her.  
On Grivița Avenue I live,  
Today I have here everything that I need  
And dream of.

On Grivița Avenue I live,  
Proud of my flat cap,  
I wear it  
And so, did my father.

Away from the hearth-less hovel  
Today I live in the most swell place.  
Cheers, cheers!  
Cheers, cheers!

Today I am at home here,  
There's no street more beautiful.

[...]

My heart throbs  
In sync with that of the train.  
[...]  
On Grivița Avenue I live,  
Today I have here everything that I need,  
And dream of.

*No district for working (wo)men*

Gone are the days of young workers proudly parading their flat caps, the foremost sign of their working-class status, while window shopping and walking about nonchalantly at the end of their shift in a city they felt was theirs. Postsocialist urban transformations corroborated with the reorganization of the railroad system to alter substantially the economic and social profile of Grivița. Gentrification made its way late, but decisively, into the borough (Deoancă 2011). It materialized in numerous glass-and-steel office buildings that have been erected on the rubble of demolished social housing, in the high-end car dealerships that sprung up on Grivița Avenue, in the fancy eateries and cafes that have replaced the bars where railroaders used to drink after work, and in the overbearing presence of Mega Image shops, the upscale grocery stores owned by a Dutch franchise that have mushroomed all over the city. The changes in the urban structure that favor those who work in the service industry and the increasingly prohibitive rent had turned this industrial borough into one that the middle classes are more likely to afford. In the

meantime, many of the facilities that feature in the lyrics of Ionescu's song as frequented by workers have been privatized or forsaken. For instance, the canteen where Grivița Workshops workers had their lunch every day now hosts a private, per-pay hospital. The municipality abandoned the summer theater in the park referenced by Ionescu's song, as well as all the cinemas in the quarter where the lathe operator and his sweetheart would have gone to the pictures.



*Illustration 13. After hours drinking in Grivița.*

Notwithstanding these massive transformations of Bucharest's urban environment since 1989, some of the aroma of modernist blue-collar urban aspiration that Ionescu's song captured so heartily sixty years before still makes a presence, albeit a drastically dimmed one compared to the times when Grivița was an industrial powerhouse. This waning flavor is embedded in the district's soundscape, as roaring locomotives entering and leaving Gara de Nord and Gara Basarab, occasionally overpower the dissonant symphony of cars on one of Bucharest's most

crowded avenues, with their high-pitched alarm whistles and whirring engines. Glimpses of it also appear early in the morning, between 6.30 and 7am, when workers arrive to work, many from long commutes. Workers' bodies, tired by now, emerge again in the afternoon, between 3 and 4 pm, when shifts at the depot and at the workshops end. Workers have few reasons to linger around the neighborhood after work. Since Feroviarul ("The Railroader") the famed tavern that ceferiști frequented went bankrupt and closed down in the early 2000s, post-work drinking takes place in a cramped watering hole made of corrugated metal tucked behind the depot that sells low-quality spirits and cheap beer in plastic bottles. Workers can be seen congregating after work, and sometimes during work hours too. Usually this happens in the sports betting shops that have mushroomed all over the area in the last decade, where workers play the slot machines, play the lottery, or gamble on a variety of sporting events. Workers also congregate in the bus stations where they wait for public transit to take them to their homes in Bucharest, or to other transit hubs from where workers continue their commute.



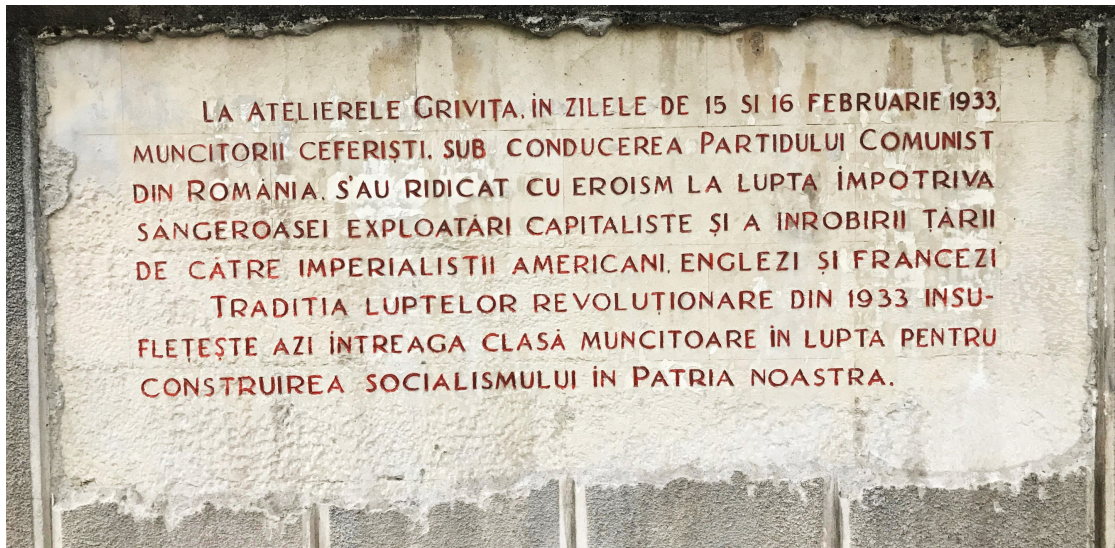
*Illustration 14. After hours drinking in Basarab Station. In the background, an electrical locomotive (left) and a Diesel one (right).*

If the physical expulsion of industrial workers manifests in the accumulation of subtle, yet decisive changes in the spatial arrangement of the quarter and of the existing facilities, Grivița also bears some of the marks of the symbolic dispossession that rails and railroaders had undergone in recent decades, and of struggles to recuperate a more dignified past. The symbolic expulsion of workers and proletarian history from the area is evinced most blatantly on the concrete boundary wall of what used to be the Red Grivița Workshops. The main entry gate into GRIRO, the privatized heir of the former “Red Grivița” Chemical Equipment Plant, had a memorial plaque installed in the late 1940s to commemorate the casualties of the Grivița workers' strike of February 1933.<sup>40</sup> After 1989, the new owners plastered the plaque over, hiding it from sight until 2018, when a group of left-oriented activists and historians chiseled the monument back to light.



Illustration 15. Stamp commemorating the twentieth anniversary of the 1933 Grivița Strike. Source: [www.pinterest.com](http://www.pinterest.com).

40. The plaque read: "At Grivița Workshops, on 15 and 16 February 1933, ceferiști workers heroically rose, under the leadership of the Romanian Communist Party, to fight against the bloody capitalist exploitation and against the enslavement of the country by American, English and French imperialists. The tradition of the revolutionary struggles of 1933 exhilarates today the whole of the working class in the struggle to build socialism in our motherland."



*Illustration 16. Uncovered plaque commemorating Grivița '33.*

The symbolic violence of pouring concrete over a memorial plaque sought to erase the memory of one of the most important episodes of interwar labor conflict that the Communist Party later incorporated as a chief historiographical tool to bolster its credentials. As the rippling effects of the Great Depression engulfed Romania, 4000 workers from the Grivița Workshops rose against years of austerity policies that led to soaring unemployment, crippling cuts in wages and benefits, and the general collapse of workers' standards of living. The bloody repression by the authorities that saw a dozen strikers shot dead in the street by the military, and the involvement of communist agitators,<sup>41</sup> earned the strikers and *ceferiști* as a whole a tall pedestal in the state-socialist pantheon of labor, and contributed to the celebration of railroaders as a first genuine pocket of proletarian consciousness. After the communist takeover of power in 1948, Grivița Workshops were renamed Grivița Roșie ("Red Grivița") to symbolize railroaders' early communist sympathies and their bloody sacrifice. The statue of Vasile Roaită, a teen worker commemorated in the state-socialist historiography as martyr of the strike, was erected in front

---

41. Among these agitators were Gheorghe Gheorgiu-Dej, who was to become the first Communist leader of Romania in 1947, Chivu Stoica, the first communist head of C.F.R. and prime minister on several mandates, and Vasile Luca, leading member of the Communist Party in the 1940s and 1950s.

of the Ministry of Transportation. The sculpture was part of a larger statuary ensemble that celebrated the *ceferiști* heroes. Like the engraved marble plaque affixed to the fence of the former workshops, this statuary group was also removed after 1989. Also like the engraved marble plaque, the monument was partially restored with the help of trade union representatives and members of a fringe socialist party.<sup>42</sup>

The symbolic importance of the 1933 strike was further consecrated by the communists' decision to decree February 16, the day when the gendarmerie shot and killed seven protesters, as *Ziua Ceferistului* ("Railroader's Day"). During socialism, this day was honored by excessively laudatory articles in national and trade newspapers and was marked by money bonuses and gifts for rail employees. Besides having the memory of their struggles materially erased from public view, as was the case with the memorial plaque on the fence of the former workshops and with the statue of *Roaită*, the railroaders also saw their celebratory day altered after 1990. Following a 1999 decree of the Minister of Transportation who oversaw the 1998 break-up of the national railways company, Railroader's Day was changed to April 23, marking the day in 1880 when King Charles I and minister for public works I.C. Brătianu signed the decree that established the first national rail company. The 1999 decree, intended to mark a new trajectory for the railroad system by purging its communist past, effectively replaced the symbolic centrality of workers' struggles with the celebration of an administrative act issued by political elites.

### **The Depot: Rise and Fall**

Depoul București-Călători has undergone the same processes of accretion followed by material decay and symbolic degradation at play in the Grivița quarter. Workers take great pride

---

42. In the place of the monumental statue now lies a stunted, cube-shaped pedestal that reads "demolished in 2005 by those who wish to suppress popular aspirations for justice and historical truth."



in the history and continued value of their workplace but have few reasons to rejoice at the contemporary condition of the depot. The depot's history goes back to 1906, when the central railroad administration opened the Grivița Workshops (Regionala C.F. București 1984: 10).<sup>43</sup> Built and equipped to facilitate the simultaneous repair of as many as 130 coaches, the Grivița Workshops complex grew into a cornerstone of railway industry (Botez et al 1977; Popescu 2014). During the WWI occupation of Bucharest (1917-1918), the occupying German forces transformed Grivița Workshops into a mixed facility by endowing it with equipment for the servicing of locomotives alongside the already existing facilities for coach maintenance. Four decades later, the destruction brought by American air raids during WWII led to another set of changes. Postwar reconstruction saw the rebuilding and expansion of the Grivița Workshops, with new repair halls added and new equipment brought in (Botez et al. 1977: 356). Besides the much-needed expansion and technological updating, the postwar period also brought increasing specialization and a more prominent emphasis on locomotive repair: the Grivița Workshops remained specialized in coaches, while the Bucharest Depot separated from it to become an exclusive locomotive rail yard.

Later on in the 1960s and 1970s, with the gradual move away from steam power, the socialist government bought licenses from rolling stock producers Sulzer (Switzerland) and ASEA (Sweden) to manufacture diesel and electrical-powered locomotives in Romanian factories, and signed partnership agreements with Rade Končar, the Yugoslav producer of electrical equipment. At the times of their introduction, officially sanctioned media presented

---

43. At the turn of the 20<sup>th</sup> Century, the Bucharest Depot was part of this newly built Atelierul Nou București ("The New Bucharest Workshop"), later renamed Grivița Workshops. The new workshop on Grivița Avenue was erected for the purpose of performing maintenance work and overhaul operations of railway equipment, primarily coaches serving Căile Ferate Române.

these machines as paragons of technological development.<sup>44</sup> To adapt the depot to handle the more powerful and technologically complex locomotives, the administration endowed it with new upgraded equipment, including two high-tech locomotive simulators for the training of drivers, a laboratory for technical research, and a new building that hosted electronic equipment used for troubleshooting and diagnosing locomotives. At the same time, depot workers received training for the diagnosis, maintenance and repair of these newer types of machines (Iordănescu and Georgescu 1986). Given its location in Bucharest, the technological superiority of its endowment, and thanks to the prestige it gained from the fact that the locomotives that pulled the presidential train used by Nicolae Ceaușescu were attended to here contributed to DB-C's designation as a first rank depot. This history gave the workers a feeling that they can master foreign Western technology, and a sense of pride linked to the importance of their workplace.

In its contemporary form, DB-C remains a sizable industrial complex. It is owned by CFR Călători, and primarily handles the maintenance and repair of locomotives, although technicians at the depot also take care of machines under the ownership of private rail operators. The depot consists of a series of office buildings for administrative personnel, and several industrial halls. There is a roundhouse ("remiză circulară") segmented into repair halls dedicated to hydraulic, diesel, and electrical locomotives respectively, a smaller square-shaped shed ("remiză dreptunghiulară") where less complex but more frequent repairs take place, an overhaul

---

44. Take for instance "Stern Novelettes," a 1965 short produced by Sahia Film, Romania's socialist-era documentary production house, that tells such a story of technologically induced progress. The movie chronicles the history of locomotives as signs of the passing of time and as vectors of future social change. It opens and ends with long shots of a freight train loaded with parts of steam locomotives on their way to the scrap yard. The train is pulled by one of the diesel-electric locomotives that had entered C.F.R.'s fleet in 1959, when the government bought the license from the Swiss-based Sulzer Frères Winterthur. The film associates the steam locomotives with the past: the interwar times when "the rich travelled nonchalantly" while the for the "tattered poor," the train was the means for a "continuous exodus," the war times when trains became mortuary convoys, and with the postwar reconstruction when these machines carried food for "workers' brigades who drudged to wrest the germs of the future away from the ruins." The film even shows workers sifting through the debris of the Bucharest Depot and North Train Station. Having witnessed the social inequalities of the 1920s and 1930s and having done their job in the war and afterwards, the time had come for steamers to be replaced by Sulzer locomotives, "younger sisters, with a different impetus." As the movie closes to a finish, the camera lingers on the remnants of steam power as the Diesel-powered Sulzer pulls them away. A voice in the background recites poetically: "From their old ruin chrysalid, a new and full-hearted Diesel, inebriated with speed takes the road hastily toward another horizon."

plant ("hala Zenk") for works that involve the separation of the locomotive's body from the undercarriage and other activities that require the removal of heavy parts, and several auxiliary shops (for welding, turnery, diagnosis, pneumatics, electrical etc.). These edifices are sprinkled on one side and the other of a convoluted tangle of tracks, switches, and overhead electrical wires that cut through the middle of the rail yard and enable locomotives to enter and exit the depot.

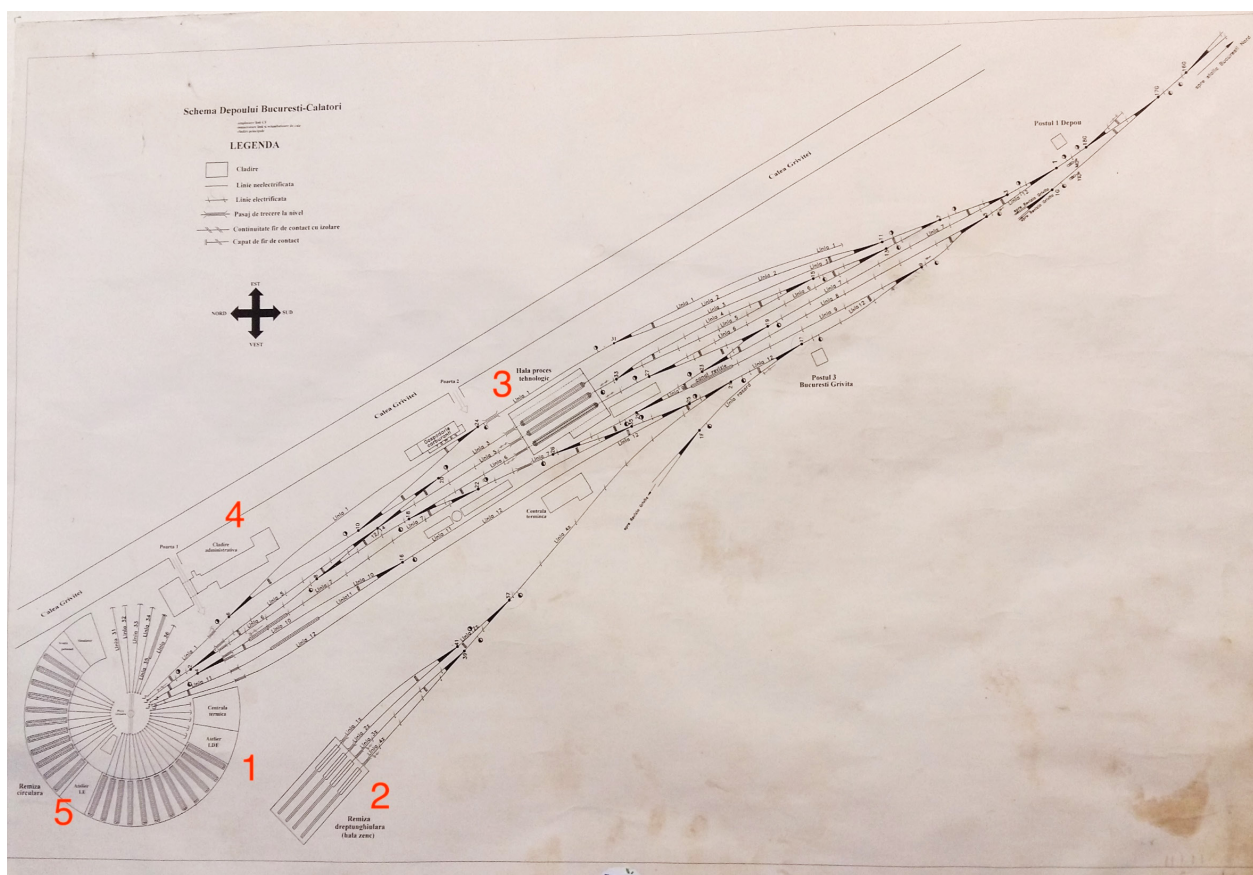


Illustration 17. Map of the Depot: 1. Roundhouse. 2. Overhaul plant. 3. Square shed. 4. Administration building. 5. Electrical technicians' break room.

To this day, the Bucharest Depot functions as garage and maintenance facility for machines that run on the busiest rail district in Romania. This renders the depot crucial for the

safe operation of passenger trains in the district and thus places great responsibility upon the workers. At the same time, the repair facility is but a shadow of its former self. Locomotives sheltered here are thirty years old on average. The workforce has aged and has shrunk to a third of what it was in the early 1990s. The work equipment is outdated, and the material environment, especially the repair sheds where most of the maintenance work is done, displays evident signs of erosion and decay. These are some of the features that older workers reference when talking about the depot's fall from its glorious times when servicemen attended to high-quality Romanian-produced, but Western designed machines, to the contemporary state of dereliction. I sketch below a brief picture of this degradation.

### *Rundown machines*

At the time of my research, the depot housed 119 machines<sup>45</sup>. According to depot records, in October 2016, more than a third of them were out of order. Some of them were sidelined for minor reasons, and their majority would return to the tracks as soon as shattered windshields and worn out wheels were replaced, and broken radiators, and busted electrical transformers and compressor engines were fixed. Defects of this sort are ordinary occurrences in the life of a locomotive as they pertain to the usual wear and tear of industrial machines. What is extraordinary, according to the service technicians who take care of these faults, is the sheer number of broken machines and the frequency of failures. Costel, a technician in his fifties who had been working at the depot since 1984, told me during a night shift in the square shed that "machines didn't drop like flies as they do now, " in the 1980s and 1990s.

---

45. 69 electrical locomotives that are regularly assigned to haul higher ranking trains on electrified mainlines; 32 Diesel-electric locomotives that serve lower-ranking stopping trains on secondary lines; 16 Diesel-hydraulic ones used for shunting coaches in the neighboring wagon yard, and 2 Diesel-mechanic machines that do the shunting work within the depot.



*Illustration 18. Street view of carcasses at the Bucharest Depot.*



*Illustration 19. Eroded supporting pillar at the roundhouse.*

At least ten of these machines would not be seen pulling trains very soon or even ever for that matter. Depot clerks file their failures under a special rubric: "other causes - missing parts." This means that they had become what technicians call mortăciuni ("carcasses"): machines that had been sidelined for many years after having suffered either a major failure that was

impossible to fix at that time. Mortăciuni eventually fall prey to forms of cannibalization that render them permanently out of order. Parts had been taken off them and used to repair other ailing locomotives, while other parts had been stolen and sold for scrap. Stripped of their subassemblies and eaten away by corrosion, there are thin chances that these locomotives will become functional ever again. These carcasses that lie in various corners of the yard, sidelined on dead-end tracks by the depot's fence where they are visible from the street, or are locked away from sight in disaffected repair halls stand as chief indices of ruination for many depot employees.

Not all those machines that clerks filed under "operational" worked smoothly. As of October 2016, fourteen of them were limited to lower speeds than those they had been designed to reach due to enduring mechanical problems. Many other electrical locomotives are green lighted to run on tracks without having all of their six engines operational. Although, officially, any machine short of full traction power should be grounded, and it is within the drivers' rights to refuse them, the scarcity of locomotives keeps these machines in use as long as at least four of their engines work, under the condition that they are not assigned to pull trains on demanding mountain routes that require full traction for haul and for braking. Because of the same issues, administrators and service technicians often brush off minor malfunctions like cracked windshields, torn rearview mirrors, busted position lights, broken ventilation, defective window insulation, wobbly seats or partial cabin lighting and do not even register them as broken, much to the chagrin of drivers.

Some of the faults described above may be attributed partially to the attrition that comes with the old age of locomotives. DB-C has only one machine built anew in the last decade, with the rest manufactured between 1970 and 1995. Aging, however, should not be blamed entirely.

CFR Călători contracted several factories from Romania and abroad (i.e. Electroputere and Softronic in Romania, Germany's Siemens, and General Motors from the U.S.) to retrofit and upgrade a portion of its train engines from 2000 onwards. Furthermore, the oldest two electrical machines at the depot date from the late 1970s, and, despite their venerable age, they both function to this day without having undergone any modifications or retrofitting. Rather than blaming only aging and obsolescence, depot workers point to the intersection of a lack of technological renewal and the underinvestment in maintenance and spare parts as main culprits for the high incidence of machines breaking down, and for the overbearing presence of "carcasses" at the yard. As one technician commented on a railroaders' Facebook group, "electrical locomotives don't die of old age. They die because of crap maintenance!"

### *Workforce contraction*

Technological aging, scarce spare parts, and a general lack of funding are not the only problems that technicians face on the job. Extremely limited staffing also plays a crucial part in rendering locomotive maintenance an increasingly daunting task. DB-C had over 700 workers toiling in the early 1990s in its vast repair sheds, the substantial administrative and cleaning staff not included. Since then, several waves of layoffs combined with resignations and retirements dropped staff numbers to a third of the workforce, although the number of locomotives to be serviced had not decreased proportionally. Currently, the two firms that operate within the depot, CFR Călători and Locomotive Repair (see next section for details), employ roughly 250 administrative and laboring personnel. Illustrative of understaffing is the fact that, in 2000 forty

electricians staffed the electrical locomotive workshop, the division where I did most of my field research. By January 2018, the time of my most recent visit, only twelve remained.<sup>46</sup>



*Illustration 20. Lunch in the break room.*

Apart from redundancies and retirement, there are other reasons that account for the low headcount. Among the major factors are the dwindling number of technical education institutions and the unattractiveness of rail jobs.<sup>47</sup> The majority of workers at the depot are in their late forties and fifties, and have worked in the rail system for decades, with many having spent their entire working lives at the Bucharest Depot. The aging of the workforce and the unlikeliness of

---

46. Layoffs between the mid-1990s and early 2000s were first prompted by government's efforts to curtail the massive indebtedness of the national rail company. In 1995, the government fired or pushed into early retirement 100.000 out of the 250.000 of employees in the railroad sector at the time, including depot workers. A few years later, the division of SNCFR in 1998 and, then the separation of maintenance operations from Passenger Company were also accompanied by dismissals and early retirement of employees from the depot, primarily blue-collar maintenance and repair workers. Another redundancy program, initiated in 2010, led to the firing of 780 Passenger Company employees and 111 Locomotive Repair workers nationwide, which impacted approximately a dozen technicians at the Bucharest Depot.

47. Driven by the socialist state's tireless search for qualified workers, the railroads had benefitted from a plethora of technical trade schools, high schools with industrial profiles, and departments of technical universities that trained workers, engineers, and clerks for specific jobs in the rail sector. Clerks and engineers at the depot hold specialized degrees in rolling stock engineering or railroad engineering from polytechnic universities. Most technicians in the electrical workshop at the Depot have earned their qualification as electricians after graduating from the two technical schools in Grivița Borough. Enrollment in rail transportation university departments has been dropping steadily since the early 2000s. The government's underfunding of trade schools and technical high schools impacted the quality of education severely and led many of these institutions to switch profiles or seek contracts with private firms.



its renewal had been recurrent tropes of conversation among technicians during field research. This dynamic emerged as a potential threat to the future of the railroads, as workers predicted the country would run out of handymen. "We're all retiring, and no one is coming from behind. It's all going to become rack and ruin ('se alege praful și pulberea de tot')" noted Valentin, an electrician in his late forties, and one of the depot's veterans. Understaffing and the lack of young blood also mean larger volumes of work for the active workforce. "Do you think that in other times the old ones would have worked like I do now? And I don't mean old like I am now, you were considered old when you were still under 40, like veterans," said Marcel, a technician who was 52 at the time of our discussion. "No! You'd hand the rookies the tools, instruct them on what to do and off they went! You'd tell them 'come and see me if you can't deal with it on your own!' That was it."

Money is another factor that plays a major role in the reduction of qualified personnel. As one commentator noted, "whereas in the past railroaders' wages were enviable, now they are comparable to those earned by a regular supermarket worker" (Morar 2018). For instance, at the time of my fieldwork, more than half of public rail firms' working personnel earned minimum wage. Public rail enterprises face difficulties both in attracting young personnel and in retaining its specialists who are tempted to find jobs that pay better and provide better work conditions. During my stay at DB-C, there was only one technician in his twenties and two in their mid-thirties. All three of them were planning to leave for better paying and "cleaner" jobs either in other businesses in Romania or abroad. Oftentimes, rail enterprises strive to cover their personnel deficits by keeping retired technicians on the payroll or by hiring unskilled or temporary workers. Since the former solution rarely works, as technicians tend to prefer retiring out of a taxing workplace as early as possible, depot managers generally turn to the latter. For

example, during my stay at the depot, Locomotive Repair hired a new electrician despite his failure to correctly answer a basic question about the fundamentals of electricity. He identified the electrical current that runs through a battery as "alternative" instead of "continuous," a fact any Romanian high-school student would know.



*Illustration 21. Degradation in the square shed.*

### *Work conditions*

Finally, the working conditions also make working for the public rail unattractive. An article written by a rail expert for Club Feroviar, a business-oriented Romanian portal that publishes news and analyses related to rail transportation describes the erosion of work conditions in the following way:

Work conditions have been degrading permanently, and many work interventions take place under the open sky, regardless of weather conditions. Dressing rooms, shower facilities, mess halls, and even the offices have remained unchanged for the past thirty years. The atmosphere at work is not too friendly either: there are plenty of controls, inspections and examinations, often followed by sanctions, reprimand, demotions etc. (Morar, n.d.)

As foretold by Marcu in his early warning, I found the depot in a state of dilapidation, much like that captured in the fragment quoted above. In addition to the decrepitude of locomotives, the work halls and the repair equipment are also broken, outdated, or function in varied states of disrepair. Half of the depot's repair sheds are dysfunctional, and workers use them as scrap storages. Those sheds that still operate are in no better condition: broken windows have not been replaced for years, walls and ceilings are cracked and infiltrated by rain water and melting snow, supporting pillars are eroded to the point of collapse, piping and sewage burst frequently, and most doors are either blocked open or stuck closed. Workers' changing rooms are filthy, drafty and unheated, hot water runs infrequently in the showers, and lavatories are left unattended and are rarely, if ever, cleaned.

Alongside with the dilapidation of the buildings in which they work, depot employees mourn a general collapse of workplace solidarity. Changes in management hiring policies led to clerks and engineers assuming management positions straight from college rather than being promoted from the rank-and-file as was more often than not the case under socialism and even before. This generated mutual distrust and resentment between workers and managerial clerks, manifested in intensified controls followed by scolding from above, and either oblique or direct insubordination from below. On one occasion the local branch manager of Locomotive Repair punched an elderly shunting driver in the face after accusing him of having pushed the torque of a locomotive into overdrive. Another time, the administration docked 30% of an electrician's wages for three months, after he reacted to an engineer addressing him disrespectfully by delivering a well-aimed loogie onto his superior's coat and threatening to beat him up. Work relations were tense not only along the lines of company hierarchy, but also horizontally, among workers themselves. This was partially due to the administration taking a hard stance against

worker having barbecues and drinks - main ritual vectors of solidarity building, - and also to the severing of work friendships produced by institutional splintering that meant former colleagues were working for different enterprises, making different wages, and suffering differently from the devastation of the facility.



*Illustration 22. Work conditions in the welding shop.*

### **The Firms: A tale of two Cinderellas**

Two types of rail-related operations performed by two distinct state-run companies unfold at DB-C. Personnel employed by CFR Călători, Romania's public rail passenger carrier, handle the bureaucratic management of the locomotive fleet and of train drivers. The second firm, Locomotive Repair, is a subsidiary of CFR Călători that trades in the maintenance and repair of its locomotives. Both the parent and the subsidiary are products of the structural reforms described in Chapter 1. This section describes the history of the two firms, their asymmetrical relation of interdependence along with the activities that their workers perform, and the spaces they occupy. The following sections are concerned with the organizational structure of labor at

the Depot, and with the different environments and sense-scapes in which the work of employees from the two firms unfolds.

*Passenger Company: Cinderella written backwards*

CFR Călători, the public rail carrier that handles the transportation of passengers and parcel, is one of the most prominent "Cinderellas" of Romania's postsocialist economy. Established in 1998, the company was allocated the depots and the wagon yards that housed its rolling stock before the split, a proportion of the dissolved company's locomotives and all the coaches, and a share of the monolithic company's debts. It also retained a significant proportion of the employees (bureaucrats, train drivers, maintenance and repair workers) from the passenger transportation sector of SNCFR prior to its division.

The restructuring of the once integrated company curtailed state support and introduced the newly established companies to hard budget constraints, often impossible to observe under the vagaries of the transportation market. Bereft of the support of CFR Marfă, and receiving reduced subsidies from the government, the revenues of CFR Călători had been dropping steadily as its passenger numbers decreased because of poor quality of service, the competition with private operators, and the expansion of automobility. Currently, it survives on a mixture of own revenues and direct and indirect subsidies from the Romanian government that still defines rail transportation as a social service. Direct subsidies come from the so-called "minimal social package," namely direct compensations through which the government and local authorities aim to ensure the provision of public train service on any given route.<sup>48</sup> Indirect subsidies are those

---

48. Compensation of this kind enables Passenger Company to keep ticket fares relatively low and provides roughly 40% of its yearly revenues.

funneled into rail transportation companies based on special legal provisions that grant facilities to certain categories of passengers.<sup>49</sup>

These payments from the state budget have a different rhythm than the expenses the company has with wages, electricity bills, infrastructure tax use, maintenance and repair costs, which means that CFR Călători often defers payments for maintenance and repair, and cannot afford to buy new machines, to invest into vast programs of retrofit, or even to stockpile necessary spare parts for repair. For instance, the company operates with little under 800 coaches throughout the country, 400 less than the minimal number that company executives declare is needed to accommodate ridership.

The 1998 division of the public railroad company directly impacted the material environment of the Bucharest Depot, the hierarchy structure, the division of labor, and the work process. With this move, the entire Depot and the locomotives it housed became the property of CFR Călători, and the personnel working on the premises were transferred to the payroll of the new company. This situation changed again three years later, when the establishment of Locomotive Repair entailed the transfer of all repair works to the newer firm, while CFR Călători retained ownership over facilities and machines.

#### *Locomotive Repair: Cinderella's Cinderella*

If CFR Călători is one of "Cinderella of Romania's economy," as Doru put it, then Locomotive Repair is Cinderella's Cinderella, the youngest sister pushed into wretchedness by the older one. Locomotive Repair emerged through the transfer of all maintenance and repair services and of most repair workers from CFR Călători. The brief historical section on the repair

---

49. The government provides special discounts to pensioners, war veterans, and people with disabilities, schoolchildren, and students. These categories can travel either for free or at half price, and the state reimburses CFR Călători through its budget for special social insurance or through the budget of the Ministry of Education.

enterprise's website explains the emergence of the firm as a result of a "need" to separate maintenance from "exploitation," and suggests this separation allowed the new firm to take on contracts with private rail firms. Although prolix, the fragment deserves quotation:

As a consequence of the diversification of traction rolling stock through the introduction of other types of vehicles and the emergence of private rail transport firms, establishing a distinct firm was needed for locomotive maintenance on a national level, and for the separation of rolling stock maintenance and repair activities from those of exploitation. By the government's decision no. 863/2001 article 1, the Commercial Society 'C.F.R. S.C.R.L. Braşov' was established as a joint stock company, subsidiary of S.N.T.F.C. "CFR Călători" S.A. through the transfer of specialized personnel from the depots. [...] Presently, [the repair firm] has extended its activity of maintenance and repair of motorized rolling stock to private rail operators. (Site SCRL)

Locomotive Repair runs as a subsidiary firm of CFR Călători, which currently owns 70% of its shares. The firm has an independent management structure, a separate budget and balance sheet. Its headquarters are in Braşov, a city in South-East Transylvania, but it operates twenty-one branches in locomotive depots throughout the country wherever CFR Călători requires maintenance and repair, including at the Bucharest Depot. De jure independent, Locomotive Repair can contract with both state-owned and private firms. Yet, it was not showered with contracts on the open market in the way the hopeful fragment reproduced above suggests. Locomotive Repair is de facto dependent on its mother company, with 94.3% of its turnover coming from payments by CFR Călători.



*Illustration 23. Operational electric locomotive with carcasses in the background.*

The consequence of this relation of dependence is that the mother company's problems spill onto the subsidiary. As a result of a series of loan agreements with the IMF that followed the 2008 financial crisis,<sup>50</sup> the management of CFR Călători drastically curtailed investments in new or modernized trains and reduced the budget for maintenance and repair. Budget restrictions forced CFR Călători to stall payments to other firms, including its subsidiaries, which crippled Locomotive Repair financially. According to the 2013 annual executive report released by the latter firm's board of directors, "the firm could not pay its debts to the state budget within the legal timeframe because of tardiness in collecting the sums of money it was owed by CFR Călători." At the same time, the executive report also noted that Locomotive Repair was indebted not only to the state budget, but also to CFR Călători itself, for outstanding repairs and rent.

---

50. The 2008 economic crisis hit Romania particularly hard (Duguleană 2011). To sustain expenditures, the government in Bucharest had entered into a loan agreement with the IMF in 2009, followed by another two-years long stand-by loan agreement in 2011. Among the conditions imposed by the IMF were the reduction of public spending and as the furthering of structural reforms by naming private-sector managers to helm public companies and the expansion of the private sector in the traditionally public domains of transportation and energy.



Locomotive Repair took a particularly heavy blow. The said report also stated, "negative capital surpassed the turnover for 2013 by 6.7 million USD, which led to the firm's default, and to the impossibility of continuing its activity under normal conditions in 2014." Since January 2015, the firm has been undergoing insolvency procedures, which means, among other things, that it cannot hire new workers unless others retire, that it had to cap wage growth and stop paying outstanding wages to its employees, and that it was left with meager resources to buy equipment, tools, and spare parts or to maintain its workspaces. Nevertheless, despite both firms' dire economic situation, Locomotive Repair workers continue working for CFR Călători and are held to the same standards of maintenance and repair. There are no exemptions from quality when passengers' lives depend on the well-functioning of machines.

This asymmetrical interdependence of the two firms is immediately observable in the tensions between the firms at DB-C and in the facility's material conditions. First, Locomotive Repair workers service machines primarily owned by CFR Călători, but are sometimes also tasked with jobs for private firms, which makes CFR Călători clerks often suspicious that Locomotive Repair workers plunder the spare parts storage or steal parts from state-owned locomotives for jobs for private firms. Secondly, Locomotive Repair rents from its mother company the same workspaces it used to occupy before the split. Given the firm's insolvency, there should be little wonder that the workspaces it occupies are much more poorly maintained than the administration building that CFR Călători occupies.

### **The Organization of Labor: Hierarchy, Duties and Work Hours**

The hierarchical organization of labor in the two firms that operate in the depot is the following. I begin with CFR Călători, and then move to Locomotive Repair.

### *Passenger Company*

The firm's activities are concentrated in the main administrative building, an L-shaped three-story building constructed in glass, steel and concrete. On the ground floor, it houses the dispatcher's office and the train drivers' waiting chamber, and a wealth of administrative offices. The offices of the human resources department and the dormitories for passing train drivers and for posted staff occupy the upper levels.

Employees of Passenger Company who work at the depot are organized in two departments: administrative and traffic, the latter subordinated to the former.<sup>51</sup> Unlike most grey-collar workers and blue-collar workers (see next section), the white-collar functionaries who staff the administrative department hold higher education degrees, usually from a Polytechnic Institute, that earned them the title of inginer ("engineer"). Clerks generally do deskwork on fixed 8-hour schedules, officially from 7am to 3pm, Monday to Friday.<sup>52</sup>

The traffic department consists entirely of train drivers of different qualifications who fulfill various positions and tasks. Train drivers perform four types of jobs: there are road drivers, locomotive inspectors, shunting drivers, and dispatchers. *Mecanicii de drum* ("road drivers") are

---

51. At the head of the administrative department stand a manager ("șef depou") and a deputy manager ("adjunct șef depou"). The managerial duo oversees the activities undertaken in the six specialized departments ("birouri"), each headed by a chief of department ("șef birou"). "Biroul exploatare" ("Exploitation Department") manages all activities related to the actual circulation of locomotives, including the investigation of traffic incidents such as delays or breakdowns. "Biroul reparații" ("Repair Department") oversees the unfolding of rolling stock repair contracts signed with Locomotive Repair. "Biroul tehnic" ("Technical Department") handles the development and maintenance of capital goods (i.e. maintenance and repair of buildings and industrial hardware, janitorial services, etc.). Ominously enough, this department had no staff whatsoever throughout my stay at the depot. It existed in the organizational chart, but not in practice. "Biroul PPS" ("Department of Payments, Prestations, and Services") is in charge of drawing train drivers' work progress slips, keeping track of their tally sheets, and of computing their salaries. "Biroul aprovizionare" ("Supply Department") manages the acquisition of material goods that serve the activity of the depot. These goods range from office supplies to spare parts, tools, equipment, and work clothes. "Biroul Contabilitate" ("Accounting Department") operates all financial payments and returns. Finally, a seventh department that had not featured in the organization of the depot until recently is the human resources office that handles workers' employment and termination procedures, and the mandatory work safety periodical briefings

52. Those administration clerks involved in particular departments (e.g. Exploitation, Repair, and PPS) are also required to do some work on the field (i.e. visit the workshops where maintenance and repairs are carried out, and accompany train drivers on the road once or twice a month). Since the administration must have at least one representative at the depot at any time, clerks have to cover nights and weekends, by rotation. Usually, one clerk will not be assigned to night or weekend shifts more often than two times a month.

those who helm locomotives that pull passenger trains.<sup>53</sup> They work on flexible timetables called *turnus* that compute drivers' work and repose hours. According to the *turnus*, they do not have to show up every day to work, but only on those days when they are scheduled to steer a machine, usually two hours before the departure time, and have mandatory rest periods.<sup>54</sup> *Mecanicii de manevră* ("shunting drivers") are tasked with driving locomotives within the premises of the depot. Similar to their higher qualified colleagues who go out on the open tracks, shunters work on *turnus*. Not all certified drivers who work at the depot actually drive locomotives. *Șefii de tură* ("dispatchers") are those who coordinate and supervise the actual movement of train drivers and locomotives from their office located at the ground floor of the main administrative building. Usually, they are experienced road drivers who relinquished driving for an office job.

Dispatchers work 12-hour long day and night shifts. After a day shift, they get 36 hours off, while a night shift is followed by 48 hours off duty. Finally, locomotive inspectors ("revizori locomotive") inspect the conditions of locomotives when they pass through the square shed at the southern entrance in the depot and oversee maintenance and repair activities. They work similar hours to those of the dispatchers and spend most of their time either in their small offices within the square shed, or in the repair hall. At the Bucharest Depot, personnel qualified to drive trains also fulfill these roles. According to several management representatives of CFR Călători whom I have interviewed, this is due to a lack of career inspectors. Most of these specialized inspectors left or retired, and technical schools have ceased offering qualification courses for this position. Since these inspectors do not have repair experience, nor do they hold specialized

---

53. The tasks of road drivers include driving trains according to the timetable, waiting on stand-by replacement locomotive in case another locomotive breaks down, and acting as reserve drivers in case one of their colleagues cannot come to work or is inapt from driving (for reasons of illness, psychological distress or, extremely rarely, hangover or drunkenness).

54. Road drivers rarely make an appearance at the depot: they show up those days when they are scheduled to take over locomotives that are parked in the depot and when they must undertake mandatory periodical training ("școli personal"). When at the depot, road drivers congregate in the drivers' waiting room on the ground floor of the administration building, and very rarely mingle with workers from the repair sectors.

qualifications, their role is rather formal, and workers often challenge their authority and gossip about their incompetence.

### *Locomotive Repair*

Whereas CFR Călători employees work in the administrative building by the main gate of the depot, Locomotive Repair occupies, in contrast, the three inland industrial shops where the physical labor of maintenance and repair is actually conducted.

The management of repair works at the Depot is in the hands of a branch manager who holds a university degree in rolling stock engineering. The branch manager is seconded by several deputies specialized in rolling stock, all with university engineering degrees. Each of the deputies sits at the helm one of the three workshops ("ateliere") into which technicians are organized. Managers spend most of their time in their offices located on the second floor of the roundhouse: they rarely do rounds through the repair sheds, and they lend a hand with repair work even more infrequently. Most days of the week, their only encounters with the labor process is the daily meeting they hold every morning at 6:45 with the foremen of each specialized workshop. During these meetings managers take stock of the planned inspections and of the unscheduled repairs for the day, and assign duties to each worker, which the foremen then communicate to the workforce at the end of the meeting.

Technicians are divided in three specialized workshops that correspond to three types of locomotives: electrical, Diesel powered, and hydraulic. A foreman ("maistru"), who earned this qualification by going through post-high school education, supervises the activities of workers in each of these workshops, with the assistance of a team leader from among the workers. All locomotive technicians at the depot are skilled workers. Most of them have graduated either from

industrial high schools or from trade schools specialized in mechanics, hydraulics, or electrical work. Technicians do three types of maintenance and repair operations, each with their designated repair sheds, with different levels of engagement with the machines, and different working hours. The roundhouse is a semi-circular construction, segmented into several repair halls dedicated to particular types of locomotive. These halls communicate with one another through tall metal doors. These large chambers are furnished with crawling pits and elevated service walkways that allow for inspections of locomotives' undercarriage and rooftops respectively. Each repair hall has back shops, separate rooms furnished with mechanical vises, that workers generally use as a combination of break room and tool shed.

Repairmen who work in the roundhouse primarily perform scheduled check-ups of various complexities<sup>55</sup>, but can also be tasked by their managers to take care of some unscheduled repairs (so called "repairs in-between trains") such as the tuning of a gear box, a broken pantograph, a leaking electrical convertor, or electrical failures that are too complex or too time-consuming for other teams to perform. Technicians in the roundhouse work on fixed eight hours schedules (7am to 3pm) and have their weekends and official holidays off. The depot's overhaul plant lies at the left side of the roundhouse, at the end of a narrow pathway that passes by the depot's stockroom. This is a large repair shed furnished with heavy duty equipment for activities like the replacement of wheels, axles, bogies, or the removal of traction engines, activities that require locomotives be jacked up on industrial winches or disassembled with the use of mechanical cranes. Like their colleagues in the roundhouse, technicians in the overhaul plant also work only the day shift. Technicians in the roundhouse and the overhaul plant who

---

55. Every two weeks, locomotives must undergo a so-called "Revizie 1" maintenance procedure. This revision, timetabled to take eight hours, involves a speedy, mostly visual check-up of subassemblies, and the cleaning of main components in the machine room. Every other month, locomotives are scheduled for a "Revizie 2" procedure that involves a full inspection, that includes the opening of mechanical and electrical installations. According to regulatory documents, "Revizie 2" can take between two and four days, depending on the type of locomotive, during which time, machines are grounded in the depot.

work *la zi* ("the day shift") are more likely to be specialized in certain subassemblies of the locomotive. Given that their duties involve scheduled inspections that take a longer time to fulfill, their work rhythm is less frantic than that of their colleagues working in the square shed, which means they have time to take lunch breaks in the middle of the workday, when they usually eat together in the break room, and to stand idle for an hour at the end of the shift, chatting or dozing off on chairs and benches. Finally, workers who live in Bucharest or in abutting localities and for whom the daily commute is more accessible usually staff these two shops.

Unlike their colleagues from the other two facilities at the depot, technicians in the square repair shed work multiple shifts, and also cover nights, weekends, and legal holidays. Repairmen working *la tură* ("round the clock") labor in 12-hour day and night shifts, after which they have 36 and respectively 48 hours off, similar to the hours of dispatchers and locomotive inspectors from CFR Călători. In this way, a team specialized in Diesel-powered locomotives and one specialized in electrical machines are permanently on call to perform fast-track check-ups that machines must undergo every three days, and a variety of repair interventions that tackle small-scale, yet essential faults (such as a broken space heater in the driver's cabin, or a malfunctioning command on the dashboard) that must be attended to on the spot. Repairmen in the square shed are more likely to have a holistic, rather than specialized understanding of machines: they must be able to fix both small defects that those on the day shift rarely or never encounter, but also need to intervene on more complex components in those cases when emergency repairs are required after regular work hours. Whatever problems technicians in the square shed cannot solve because of time pressure, high difficulty, or because of not having overnight access to the depot's stockroom, fall onto their colleagues on the day shift. During the heyday of the depot,

when understaffing was less of a problem than today, it was customary to rotate workers between the roundhouse and the square shed, to ensure they would become familiarized with all the technical parts of locomotives.

To accommodate the continuous flow of locomotives that pass through the square shed, its design differs from the other two facilities. Unlike the roundhouse and the overhaul plant, the square shed has entries on both ends to allow machines to pass through it for brief inspections then move through the yard to reach the other facilities. With several machines undergoing superficial inspections each day, the work rhythm in the square shed is highly irregular, with peaks of activity early in the morning, late in the afternoon, and around midnight, when machines return from the road, followed by long periods of idleness between midnight at 5a.m. During idle time, many of the workers sleep on benches in their break rooms, and some play hooky, or pay visits to their mistresses or to sexual workers who earn a living around *Gara de Nord*. Unlike technicians on the day shift, who generally come from urban environments, those on round-the-clock duty are more likely to commute from farther away, usually from the countryside. Having uninterrupted time off from their job, they have more time to work the land in their households and supplement their wages with informal incomes (some sell produce or moonlight as electricians or mechanics). Finally, since they work nights, weekends and state holidays, hours that are paid double the amount, their monthly wages are generally higher than those their colleagues, although they labor the same number of hours. Due to the benefits that come with working such hours, transfers from round-the-clock duty to the day shift are one of the chief ways by which managers discipline the workforce. For instance, for a commuting worker, moving from round-the-clock duty to the day shift, would mean more time and money

spent on transportation and commute, a need to find accommodation in Bucharest, a pay deduction, and, oftentimes, the end of extra-marital affairs.

### **Wages at the Depot**

The provisions of Romania's labor legislation govern wages in the public rail transportation sector, by ordinances issued by the Ministry of Transportation, and by the collective employment contracts agreed upon through collective bargaining between company administrations and branch trade unions. Monthly salaries are computed in relation to the time spent fulfilling their duties and to pre-determined time standards ("în regim"). Salaries are thus not bound to individual performance, but to work time: in order to make the monthly wage stipulated in the employment contract, one has to come to work every day and do what they are told, otherwise penalties may be docked out of the salary. A worker's gross wage is reached through the cumulating of the starting salary with various allowances and weighted increments. From this sum, the firm deducts the flat income tax (10%), a pension levy (25%), and health contribution (10%), which it transfers to the state social security budget. Finally, union dues (0.6%) are also deducted from the gross wage. The resulting sum represents an employee's net income that s/he takes home. In this section, I first detail the general principles for wage calculation for railroaders employed in the state sector. Subsequently, I continue by noting how wages and rights have changed since the 1998 break-up of SNCFR. Finally, I end by discussing the resulting wage inequalities between CFR Călători and Locomotive Repair workers.



### *Wage calculation scheme*

Starting salaries take into account employees' qualifications (unskilled, skilled with trade education, skilled with high school degree etc.), the job they fulfill (worker, driver, inspector), and office (execution, administration, management). Starting salaries for each job are calculated based on predefined incremental wage scales that range from the national guaranteed minimum wage (usually the starting wage of entry-level unskilled workers) to the maximum salary of a company manager. Each job occupies a certain interval on the wage scale: workers start on class 23 and cannot go further up than class 32, drivers are situated in the 32-36 interval, foremen (32-38), accountants (26-34), dispatchers (40-41), and depot managers (39-43). Once an employee reaches the maximum class for her job, the only possibility to earn more is to change professions by acquiring new qualifications, or to take up a management position.

Allowances are supplemental earnings that benefit only those who fulfill management duties. In the case of CFR Călători, they range between 5 and 50% of base salaries. For example, the 40% management allowance bestowed upon Bucharest Depot's head manager earns him between \$355 and \$415 on top of his starting salary, depending on the class he occupies on the wage scale. Weightings are various increments that apply either to all employees, or only to those engaged in certain activities deemed hazardous. The former include increments for seniority (i.e. 12% of the starting salary for 3-5 years worked, 15% for 5-10 years, 18% for 10-15 years, 21% for 15-20 years, and 25% for over 25 years of work) and for "hard railroad labor" (3% for certain administrative positions and 8% for certain execution jobs). Increments for nighttime work (25% extra pay for hours worked between 10pm and 6am) and the double pay for overtime and for so-called "festive hours" (time worked on Saturday, Sunday, and legal holidays) also apply to all categories. Other types of weighting, such as increments for harmful conditions (10% of base

salary), for hazardous labor conditions (10-15%) only apply to employees whose jobs expose them to noxious dust, toxic substances, loud noises and vibrations, that involve working on elevated or suspended surfaces or who handle electrical components.

*Bargaining, union representation, and loss of benefits*

Changes in the organization of the defunct Romanian Railways and the economic downturn of the entire state-run railroad transportation sector altered workers' wages and benefits and curtailed the power that trade unions can wield in the bargaining process that underpins collective employment agreements. One vital effect of the dissolution of the monolithic SNCFR was the fragmentation of the powerful railroaders' trade union that had mounted substantial resistance to company restructuring plans in the 1990s. Today railroaders are represented by a plethora of trade unions that are affiliated to different nationwide federations that often have conflicting interests or political allegiances. Another effect of splintering is that yearly collective agreements expire on different dates for each of the rail companies and for their branches, thus bargaining procedures do not coincide temporally. This provides little incentives for solidarity among different trade unions and between workers employed by different firms. In this way, railroaders have become highly vulnerable to company moves to economize by keeping workers on duty for as many years as possible and by keeping salaries as low as possible. Workers from different companies have told me in several interviews that they consider the break-up of the monolithic company as a *divide et impera* tactic that atomized the workforce and diminished its means of resisting detrimental reforms.

Workers complain that union leaders do not represent their interests adequately in the bargaining process anyway, as a consequence of the incorporation of union representation into

the administration. Starting with 2011, under a decision by a social-democrat secretary of transportation, rail union leaders have turned into so-called "social relations experts". Under this new title, union leaders maintain their working jobs during their tenure on paper but move into offices in the Ministry of Transportation building. Additionally, they benefit from substantial financial bonuses on top of their salaries and other privileges (such as fuel subsidies). Given that union leaders are closer to the administration than to workers, in terms of both physical proximity and financial interests, there is little wonder that railroaders who participated in a 2017 wildcat strike organized themselves through social media, independently of trade union structures, and numbered among their demands the resignation of union leaders and the abolition of the "social relations experts" institution.

Fragmented in terms of representation, railroaders could produce only meek, inefficient opposition to changes in labor legislation and in collective agreements, which rendered them poorer and more vulnerable. As railroaders never fail to note in interviews, the benefits they had lost had been taken away from them with the direct or tacit approval of their representatives. In 2001, for instance, the Ministry of Transportation, the administration of public rail companies and union representatives struck an accord to eliminate a special provision from collective employment contracts that had previously placed a vast number of railroaders in the so-called "Group 1" category of labor that allowed for early retirement. Group 1 enabled those whose professions that contribute to the safety of circulation (train drivers, track workers, dispatchers, signalmen, locomotive and coach repairmen etc.) to retire with a full pension provided they had worked and paid retirement contributions from their salaries for a minimum of 35 years, even without reaching the legal retirement age of 65 for men and 62 for women. According to this provision, a repair technician could have opted to retire as early as 53 years of age.

Retirement age is a chief matter of concern for laboring railroaders. First, they feel that the hardship of their labor goes unrecognized unless they are allowed to retire early. Secondly, many are afraid that staying active until legal retirement will put undue stress on their minds and bodies. Railroaders' social media discussion groups are replete with threads that announce and mourn the untimely death of their colleagues on the job, with commenters stressing their fears that they might not live to see their pensions. Thirdly, railroaders fear that later retirement might render them incapable of doing their jobs properly as they age. "Only someone who never worked for the railroads can think that you can do this job until you're sixty-five," a track repairman once told me. At the same time, train drivers got to keep the benefit of retiring earlier, for no apparent reason other than their union's bargaining power. Unlike other unions in the rail sector, those representing drivers have significant leverage over the administration for reasons that include the scarcity of drivers not only in state companies, but on the market as a whole, their special training, and the poor locomotives that they are forced to drive. Save for the privileged drivers, all other categories retire at the same age, regardless of whether they worked in an office their whole career, or had their bodies and minds put through enormous stress drudging in abject conditions like Locomotive Repair technicians do.

Early retirement was not the only benefit railroaders had lost to backdoor agreements between administration and trade unions. A decade after the withdrawal of the Group 1 provision, in the context of significant investment and wage cuts triggered by the 2008 economic crisis and the subsequent loan agreements with the IMF, another crucial privilege, this time related to wage calculation, was taken away. This was the so-called "K factor" that influenced the wage calculation algorithm. As long as the K factor was in place no railroader worked on minimum wage. Starting salaries were calculated by the multiplication of the national minimum

wage with the K factor, which meant that an entry-level employee would earn 20% more than the minimum wage. In this way, each hike in the national minimum wage entailed the recalibration of the entire wage scale, and thus the proportional growth of all starting wages. For example, a rise in the national minimum wage from 1450 to 1650 Romanian lei automatically hiked the starting salary of an entry level technician on class 17 on the wage scale from 1740 lei (20% more than the old minimum wage) to 1980 lei (20% more than the new minimum wage). At the same time, the wage of a class 18 worker would also increase to maintain the same pay gap between classes, and this readjustment would go all the way to the top of the scale. Since the elimination of this provision, the minimum wage has increased to 320 euros, but until recently, railroaders' salaries were still calculated in relation to the minimum wage in 2011, namely 142 euros.

Besides impacting the workers materially, the absence of the said factor also has symbolic implications for workers' self-value. The withdrawal of the "K" factor narrowed pay differences between workers and some clerks or eliminated these differences altogether. An entry-level worker employed on class 24 on the wage scale whose wage must be raised with the minimum wage may reach the same starting salary as a class 28 college educated clerk, as the latter's salary had not been elevated by changes in the minimum wage. At the same time, it erases differences between workers of different skills and experience: a class 24 worker earns the same amount as a colleague on class 26, despite the latter's seniority, experience, and superior responsibility. In the roundhouse of the Bucharest Depot, George, a recently hired entry-level electrician makes the same amount as his colleague Fane, although the latter has a higher position, and nearly ten years of skilled labor experience under his belt. George's salary is only 50 euros lower than Popică's, the workshop's superstar repairman, who counts 31 years on the

job. For the more experienced workers like Dumitru and Fane, this situation is unbearably frustrating and disrespectful. As Fane put it, shortly before quitting the job and going to work in Switzerland, "we're now paid like unskilled workers, they turned us all into janitors."

### *Wage differences at the depot*

Wages are highly variable at the depot. As is the case with work duties and work conditions explored above, there are marked disparities, on the one hand between administrative staff and workers, and, on the other hand, between employees of the subsidized CFR Călători and those of the insolvent Locomotive Repair. Furthermore, as it will soon become apparent soon, there are often disparities between workers doing the same job, depending on their seniority, work experience, work hours, and, on the social capital they can mobilize.

Employees of the two firms that operate within the premises of the depot are hired on different collective employment contracts reached by different bargaining processes. On both wage scales, the starting salaries of white-collar management and clerks are higher than those earned by grey and blue-collar workers, as both collective employment contracts assign higher positions to administration staff with college degrees than to execution jobs that require technical or trade education. In the particular case of the Bucharest Depot, since the 2001 partition assigned all manual work to Locomotive Repair, all its employees, with the exception of managers and engineers, make less than those working for CFR Călători.

Within both firms, some categories may make more than others depending on the hours they work. For instance, it is not uncommon for locomotive drivers who benefit from substantial increments for nighttime work, overtime, and compensation for "festive hours" to earn more than some of the lower rungs of the white-collar staff. While the latter may have a higher starting

salary, they cannot accumulate substantial increments due to their 8-hour daytime work hours. The same differences in monthly wages may occur even between drivers themselves, depending on how depot clerks draw each of their turnus (monthly schedule). Who gets to drive more on the weekends and on holidays is thus a chief issue of contention among drivers and among drivers and the administration. It is very common that disgruntled drivers who consider themselves disadvantaged by the turnus accuse the clerk in charge of the program to his face of receiving kickbacks from drivers who get the better schedule or for favoring those who had befriended him. Clerks tend to dread this task and often do all in their power to get out of it, either by taking sick leave around the time of the month when schedule duty is assigned, by convincing a colleague to do it instead, or by putting the task off for long enough that the management has to step in and assign it to someone else.

Locomotive Repair technicians from the roundhouse and the overhaul plant who only work the day shift, five days per week, earn less than their peers in the square shed who are on round-the-clock duty. They all work the same number of hours each month, but the quality of those hours differs. As is the case with drivers' complaints about the turnus, technicians also single out a social economy of favors as the main reason why some rather than others get assigned to work in the square shed, where money is better and there is more time off. As Viorel, a Diesel repairman in the square shed, put it, prefacing his words with a wink, "all those with connections ("piloșii") are here, on the round the clock shift." Those who are said to have connections may be kin or otherwise socially close with managers or someone else in a position of power in any of the companies. This was the case of Ștefan, a foreman from the square shed, who was nicknamed Iubirică ("Loverboy") by his detractors among his colleagues for being partnered up with the branch manager's sister. Others may foster connections with management

by snitching, as is the case of Ion, suspected by everyone in the shop of ratting out his colleagues. But the most common way to curry favor is to agree to overtime, and to perform labor for the bosses in one's spare time: one may be asked to fix the electrical wiring in a boss's house, do some gardening work, or help with a paint job.

Yet, the most marked discrepancy between wages at CFR Călători and Locomotive Repair is rooted in the divergent economic situations of the two firms: the former earns subsidies from the government while the other has been insolvent for six years and counting. In 2013, the social-democratic government led by Victor Ponta, a self-declared Blairite and "the most pro-business prime minister in Europe," passed a bill that conditioned wage increases in public companies on the company's profit, and on employees reaching certain criteria of performance. Thanks to a 2016 hike in indirect subsidies generated by the government's decision to make rail travel free for all university students, the balance of CFR Călători had been positive for the first time in decades. Although revenues increased without considerable input from managers or workers, the positive financial outcome earned CFR Călători employees a substantial raise of 17.5%. Locomotive Repair workers, on the other hand, did not benefit from such raise. Technicians know that no matter how hard they work, they cannot hope for a raise until the firm becomes solvent, and no one knows when, if ever, this might happen. Repairmen also find it practically impossible to be competitive in their work anyway due to lack of spare parts, tools, and personnel. As Cornel, an electrician from the roundhouse put it, "in this rhythm, we won't see the end of the repair order book of CFR Călători even in 10 years. There's no way we can do it in time." There is another side effect of Locomotive Repair's liminal economic situation: the insolvency of their employer means that workers cannot contract any personal loans, since they are unable to guarantee to a bank that they will have steady wages in the future.



Since official pathways to wage raises are closed until further notice, the only way Locomotive Repair technicians can earn something extra is by climbing higher on the wage scale. For example, moving from class 28 up to class 29 earns a worker an \$11 increase in the monthly starting wage, and thus a proportional increase in certain weightings that are calculated in relation to the starting salary. Granting additional classes, however, is at the discretion of the firm's administration and their distribution is the prerogative of branch managers. This means that charity and social capital play determining roles in how these wage promotions are allocated. In 2017, the central management of Locomotive Repair decided to release a number of classes to be distributed to workers at the Bucharest Depot subunit. Local managers gave each of the workers one extra class, and then distributed the surplus according to their whim, prompting suspicions and finger pointing from those who were left out. Take the case of Popică and Valentin, the star electricians from the roundhouse and the square shed respectively, both known by their managers as critically important workers and as disgruntled troublemakers. The two were given only one extra class each, whereas other colleagues with lower work prestige gained up to four extra classes. Branch management insisted that they preferred to distribute more classes to those workers who were making the least amount of money so as not to leave anyone severely behind, but, coincidentally or not, some of the latter were the same ones suspected of "having connections" with the bosses, including Ion, the suspected snitch, and the well-connected Loverboy. Both Popică and Valentin left their jobs at the depot. The former found a well-paying job at the Bucharest subway company, and the latter remained on the payroll of Locomotive Repair but got transferred to another depot. Both of them blamed what they saw an unjust distribution of classes as the final humiliation that prompted them to leave the depot where they had worked for 30 and 25 years respectively.

## Conclusion

I have shown in this this chapter that the two firms that share the space of the Bucharest Depot emerged in the late 1990s and early 2000s as a consequence of the division of the integrated SNCFR (detailed in Chapter 1). The move, undertaken by a cash-strapped government caught in a chokehold by international creditors, was underpinned by the 1990s ideology of de-statization at all costs. It promised market-based competition on the national rail network, reduced reliance of rail transport on state's coffers, greater financial accountability in the system, and increased efficiency and profitability for public rails. Whereas the policy fulfilled the first part of the deal, as it did lead to the emergence of a large number of profitable private rail ventures, it only deepened, prolonged, and indeed routinized the crisis of public enterprises.

Far from becoming weaned off state support, the enterprises that have emerged from the break-up process survive on direct or indirect subsidies or thanks to preferential contracts with state agencies rather than on the "free market." CFR Călători is a case of the latter, as its solvability largely hinges on special discounts for large categories of travelers like students that are provided and paid for either entirely or in part by the state. From this perspective, although the neoliberal reforms of the 1990s and 2000s aimed to unbundle and disembed the state rail sector, stressing its marketability over its social input, the combined effect of policies favoring private competition over state planning has turned public rail enterprises into hybrids of economic and welfare institutions. More precisely, these are institutions that, while formally functioning on the market and being expected to be profitable, survive due to their role as welfare purveyors. At the same time, the emerging companies, while formally separated, have not become independent by any stretch.

The simultaneous encompassment by the state and disinvestment by the state that came with rail restructuring, and that still holds state-run firms in a double bind, is manifested as a form of survival in agony. With their industry being a mere shadow of its former flagship self, with machines turning into carcasses, dilapidated workplaces, and dwindling wages, there should be little wonder that workers cast their condition in powerful affective tropes. Discourses referencing rubble, ruination, desolation and scrap like that put forward by Marcu, index not only the current material condition of repair enterprises and the physical effects that this state has on workers' bodies, but also the simultaneous presence of intense affects of loss, nostalgia, and fears for the future among workers who toil in these environments.

Railroaders describe the restructuring process as having "broken up," "smashed," or "destroyed" their industry. Continuous encompassment by the state ensured a degree of job security, but it did so at the cost of significant economic and symbolic dispossession. "It's all a ruin now!" Alexandru, the young clerk tasked by the depot's administration to show me around, warned me in my first week of research. Alexandru gave me a tour of the facility as soon as I arrived. As we walked about in the wide yard, moving from one building to the other, he showed me the overgrown tracks, the wobbly pavement, the abandoned repair sheds, the broken windows, the mold stains on the walls, the crumbling plaster and the cracks in the ceilings of those sheds that still operate. He also drew my attention to the busted locomotives that rust away on dead-end lines, and to the piles and piles of broken parts that just lay there in the yard and in the repair sheds. He showed me the heavy-duty brushes, designed to wash the exterior of locomotives, that had stopped rotating a while ago, and the industrial space heaters meant to remove snow and water from the surfaces of machines, that had not thawed anything in decades.

"This entire depot is an accumulation of has-beens," Alexandru concluded. "All these things used to work and mean something in the past, but now everything's left to rot.

The current material condition of facilities like the Bucharest Depot inspires not only nostalgia, but also invite gloomy perspectives on the future. Despite of their relatively cushy position compared to other sectors, the economic and technological decay that they encounter on a daily basis on their jobs makes workers rather pessimistic. "Without state investment, without buying new ones [locomotives and coaches] we'll just repair these old tins until they drop, and then we'll shut this entire thing down," one engineer told me. The future is framed in similarly violent terms. "They will terminate us," another worker said, highlighting the inextricable link between the rail industry and the workers' lives and selves. If the system collapses, an outcome that many workers consider unavoidable if things continue this way, they will be terminated too, terminated economically, physically, and morally.

## Snapshot: An Eventful Train Journey

As the *Bulgaria Express* international train coming from Moscow had left the checkpoint at the Ukrainian western frontier and was approaching the Romanian side of the same border, Ciprian, an automobile designer in his thirties, whom I had met in the coach's smoking area, was becoming nervous. He would pace the length of the hallway and stop to consult the timetable affixed to a wall of the coach and gaze at his watch impatiently. "We're entering *țara nimănui* ("no man's land")! We're going to get delayed; you'll see. It happens every time!" the man, who was returning home to Bucharest from a two-week holiday in Russia, mumbled ominously in my general direction.

His intuition was proven right. What had been a smooth thirty hours long trip across Western Russia and Ukraine had turned eventful immediately upon crossing into Romania. First, the Romanian border guards had returned our passports 15 minutes after the scheduled departure time, and they had done so without offering any explanation or apology. This arbitrary manifestation of power prompted Ciprian to comment loudly on the callousness ("*nesimțirea*") of the Romanian state ("*statul român*"). Angered as he already was, he also took the opportunity to scoff at the wrinkled and drab grey uniforms of the border guards, the scruffiness of which, he alleged, was an embarrassing eyesore compared to the military orderliness of the starched attires of their Ukrainian counterparts. "They [the Ukrainians] at least look serious. When you look at our guys ("*ai noștri*"), it doesn't feel like you're in the European Union."

Then, in the very first station after the border, the train was halted without apparent reason for more than thirty minutes over the one-minute scheduled stopover. With this occasion, my companion sneered at another body in uniform that indexed the state. Looking out of the train's windows to see why we were not moving, Ciprian noticed the train conductor, with his

military-style navy-and-red railroaders' cap tilted to the back of his head, walking sluggishly towards the locomotive. "Just look at him, *îl doare-n pulă* ('he doesn't give a fuck,' lit. 'his cock hurts')." Ciprian then immediately launched a long commentary peppered with more expletives about the Romanian state that was "so dumb that it can't do shit" ("așa de prost că nu-î în stare să facă niciun căcat").

The rail traffic manager of the small rural station where we were stuck eventually relented and gave us an explanation. A freight train had broken down a few kilometers ahead, and we were waiting for the line to clear. It was taking so long because the hot weather was forcing the replacement locomotive that was coming from a neighboring locality, to move slower than usual. This technical explanation delivered resignedly on a casual tone by the railroad employee did not quench Ciprian's anger, nor did it avert his urge to bash the state. Quite contrarily, he took the explanation as a bogus cop-out and got even more fired up. "Yeah, blame it on the sun, what can I say? Wasn't it just as hot in Ukraine? Doesn't Germany have heat waves? Give me a break! It's like when authorities say snowfall caught them by surprise in middle of the winter!"

Once green lighted, the saga of the *Bulgaria Express* continued. The initial delays accumulated at the border and during the first stop, colluded with other technical factors to expand the time we were spending on board. The journey was particularly slow on the first thirty-eight kilometers on Romanian territory since this segment was not electrified. The train ran slower than planned even on the electrified mainline, this time due to speed restrictions caused by the heat that the traffic manager had mentioned. These hindrances set into motion a chain of contingencies across the rail network, prompting massive delays to pile up, as our train was not only moving slowly, but also had to fully stop at numerous junctions and give way to

others that were on time. By the time we had reached the outskirts of Bucharest, we were already ninety minutes late. Twenty more minutes were added just outside *Gara de Nord*, the city's central rail station. Having missed its time slot, the *Bulgaria Express* had to wait for a platform to clear.

Tardiness altered passengers' experience substantially. The later the train ran, the more restless we all got. We paced the hallways in exasperation, and we smoked too often and too much. Ciprian and I felt trapped. It was not only our nerves that were strained. The prolonged journey took a toll on our bodies too, as the expansion of time intersected other technical issues, in particular the barely functional air-conditioning system of the coach built in the 1970s. Ciprian and I talked about desperately needing to shower to rid us of that gross sensation of sticky skin covered in dried sweat. There was a shower in our sleeping car, but the amenities were out of order. Even if they had worked, none of us would be courageous enough to venture into using them. We also complained to one another about our aching backs and knees. It was as if infrastructural disrepair was somehow expanding and thickening time in ways that were transforming our bodies and emotions.

Ciprian was not alone in politicizing the materiality of the tracks and of the train and their embodied and emotional effects. During the rest of the journey someone would occasionally burst into laments about how poor public infrastructure showed that Romania was a backward shit hole ("țară înapoiată și de căcat"), and the state was "incompetent" and run by "corrupt politicians who only care about themselves." For them, the disrepair of tracks, the poor time performance of trains, the moribund ventilation system, the derelict sanitary amenities, the disheveled uniforms of border guards and train conductors, and the blatant indifference of rail staff were symptoms of a malfunctioning state. "Welcome to Romania," a passenger exclaimed,

"the country of *lasă, merge și așa* ("never mind, that'll do")!" "That'll do" is an idiomatic expression that designates what many take to be a cultural penchant of Romanians to half-ass their jobs and settle for things that work, but not fully. In proclaiming Romania to be a grey zone of negligence and imperfect approximation, people on the train made fundamental claims not only about an infrastructural system or about a rail company, but also about societal disorder

When we finally reached Bucharest, Ciprian and I parted ways. I do not know whether he or any of the other passengers translated their outrage into writing by filing complaints against CFR Călători. Many other passengers do, and they often do it by casting their experience in registers similar to the discussions I had heard on the *Bulgaria Express*. In the next chapter, I dwell on the forms of political and affective lives that the material disrepair of railroads in Romania begets. Specifically, I flesh out in detail the ways that public rail passengers, in their double capacity of citizens accessing a social service and of consumers paying for mobility, experience the materiality of infrastructures, how they talk about it, and who and what they blame for this condition. I do so by analyzing the complaints that disgruntled passengers file with the public relations bureau at Bucharest's *Gara de Nord*, the final destination of the trip described above, and the ways the state-owned rail company CFR Călători responds to such grievances. Overall, this chapter addresses the material avatars of the state, citizens' interactions with these materialities, and the political possibilities to which these material encounters give rise.



**CHAPTER 3.**  
**Tracks of Postsocialism**  
**Qualities of State, Infrastructure, and People**

Building on the preceding snapshot, this chapter is concerned with the ways Romanians experience the material qualities of rail infrastructure, and with how they interpret them. There are several lessons that can be derived from the saga of the *Bulgaria Express*. One concerns the hybrid ontology of material infrastructures, a condition that plays out both in relation to their composition and in relation to their functions. Infrastructures such as railroads are complex relations of relations, networked assemblages of heterogeneous human and non-human elements such as policies, standards, material parts, people, and environmental factors (Bennett 2005; Latour 1996a, 2005; Star 1999). The coordination between these heterogeneous components is effective inasmuch it facilitates or hinders mobility and structures people's experience of time and space (Latour 1996b). At the same time the various components of an infrastructural system also carry affective potentials, namely they are material objects that present themselves to human senses, and thus afford emotional and embodied sensations and inspire interpretation (Laidlaw 2010; Larkin 2008; Schwenkel 2015). Simply put, they are heterogeneous networks of people and things that do things and that mean things. Approaching railroads ethnographically thus requires attention to the works of the technological system per se as well as to the ways people experience and make sense of these objects. An important caveat regarding the relation between the technical and the representational dimensions of infrastructures is in order. As the disjuncture between the explanation provided by the traffic manager who stressed the natural and technical

factors underpinning failure, and the outraged reactions of passengers who cast the delay in stark political tones reminds suggests, the technical and poetical functions of infrastructures are not always perfectly laminated onto one another (Larkin 2013: 328).

Another lesson that passenger's reactions to systemic malfunction and material disrepair teach us is that the politics of infrastructures is heavily inflected by ideology (Humphrey 2005; Larkin 2008; Lemon 2009; Zhang 2016). The previous chapter has discussed at length how ideological transformations throughout history have influenced how railroads have been sponsored, built, organized, and managed, as well as how they have been geared to social effects and targeted to specific sorts of social subjects. A mixture of ideology (ideas about how something should function and who or what is responsible for it) and material experience (how infrastructures actually function in practice) also informs infrastructural politics from below (Humphrey 2005). Ideology is what makes some elements of the network more socially relevant than others in one context or the other. Socially relevant actors are more likely to be blamed for the occurrence of malfunctions or expected to step up and fix them. Ciprian, the protagonist of the introductory snapshot singled out the Romanian state, itself an abstraction of a loosely connected network of regulations, institutions, public companies, material things and people, as the ultimate culprit for the unbearable eventfulness of the journey. This is a welcome reminder of the intense politicization of the built environment in (post)socialist countries where the state is still held responsible for public infrastructures, despite (or precisely because) of its divestment and partial withdrawal (Fehérváry 2009; 2013; Also, Dalakoglou 2010, 2012, 2017). In this sense, it is noteworthy that the experience that Ciprian had riding a train operated by a state-owned company was not only the experience of a fare paying consumer of transportation service, but also that of a citizen accessing public infrastructures. The peculiar patchwork condition of the

rail companies that have emerged from the restructuring of the communist-era integrated enterprise discussed in Chapter 1 blurs the distinction between customer and citizen, and thus lends political undertones to passengers' claims about their customer experience.

Building on these premises, this chapter explores how the material qualities of infrastructures and technologies of mobility structure passengers' experience and informs their political narratives to understand how the post socialist "runaway state" (Szilagyí 1997, cf. Bodnar 1998) is reified as a social fact that evokes powerful affective reactions (Lasczkowski and Reeves 2017). To understand how passengers experience the qualities of state-operated railroads and how technological malfunctions and other material misalignments inform affective dispositions and inspire political narratives, I draw in this chapter on the petitions and complaints filed by passengers with C.F.R. Călători, Romania's state run passenger carrier, in addition to first hand ethnographic material obtained through mobile ethnography (Sheller and Urry 2006). In November 2016, the company granted me access to the passenger's logbook ("jurnalul călătorului"), a dossier that contained claims lodged that year by passengers at Gara de Nord (North Station) in Bucharest, the country's largest and busiest terminal. By November, the logbook comprised over 700 entries that totaled roughly 1200 pages of handwritten text and justificatory evidence such as photocopies of train tickets, pensioners' and students' discount coupons, and photographs taken by passengers.

Petitions and complaints are documents that facilitate the interaction between the state company and its customer/citizens. Graphic artifacts like these are communicational devices that record complaints and that mediate the way they are expressed by forcing passengers to translate their experience into preset written forms. As such, the materiality of the paper forms that comprise the logbook, together with the bureaucratic infrastructure that underpins them (i.e. the

physical space of the offices where they are received and the interaction with staff) are constitutive elements that play a role in structuring the identity of subjects at both ends of the claims and of the relations between them (Hull 2003). As we will see, in their semiotic indeterminacy, these graphic and material artifacts blur the distinction between rail corporations and state institution on the one hand, and between customers accessing a service and citizens benefiting from rights. Most written complaints discursively link technological malfunction (especially if leading to tardiness of trains) and other forms of material brokenness to passengers' senses, their feelings, and their political imaginaries. Documents contain brief but visceral descriptions of passengers' dissatisfaction with transport services that are often accompanied by compensation claims and demands that problems be fixed. Besides representing a semiotic technology that translate and transform the affective experience of travel under conditions of perpetuated disrepair and the forms of action that people require on account of these experiences, the logbook also offers insights into how the mechanisms that the company uses to respond to passengers' petitions and into how it explains malfunctions and dodges accountability.<sup>56</sup> For this reason, I will supplement the analysis of petitions and complaints with a discussion of the legal framework in which they operate, and with ethnographic explorations of the processes by which complaints are received and then distributed along the various branches of the company.

The chapter has the following organization. The first section outlines the postsocialist transformation of universal rights to state-sponsored transportation and the new categories that are deemed worthy of privilege or in need of state support, and then moves to discuss how the malfunctioning of railroads and the poor qualities of coaches frustrate passengers. Most complaints are cast in powerful affective registers that have political overtones, and are driven by

---

56. The archive did not contain the responses issued by the company, which are usually sent via e-mail to the petitioner. However, I was able to glean a handful of such answers, as the company's replies are stored in print form in the "passenger's logbook" when a petitioner follows up with another notification on the same topic.

tardiness, lack of heating or air-conditioning, unclean toilets and broken seats. The second section lays out the legal framework of petitions and complaints, the material format of these documents, and their various effects. The third describes the procedures by which complaints are received by the personnel of the Public Relations Bureau (BRP) at Gara de Nord, then distributed internally - to company branches and sub-branches -, and externally, to other state companies. Special attention is given to the spatial arrangements of the BRP office itself and to the demeanor of staff as instantiations of how the relationship between a public company and its customers is framed as a relation of authority. The fourth section analyzes some of the company's responses to claims against its services. CFR Călători tends to deflect accountability by foregrounding unforeseen technical or natural causes, by blaming passengers themselves for the destruction of trains' amenities, and by making use of legal provisions that allows it to avoid the payment of compensations. In the fifth and sixth sections I muse theoretically on the disjuncture between the technical explanations for malfunction provided by CFR Călători and the political narratives that such events inspire among passengers. I draw on STS theorizations of actor-networks and assemblages on the one hand, and on semiotic approaches to materiality and agency to understand why, out of wide range of available human and non-human agents, responsibility is attributed primarily to the state when it comes to infrastructure. The key concept underpinning this inquiry is Webb Keane's (2003) notion of "semiotic ideology" that enables analyses of how some agents emerge as more socially relevant than others, even in a complex system of relations like railroad infrastructures.

## **Rights and Qualities of Transportation: Visceral Experiences and Political Complaints**

Romanian trains have a bad reputation for their time performance and the poor quality of service. Rail restructuring and the transformation of public transportation from a quasi-universal right to be enjoyed by all into a vector for profit and for the channeling of specific rights, came with a general degradation of the quality of services, especially of running speed and timeliness. For example, in 1990, a train covered the distance between Bucharest and my hometown Petroșani (227 miles) in just a little over 5 hours, whereas currently the trip is timetabled to take 6 hours and 30 minutes (Tiron 2010). Even with longer trip durations, the poor quality of infrastructure makes delays frequent. A 541 miles train trip from Arad (Western Romania) to the Black Sea port of Constanța (South East) is timetabled to take 13 hours. On June 20<sup>th</sup>, 2016, the train reached its destination with a staggering 8-hour delay caused by a mix of heat-induced speed limitations, a downpour that fell trees on the line, and a defective locomotive. Malfunctioning of this kind occur throughout the year, but even in the absence of such events, the speed of Romanian train passenger trains averages 26 miles/hour, lower than the average speeds of trains in the 1960s, while delays totaled 880 days in 2016 alone. Poor services, reduced speed, and the post-1989 prioritization of highway and road building over investments in rail track renewal and new motive power and rolling stock, coupled with a massive rise in car ownership stimulated by easy credit, and with the growing competition of bus and airline services played a major role in dwindling passenger numbers.<sup>57</sup> Conversely, decreasing passenger traffic and passenger-kilometers account for the massive financial losses of the state company, especially considering the fact that, irrespective of how many passengers travel by

---

57. Between 1950 and 1989, the number of passengers increased from 116.5 million a year to a peak of 481 million, while the passenger-kilometers rate over the same period increased from 8.6 billion to 35.46 billion. By comparison, in 2015, only 54.9 million passengers chose the train, with a correspondent passenger-kilometer rate of 11.6 billion (Turnock 2011; CFR Călători personal communication).

train and how long are their trips, railroads involve very high fixed costs (Cronon 1992: 84).<sup>58</sup> Reduced ridership also leads to fewer trains running on the national track network.<sup>59</sup>

The post-socialist governments that inherited thousands of kilometers of rail infrastructure faced not only pressures to restructure the enterprise that administered tracks and operated trains, but also the imperative to transform the socialist-era welfare regime associated with it. Postsocialist reforms of the national rail system thus entailed not only the gradual de-statization of rail governance and the splintering of the monolithic institutional structure of CFR, but also the vanquishing of the universalist principle that informed the provision of affordable state-sponsored public transportation to all its citizens. Dismantling universal transportation involved the quasi-liberalization of transportation fare and the severing of the link between welfare and labor, and the creation of new forms of privilege.

To this day, state-operated rail firms grant generous discounts either on a commercial basis, or in relation to national legislation that entitle certain social categories to transportation privileges by virtue of worthiness and need. Commercial discounts (10-25%) can be accessed by anyone who holds weekly or monthly passes or travel in large groups. Generally, it is blue-collar workers commuting to and from their workplace who buy these kinds of passes in order to reduce their travel expenses. By contrast, other categories benefit from reduced fares as a right. Among those who pay half of the fare are schoolchildren, pensioners (6 discounted one-way trips), and traditional craftsmen from the Apuseni Mountains. Others travel for free within certain limitations in terms of numbers of yearly trips and coach class. War veterans have 24 free trips per year and holders of "revolutionary" certificates attesting their participation in the 1989

---

58. By comparison, private passenger carriers that operate in Romania are more profitable. They use lighter rolling stock that is easier and cheaper maintain and spend much less on the maintenance of the tracks onto which they run.

59. In 2007, CFR Călători, the state-run passenger carrier, ran 1603 trains each day, the number decreasing every year until in 2016, when the company operated 1300 trains each day nationwide (CFR Călători, personal communication).

uprisings and their attendants have 12 first class round trips per year. Victims of wartime ethnic persecution are granted 6 free round trips each year with first class trains, while those persecuted politically under communism enjoy 12 one-way trips/year, also in first class. University students benefit from unlimited travel with second-class coaches regardless of their age and route.

Railroad workers are an intermediary category. Under state-socialism, railroaders and members of their families were entitled to unlimited free transportation within the country, and to a limited number of trips abroad, benefits that were among the main perks of working for CFR.

Nowadays, employees of state-run rail companies are entitled to free travel with Regio trains with their work id, but, unlike other privileged categories listed above, they are required to pay for their seats if they travel on InterRegio trains. Family members are no longer automatically entitled to benefits, but rail workers have the option of buying a limited number of preferentially priced trips for members of their family. In their case, free or discounted rail mobility is not considered a citizenship right, but an employment related benefit. As such travel benefits fall into the category of revenue for which railroaders are required to pay taxes.

Despite their devaluation in status, the reduction in number and frequency, and the degrading of their material conditions, public railroads retain a particular importance for everyday mobility. The comparative affordability of trains and the availability of discounts and gratuities make rail travel popular especially among those of lesser means and among those who can access transportation privileges. According to data provided by the company, the typical passengers are commuters ("navetiști"), middle-aged blue-collar workers who travel to their workplaces, and school pupils and university students traveling to school between urban settings. Differences in rights (the workers have to pay full fare and may benefit from commercial discounts, while pupils and students are automatically granted gratuities) also translate into



different qualities of transportation. Workers generally travel with lower-ranking regional trains that stop in every station, and thus cater primarily to *navetiști* ("commuters") who travel to and from rural areas or small towns. Nowadays called Regio, according to EU train nomenclature, stopping trains were formerly known until the late 1990s as *trenuri personal* ("trains for personnel") or "class M trains" (where "m" stood for "muncitori," the Romanian word for "workers"). Students are more likely to ride higher-ranking InterRegio trains. Regio trains are significantly cheaper than InterRegio ones, but they are also much slower due to frequent stops and the poorer condition of secondary lines and are usually served by older machines that are in poorer states of upkeep. InterRegio trains stop less often, run at higher speeds on electrified mainlines, some of which have been updated in the recent decades thanks to EU funding slated for the modernization of pan-European rail corridors. Also different from Regio trains, InterRegio ones are more likely to be serviced by new or refurbished coaches that have air-conditioning, electrical doors, chairs with reconditioned upholstery, and electrical sockets for charging phones and laptops.

### **Material Qualities of Mobility: Tardiness, Brokenness, and Filth**

Under such conditions of reformed transportation rights coupled with material erosion of infrastructure and services, one must ask how the quality of infrastructures and technologies affect the mobility experience, and how passengers interpret these materialities as signs that index the state and that structure their political and commercial relation to the public rail company. In asking about the ways qualities structure experience and afford interpretation, I draw inspiration from Krisztina Fehérváry's (2013) adaptation of Nancy Munn's work on material qualities to (post)socialist contexts to show how the quality of things tend to become the

quality of people and of their relation to the state. For instance, when Melanesian Gawans experience crappy mobility on their kula journeys, they are likely to attribute ultimate agency to witches (Munn 1992). Under state-socialism, East Europeans shabby commodities indexed a failure of the socialist state to deliver on its promises, whereas post-socialist citizens are most likely to point to corruption as final cause of infrastructural failure (Fehérváry 2009; Deoancă 2017). Interpretations of material qualities are generally cast in moral terms (Gibson 1977; Keane 2014). Melanesian Gawans take the heaviness of kula canoes to symbolize their owner's greediness and recalcitrance, while generosity and cooperation are inferred from qualities of lightness and slipperiness (Munn 1977). Qualities are always underdetermined, in the sense that some might be foregrounded at the expense of others and are open to conflicting interpretations. Selection of significant features, and the ways they are interpreted largely depend upon local semiotic ideologies, namely assumptions about what can be an agent, and what material qualities are recognized as socially significant (Keane 2003). For example, the slowness of trains appears more socially relevant for passengers than the heightened safety that speed limitations aim to ensure, and this might have something to do with the positive evaluation of acceleration *qua* development (Eriksen 2001).

Following a freedom of information act request that I submitted in April 2016, CFR Călători shared the results of a market research study regarding the public perception of train services. According to data synthesized by the company's public relations department, the main dissatisfactions of passengers regarding train travel were "trip duration," "the quality of services/the value of the service compared to the price of the ticket," "the degree of comfort during the trip." Entries in the passenger's logbook at Gara de Nord in Bucharest flag similar issues with the ones listed in the aforementioned study but provide a more differentiated

understanding of the material qualities that prod people into complaining and of the range of affective responses to these materialities.

Most complaints referenced issues related to tardiness and to the phenomenological experience of being on the train - being hot, sitting in filth, smelling foul odors -, problems that are linked to infrastructural malfunctions and with defective installations on board. Petitions often read that "on the Bucharest to Ploiești route there are always delays, each time with a different motivation," or that "the train IR 1635 Brașov-Bucharest-Constanța is late at least once every week because of various reasons: broken locomotive, defective breaks, speed restrictions etc." The environment of the train (too cold, too hot, and/or draft) is another frequent cause of discontent: "I commute daily [...] and since Friday we sit and freeze in the train because the heating system is not working, although we have brought this issue to the conductor's attention," "heating in the first class car was interrupted in Tecuci because of some technical failures," or "in car number 7 [...] the air-conditioning installation did not work, and we, the passengers, were forced to spend the entire duration of the trip under unbearable temperatures."

Other material qualities of the coaches are invoked with similar frequency in the complaints filed with the BRP. Among these qualities, dirtiness (especially of restrooms, seats, and floors) and foul odors feature most prominently, especially in complaints filed by women. One woman's complaint, for example, noted that "the train is indescribably filthy, restrooms are extremely dirty, the sink had no running water, and the toilet was clogged and filled with water." Another one wrote that "there was a persistent smell of urine, and the air conditioning did not function, to the effect of [having to endure] high heat and unbearable smell," while a third one noted that the conditions in her commuting train were "disastrous" because of "the unpleasant odors (conducive to various illnesses) of the [...] toilets." Likewise, a man recounted that in his

train "there was a horrible smell of feces and urine coming from the toilets that made it difficult to breathe and made us very queasy." Many passengers also complain about seats that are broken, uncomfortable, or dirty. A man's complaint writing that "the upholstery of the seats was unsuitable, uncomfortable, and the condition of the coach was generally poor, with worn out objects that were dirty and obviously outdated", illustrates this. Another man described the conditions of a regional stopping train in the following way: "all the seats were incredibly dirty, as if they had been dipped into a latrine. I have never seen such filth, and [...] I had to breathe the disgusting air for 75 minutes."

Tardiness, the problem that most petitions reference often plays a role in aggravating other discontents. In general, tardiness has immediate technical causes. Poor infrastructure leads to speed limitations, old locomotives breaking down conduce to train stoppage, and so do the faulty braking systems on train cars. *Per* the complaints received by the BRP, technically induced tardiness can often be experienced as a problem in itself, inasmuch it leads to an expropriation of passengers' time and that signals a breaking of contractual terms (i.e. the departure and arrival times inscribed on transportation tickets). The following example comes from the complaint of a man who claims is frequently late in his commute:

I have been commuting for seven years between Caracal and Bucharest twice a week. It is not normal to wait for hours on end on the train because another train is broken, and nothing can be moved without thousands of permissions being required. What century are we living in? [...] After we finally move, we wait for another 15 minutes in Chiajna for some line to clear. I specify that I have arrived in Bucharest 70 minutes late with the train IR 1522. In my 7 years of commuting I have wasted hundreds of hours on the train. Who will pay me for that?

The petition of a woman who had taken a day off from work to solve personal problems in another city, but her plans were thwarted by her train's tardiness also talks about wasted time:

It was impossible for me to reach Craiova today, because the train got stuck in Chiajna for an hour because of a locomotive failure. I specify that I had bought a round trip ticket and

was supposed to return (the same day - *m.n.*) with train 1836 (departure from Craiova at 17:05). Under these circumstances (the delay...), it was impossible to get to Craiova and solve my personal problems there. Consequently, I was forced to return to Bucharest, waste a day that I had taken off (I am employed), and at the same time you have caused me serious inconveniences. I demand that you refund the entire value of the round-trip tickets, and that you make arrangements for locomotives to function properly, because they break down 50 kilometers after departure. Also, I demand official apologies for the nuisance suffered.

TREN	NR.	DESTINAȚIA	VIA	ORA	ÎNT.	LINIA
IR	382	MOSKWA	Buzau	06:50	400	
IR	1632	CONSTANTA	Buzau	08:15	300	
IR	1571	GALATI	Buzau	09:00	240	
R	14064	CRAIOVA	Videle	09:15	240	
IR	1521	PAUSA H	Videle	09:45	200	
IR	1621	TIMISOARA N.	Fagaras	09:50	200	13
IR	1645	TG MURES	Brasov-Deda	11:10	120	
IR	1893	CRAIOVA	Pitesti	11:20	100	
IR	1661	IASI	Focsani-Barlad	12:00	60	
IR	461	SOFIA	Giurgiu Nord	13:00	30	

Illustration 24. Tardiness in Bucharest. The last column to the right displays the delays expressed in minutes. Source: [www.brasovultau.ro](http://www.brasovultau.ro).

Delays may also lead to spiraling temporal effects. For instance, the logbook contains descriptions of late trains that lead passengers to miss other means of transportation including local public transit, and train connections, and international flights. For frequent commuters whose journey consists of multiple legs, the situation may be even direr, as it may involve physical danger in addition to time wasted. Take the example of the following woman who commutes between her village in Buzău County and their jobs in Bucharest (nearly three hours away by train). She works late shifts as medical orderly at a private hospital in Bucharest and is dependent on public transportation. The frequent tardiness of the train taking her to Buzău sometimes forces her to walk alone at night:

I am a passenger, and commute by this train three times a week. I do not understand why the train that goes to Buzău from Bucharest is not replaced. Today I was again announced that it will be forty minutes late. Let me indicate that at the time when I will reach Buzău, there will be no [public] means of transportation. After arriving [in Buzău] I need to take another means of transportation. The last one departs at 22.15. In case of the train being late, I need to walk five kilometers.

As was the case with the *Bulgaria Express* journey described in the introductory snapshot, delays often caused problems unrelated to being late or missing connections. When trains were delayed, it meant passengers were exposed to the unpleasant conditions of the coaches for longer periods of time, to freezing cold or stifling hot compartments, or to the broken seats, dirty coaches, and overflowing toilets, intensifying the experience. Take the following two examples as illustrations of how multiple problems are laminated into a single complaint.

A man, who demanded complete reimbursement of his travel expenses, claiming that his train was late, cold, and dirty, filed the first petition. He also criticized the opacity of the company for not having let him know of these problems in advance so that he could have arranged for other means of transportation:

On 01.01.2016, am traveled with train IR 1522 Rm. Vâlcea - Bucharest. This train had a delay of over 1 hour and 40 minutes: during the entire length of the journey, the train did not have heating (temperature on the train was under -5 Celsius for the entire duration), the toilet in the train was not functional (the door couldn't be locked, the toilet did not flush, and the toilet bowl was full).

I wish to mention that I was not informed when I had acquired the tickets that the trains had the defects described above to have the possibility to choose another mode of transportation.

The second petition was filed in July 2016 by a group of passengers who claimed that the company had violated their rights because the train was late, air-conditioning was not functioning, and the conductor had failed to enforce social order on board. Consequently, they demanded their money back:

CFR Romania (sic!) has violated our rights flagrantly:

- During the journey [between] Craiova and Bucharest, in the train IR we did not have air-conditioning and the train was 90 minutes late
  - The same was the case on the route from Severin to Bucharest
  - People were smoking on board, and the conductor didn't even bother to admonish them verbally. We have even filmed this.
- We demand our money back.

*Consumer demands, political complaints*

Complaints often end as in the two examples above, with requests for total or partial reimbursement of the fare paid ("I demand the refund of the money paid for the ticket because the traveling conditions were not adequate"). But many other complaints transcended the contractual link with the company, with passengers demanding not only reimbursement, but also explanations for malfunctions or other incidents ("I want to know your position regarding these delays") and that someone, not always a specified someone, be sanctioned ("I demand explanations and sanctions!"). Others demanded solutions to long lasting problems that affected their mobility ("I beg you with all my heart that something be done to remediate these problems," "Someone do something about these foul railroads, whomever that someone is!"). Often times, a petition would contain several or all of these elements at the same time: requests for reimbursement, demands for explanations, and pleas for the problems to be fixed in the future.

While the majority of complaints were primarily focused on the ways the issues raised impacted the personal experience of passengers, a significant proportion also lambasted the quality of services using emotionally charged wording. Traveling conditions were described as "unimaginable," "inhuman and subhuman," "deplorable," "unacceptable," "shameful," "disgusting." Petitioners note that delays and shabby material conditions made them feel "abused," "disappointed" "offended," "mistreated," "insulted," "uncared for" or "treated like

suckers." The fact that these problems are recurring frequently enhanced the anger and frustration of passengers who confronted them on a daily basis. This was the case with the following commuter: "Why do you treat us like this? Why don't you care at all about us, the suckers who pay for the tickets? It is clear that this is not an isolated incident, but something ordinary! Shame on CFR!!!"

A significant proportion of complaints also contained political judgments that went beyond personal experience and the circumstances of one particular incident or the other. Frequently, tardiness and poor traveling conditions are taken to stand for an offense against an imagined "normality" tallied against European civilizational standards. One complaint read "Do you find it normal that we pay so much money and be the object of your mockery?" Another one noted "this is [not] normal in a country that presents itself as European." Another one linked the broken toilets in the train with national embarrassment: "You are a disgrace to CFR, and you are embarrassing us in front of foreign visitors." As these complaints suggest, the poor quality of transportation also indexes imaginaries of proper standards of mobility. Hardly one day passes on the field without hearing someone commenting on the backwardness of infrastructure as sign of political, social, and moral depravity while conversely praising the orderliness of German trains, the cleanliness of Italian trains, or the punctuality of Dutch rails. Sometimes, the standards invoked in the media are even higher: a recurring feature of press reports on train performance is to compare the cumulated delays of Romanian trains that, in 2012 for example, equaled 5 years and three months, with the cumulated yearly delays of only 36 seconds recorded by Japan's Shinkansen trains that can reach top speeds of 440 kilometers per hour. Of course, slower trains circulate on Japanese rails, but the term chosen for comparison is always futuristic "bullet train". Equally telling is the fact that the state is taken as the political actor taken to be responsible for



poorly functioning rail services; in the same way that Ciprian singled it out as main culprit for the saga of the *Bulgaria Express*. For example, one disgruntled passenger wrote under the "proposals" rubric of the complaint form that the railroads "should be privatized," while another insisted that "a collaboration with a private investor must be made."

### **The Bureaucracy of Discontent**

Through what means do passengers communicate their discontent with transportation services and what do these material forms of expression tell us about the way that the relationship between passengers and public companies is structured? Criticizing and poking fun at the public rails, one of the few systems where the state maintains a strong foothold to this day, may be considered a post socialist genre of infrastructural politics in which mass-media, citizens, and even the occasional politician partakes. In addition to grumbling like Ciprian and my other travel companions on the *Bulgaria Express* train, there are several other ways that people can express their bitterness with mobility services. Sometimes, angry travelers confront and haze ticket inspectors or even the engine drivers who helm trains. Many more vent on social media platforms like Facebook, Romanians' channel of choice for manifesting political subjectivities, as well as for publicizing infrastructural problems and for airing customer concerns directed both at public authorities and private enterprises. For instance, almost any Facebook post made by CFR Călători representatives on any of the company's official or unofficial social media pages will be sieged by comments from the public complaining about the quality of train services.<sup>60</sup>

---

60. People's propensity to take jabs at state governance due to the poor condition of rail services suggests that infrastructure may be theorized as a double-edged sword. As the Eastern European experience of state-socialism and of its aftermaths demonstrates eloquently, the built environment operates not only as support of state projects but can also afford significant grounds for contestation. Infrastructural violence may be something that is enacted on people (Rodgers and O'Neill 2012), but it must also be understood as a medium for citizens to make claims, counterclaims, and exact their own forms of violence. As Julie Chu (2014) has noted with respect to eviction disputes related to grand projects of urban redevelopment in China, the material disrepair of infrastructures can open fields of political contestation and feed citizens ammo to lash against the state.

Besides these informal means there are other, more formal ways through which disgruntled passengers can express their grievances. Needless to say, formal means of complaint are much more to the liking of CFR Călători than the overtly confrontational ones that tend to draw media scrutiny and thus do great damage to the already embattled public image of the state-run company. Official petitions and complaints are formally designed methods that are governed by EU and national legislation emphasizing rule of law and principles of transparency and accountability for public companies. They are designed to contain popular discontent into legalistic procedures characterized by power disparities. This is what Julie Chu (2014: 352), drawing on the work of sociologist Michael Mann (1984), calls the infrastructuralization of state power that relies on "the logistical (re)distribution and spreading interpenetrations of state and civilian forces." Infrastructuralization simultaneously narrows and proliferates the sites of accountability for making claims and counterclaims about the ruination of the material environment (Chu 2014: 355).



*Illustration 25. Disgruntled passenger pretending to push-start the locomotive of a train that had broken down in Bucharest's Gara de Nord. Photo by Bogdan Iancu.*

### *The form of petitions and complaints*

Similar processes can be seen at work with respect to the disrepair of public railroads in Romania. The Romanian state has opened multiple such avenues and sites for citizens and consumers to assess rail services and complain about their quality. One formal method is to address the company directly, which can be done in two ways. A passenger may call a dedicated phone line or use the electronic forms on the company's website to notify the company about possible breaches of the CFR code of conduct by rail staff, to make constructive suggestions, and to file petitions. An analog alternative to the telephone and online methods is to write down a petition by hand in *jurnalul călătorului* ("passenger's logbook"), the record that each station is obliged to keep. If petitioners are not satisfied with the company's response and want to take it one step further, they can address the National Authority for Consumers' Protection (ANPC), the government body that is in charge of enforcing consumers' rights. While it encourages citizens and consumers to formulate petitions and complaints and provides them with a plethora of physical and online sites for doing so, the state and the company also narrow the forms in which complaints may be submitted, as well as the potential effects that these complaints may have. As the following sections will show, neither the company, nor the state is able to remediate the problems raised by passengers. This does not mean, however, that the complaints generate no effects.

Official means of address are different from one another in form and effects. The company's website makes available three ways of filing petitions and complaints online, provided that the petitioner has an e-mail address. Any member of the public can notify ("sesizare") CFR Călători about "deviations from the provisions of the [company's] Code of ethics." The form requires the plaintiff's name and contact information and provides a rubric

where details about the problem and "the name of the person accused" can be entered, as well as a rubric that allows for the attachment of evidence. Notifications of this sort operate like denunciations: the management may use them to take disciplinary measures (i.e. reprimand, dock wages, demote, transfer, or fire) or legal actions (i.e. for corruption or abuse of office) against its personnel found at fault. Another online tab allows for passengers or concerned citizens to make proposals and suggestions ("propuneri și sugestii"). This form functions like a feedback loop: any member of the public can submit constructive recommendations like timetable changes, the opening of a new train station, a better way of coordinating rail connections with passenger flows, etc. If the first two methods are open to all citizens, the third option is available only to a narrower category of citizens that are also customers of services. This is a tab that allows only those holders of a valid train ticket to make a complaint ("reclamație/sesizare"). For this, passengers are required to input their travel details manually or to provide a photocopy of their ticket and detail the issue in writing. Train stations' "passenger's logbook" is an analog alternative that may be used to address any of the matters for which the specific online forms are designed. To make an entry into the logbook, one must visit in person one of offices tasked to handle complaints in train stations and write the complaint by hand *in situ*. Depending on the station, these entries are made either on printed standardized forms provided by station staff or written on regular large format notebooks. Upon submitting a claim, the company personnel provide the claimant with a registration number and with a proof of submission. Only after all other methods of petitioning the company itself have been exhausted can passengers complain to ANPC.

The documents comprised in the logbook are especially interesting. The logbook contains entries of a peculiarly grey genre that straddle the border between petitions addressed to a public authority and complaints made against a service provider. First, the material form and graphic

layout of the forms has an air of official performativity. Forms are furnished with a letterhead, an arcane code for the type of form, a registration number, time stamp, and signatures. They provide rubrics for passengers to make constructive suggestions, to detail the issues they encountered, and to make specific demands. Secondly, the language in which they are cast indexes a political relation of subordination between a public authority and a citizen. Logbook entries are defined as "petitions" (petiție) and the subjects submitting them are referenced as "petitioners" ("petenți"). Legally, a petition is defined as "the request, intimation, notification or proposition [...] that can be addressed to central and local public authorities and institutions, to the decentralized public services of ministries and other central organs, to national companies and societies [...] heretofore named public authorities and institutions." By providing official-looking forms and labeling them as "petitions," CFR Călători reminds passengers that it is not only a service company, but also a public authority, and frames the exchange in a way fraught with power.

In practice, however, people blur the distinction and often treat these forms not only as petitions to a public authority but also like complaints ("reclamații") against a service provider. As a legal genre, petitions ask a public authority, the respondent, to make a ruling. Complaints, on the other hand, demand that the plaintiff be awarded some form of compensation or that the defendant take some action. Entries in the passengers' logbook are often a mixture between the characteristics and languages of petitions and complaints. For instance, the same passenger that flags a problem related to the punctuality of a particular train may demand in her petition that the rail company explain the issue to her, that it solves the problem, and that it provides compensation by means of total or partial fare refund. Equally important is the fact that many petitioners also use this genre of address to transmit similar messages to those uttered by Ciprian and some of my other co-travelers on the *Bulgaria Express*. In these cases, their experience is not

simply linked with infrastructure and trains but is taken to be symptomatic of wider political neglect, social disorder and abnormality. As the previous section has highlighted, complaints index discontent of a grander scale cast in political terms. In the logbook, problems of consumption are often politicized.

S.N.T.F.C. „CFR CALATORI” SA  
S.R.T.F.C. BUCURESTI  
Compartimentul Relatii cu Publicul  
Tel. 021/319.03.58  
Tel. CFR 021/319.95.39 - int. 135135

Cod R-PO-0-7.2.3-03-01

Nr. Înregistrare.....291...../ Data.....27 08 2016.....  
Ora înregistrării petiției.....7/16.....

**A. Date de identificare petent:**

1. Nume și prenume BARBU VASILE-ALIN  
2. Adresă VASILE BARBU 2-5, S. 3, ap. 41, sector 4, București  
3. Telefon (opțional) \_\_\_\_\_  
4. E-mail (opțional) vasile.barbu@net.ro - telefonului meu  
5. Propuneri (opțional) SA SE SCHIMBE ORELE DE SOBIRE ASPEC PNEAT

**B. DETALIERE PETITIE:**  
SA REPERTE ORELE LA CAZE AVUNG IN MOD EFECTIV TREZURILE IN MOD CONSTANT

Cătreul din mod constant cu IR 1822 și pierderea. Trezura  
intârziere în mod constant, nu există niciun fel de  
produsele locale cu prețuri la ora de noapte, nici pentru  
cu care stăruie cu dăruire, nici pentru ce care să  
afectată. Dacă am o parte repetit program, să se  
schimbă ca lumea să pot în mod clar când ajunge  
trezura. În orice țară din Uniunea Europeană nu se  
intârziere așa.

**C. Cerințe ale petentului:** ASE VEȘTEA MAI SUS, SECȚIUNEA ARON VERI

**D. Legitimații (documente) anexate:**

Semnătura petentului \_\_\_\_\_  
Semnătura salariatului \_\_\_\_\_

Illustration 26. Complaint sample. The petitioner complains about constant delays and ends by claiming that “this doesn’t happen in any other EU country.”

### *Effects of petitions and complaints*

The law requires public companies like CFR Călători to respond to any notification, petition or complaint within 30 days. Otherwise it may risk the petitioner taking legal action in administrative courts. While very rare, such legal actions can be a hassle for the company's public relations departments, as they may lead to the court ordering the company to comply or mandating administrative fines against it. Personal experience and a wealth of anecdotal evidence suggest that the company does comply with the legal terms of response. Responding to petitions and complaints is the only legal requirement, which enables the company to be easily compliant and to perform transparency and accountability. However, as I show below it can hardly be held monetarily accountable for the majority of the actual problems that petitions raise.

Anecdotal evidence that I have gathered during fieldwork also suggests that the management of the company tends to act disciplinarily against its personnel indicated in complaints as having departed from the code of ethics (i.e. conductors taking bribes from fare dodgers), albeit not very often. Even more unlikely are drastic disciplinary actions, save for the most flagrant of transgressions. This is largely due to a lack of personnel and to the power that some railroaders' trade unions wield against management's capacity of sanctioning or firing staff. Most of the times, hierarchical superiors will apply the most lenient of sanctions (a verbal or written reprimand, or salary penalties between 5 and 15% over a period of maximum three months). Leniency works as a form of indebtedness by which managers can earn the tacit consent of personnel when it comes, for instance, to work conditions. Simply put, bureaucrats will not act against transgressing employees as long as the latter do not become too vocal about their rights. For example, supervisors are likely to overlook a train driver's noncompliance with the company's dress code, his moderately unsafe or negligent conduct, the occasional lateness to

work, or other offenses against the code of conduct, as long as he is not caught drunk on the job and does not put the lives of passengers or the company's assets in any actual danger. In exchange, the drivers are expected to drive locomotives that have cracked windshields, poor ventilation systems, are lacking rearview mirrors, or do not have all the motors operational, although rail regulations entitle them to refuse.

Complaints to ANPC, the consumers' protection agency, are last resort actions: a plaintiff can make use of this method only after all other attempts of amicable resolve with the company itself have failed. If ANPC finds in favor of the plaintiff, then it may order CFR Călători to solve the issues raised and/or slam it with a fine. ANPC agents can act either upon intimations submitted by customers or perform unannounced inspections in trains and stations on their own initiative. For example, an inspection carried out in Bucharest's Gara de Nord in July 2015 found trains dirty, broken toilets, ragged seats, and defective or absent air-conditioning, as well as improperly disposed trash in the station. Consequently, ANPC issued fines totaling over \$23,000.<sup>61</sup> More recently, media reported that over the course of 2019, CFR Călători and CFR Infrastructură were issued 36 warnings and had to pay nearly \$117,000 in fines.<sup>62</sup>

Besides financial and public image implications, a fine from ANPC can also lead to internal tensions and sanctions within the company. At the same time, it may give rise to ingenious methods of informal repair. Take the following story as illustration. In 2016, three local women from the same family (a mother, and two daughters) filed a complaint at the train station in Târgoviște, a city some 80 kilometers north of Bucharest. Their grievance had to do with the poor synchronization of two connecting trains in Târgoviște. The women blamed the conductor of the first train (between Fieni and Târgoviște) and the ticketing staff at the

---

61. [http://stiri.tvr.ro/amenzi-usturatoare-pentru-cfr-calatori-din-cauza-conditiilor-de-transport\\_63159.html#view](http://stiri.tvr.ro/amenzi-usturatoare-pentru-cfr-calatori-din-cauza-conditiilor-de-transport_63159.html#view)

62. <https://incont.stirileprotv.ro/transporturi/anpc-romanii-vor-primi-compensatii-pentru-intarzierea-trenului-cfr-amendata-cu-pestre-jumatate-de-miliard.html>



Târgoviște station for providing them with incorrect information that led them to miss their connecting train to Bucharest and threatened to notify ANPC. Through internal memos, the supervisors of the train conductor from the Bucharest station attempted to kick the ball out of their court by placing the blame solely with the Târgoviște ticketing agents. This prompted Tomiță, the Târgoviște stationmaster, to try to repair the situation on his own. Tomiță was aware that the problem would make him look bad, especially given that he was not on good terms with the Bucharest Regional District management (he was known as a troublemaker and a lover of the bottle). As a rather paternalist figure at the station, he was also wary that his staff might get sanctioned for a glitch that was not of their own making, and felt he had to stand up for them. When he was unsuccessful in trying to reason with his superiors in the company, he moved to an ingenious plan B. Namely, he picked up the phone and called one of the numbers listed on the complaint. Very politely, Tomiță apologized to the woman at the other end of the phone and did his best to explain his take on the situation, but the woman remained skeptical. Before hanging up, the stationmaster tested the waters for some social connections. He had recognized the street where the woman lived, and using that information, he began asking questions about local institutions and people. Luckily, the stationmaster and the plaintiff ended up having a long conversation about a music teacher that he knew, and with whom the woman's daughter was studying violin. After hanging up, Tomiță was happy. He told me, with a wink, that he was sure he had solved the problem and the women would not roll the complaint further thanks to his strategy of personalizing an otherwise abstract bureaucratic procedure.

However, situations when the company itself is held accountable to its customers based on the petitions and complaints received are remarkably few. In some cases (a misprint ticket, an erroneous fine, etc.) the company may decide to refund a passenger. It will not, however,

compensate for either poor traveling conditions or for delays and/or missed connecting trains, the two issues most frequently referred in complaints. Unless the ANPC becomes involved, there are no legal provisions whatsoever that can either force or allow the company itself to grant compensation for travel conditions. However, according to ANPC representatives cited in the media, Romanians tend to address the agency more for "delays, modified fares, the canceling of some trains or [matters] regarding traveling speed," issues about which the agency can do nothing, and less about "health and hygiene conditions," problems that actually fall under its jurisdiction. With respect to delays, there are EU regulations in place that entitle passengers to refunds for delays longer than 60 minutes<sup>63</sup>, but they apply only minimally to the Romanian state operator. This is due to the Romanian government taking advantage twice of a provision in the EU regulations that allowed exemptions for national rail operators. In 2009, the government put the waiver in place for ten years, and then prolonged it for five more years in 2019. Had CFR Călători been held to the same standards applied to other national rail operators in Europe like Germany's Deutsche Bahn, the Romanian company, famed for trains that are slow and late, would have incurred spiraling financial loss and bankruptcy. According to the waiver, only passengers on international trains within the EU are entitled to compensation. Had Ciprian and I come from Austria, Bulgaria, or Hungary we would have been entitled to file for compensation. Trains entering Romania via Ukraine, like the *Bulgaria Express*, or via Serbia, are exempted. The same exemption from compensation applies to all train journeys between localities in Romania.

---

63. EU regulations require rail companies to refund passengers 25% off the ticket fare for delays between 60 and 119 minutes, and 50% for delays over 120 minutes.

## **The Public Relations Bureau: Ambivalent Representations**

At Gara de Nord in Bucharest, the logbook is kept at the Public Relations Bureau (BRP), an office situated in the middle of the main corridor of the station. The BRP, an office that was open in 2010 in compliance with EU legislation, is open daily between 7 am and 8 pm, with staff working 12-hour long shifts followed by 36 hours off. Despite its visibility and long working hours, the bureau has virtually no operational power. Staff is tasked with answering telephones and providing information and explanations to callers without a preset script, and with handling walk-in information requests and taking in petitions and complaints from the public. All of these activities are already covered by a host of other offices. For example, Gara de Nord has a dedicated information desk, and petitions and complaints can also be submitted telephonically or online, as well as in person with the station's dispatchers' office. The latter, for example, functions as a surrogate of the BRP outside of its working hours. The complaints written in a large notebook at the dispatcher's office are then centralized at the BRP the following day.

A job like the BRP that pays decently and demands little responsibility may sound like riding the gravy train, but PR officers lament the stressfulness of their work, find little satisfaction in it, and often doubt the very utility and social value of their job. If anything, their subjective narratives approximate quite well the "bullshit jobs" category. These are jobs that "pay quite well, and tend to offer excellent working conditions," but they are "so completely pointless that even the person who has to perform [them] every day cannot convince himself there's a good reason for him to be doing [them]"(Graeber 2018: 10-14). The job of the BRP staff may be seen as a particular instantiation of the "duct tapers" version of bullshit jobs, namely "those that exist only because of a glitch or fault in their organization; who are there to solve a problem that ought not to exist." (*ibid.* 40). Differently put, BRP staff members have to perform the emotional labor

of listening day after day for years on end to people complaining about issues that are way outside of their expertise or capacity of action, and of offering apologies for these problems. One of the purposes of the BRP, then, is to help the state company perform the image of a transparent and customer-oriented corporation. Another one is to absorb public manifestations of discontent and channel it into more manageable bureaucratic forms.

For two weeks in November 2016, I spent several hours every other day perusing and photocopying documents in the front office of the BRP in the company of Gina and Alina, two of the offices' staffers. With this occasion, I was able to supplement my exploration of the complaints archived in the station's logbook with ethnographic observations on the material arrangements of the space, the practical procedure of submitting a petition or complaint, and the interactions between staff and customers. This subsection dwells on the ambiguous representation of the BRP that is iconic of the company's grey condition. On the one hand, it operates as a customer service agency and is arranged in a way that conveys transparency and recalls the austerity of corporate front offices. At the same time, the materiality of the office and the demeanor of the staff also signify state authority in a variety of ways, and thus encode symbolically a clear separation between the state and citizens and a hierarchical subordination of the latter to the former. These materially mediated symbolic interactions frame discontented passengers more like supplicants to a state authority rather than as entitled customers.

*Customers and supplicants: Signs of authority*

Besides the actual trains and the built environment of train stations, the BRP is one of the main interfaces between the state-run rail company and the public in Bucharest. In that respect, it is the closest approximation of a corporate-style customer service bureau set up by a public

company like CFR Călători. However, unlike corporate customer agencies, it has no powers in solving any of the issues brought to their attention by passengers. That is because most of the complaints are linked to discomfort produced by technical causes that are outside of the agency of CFR Călători itself, and, because the BRP has no prerogatives in handling tickets or issuing refunds in the first place. Devoid of any executive powers, the BRP mainly serves as a magnet for containing and placating angry passengers and as an entry point for the later distribution of complaints along networked bureaucratic infrastructures.

Petitions and complaints have been written and filed into the logbook after petitioners have exchanged words with Alina, Gina or other BRP staffers whose job is to placate angry passengers. Furthermore, complaints are written by hand on standardized forms with an official air to them, and petitioners have to either stand or sit at a table twisted in an uncomfortable position to compose them by hand, on the spot. Preliminary socio-material and techno-semiotic processing of grievances is likely to have transformed the ways passengers expressed their discontent. Compared to the interactions with BRP staff that I was able to observe, the handwritten versions of complaints tend to employ a more formal style and more neutral tones. At the same time, they tend to be significantly shorter than the handful of complaints submitted online that I had seen.

The BRP is rife with ambiguous material signs that are indicative of the company's in-between-ness. A large luminescent sign in navy blue and white, the heraldic colors of CFR marks the entrance. Inside, the identity of the enterprise is signaled by a white flag carrying the blue logo of the company, by a variety of branded swag (pens, calendars, and notepads), as well as by promotional leaflets that advertise train travel packages. A semblance of corporate branding is completed by staffers' dress code, which is described in the company's Code of Ethics and

Professional Conduct as having to be "clean, tidy, in a classic and conventional style." Public relations officers are required to wear austere corporate-style attire (black skirt or slacks, white shirt, neutral footwear), a name badge branded with the company logotype on the chest, and navy-blue blazers adorned with a company pin. Dress code is also required from all other personnel working front office jobs (i.e. ticketing agents). When it comes to this public company, the line between dress code and uniform is often thin. Ticket inspectors, as well as a number of other categories of staff, are officially required to wear uniforms. Aesthetically, these uniforms that have not been redesigned since state-socialist times are reminiscent of the previous military-style organization of the railroads: navy-blue uniform suit, neutral color shirt, tie, and peaked cap with a visor.

Notwithstanding their position, all personnel are banned from wearing tight clothes, deep cleavages, short skirts or dresses, shorts, clothes that are transparent or brightly colored, sandals or flip flops, as well as large or excessive jewelry. The dress code, however, is rarely respected or enforced, especially since new uniforms have been in short supply for decades. Most of the time, BRP staffers keep their branded blazers on the clothes tree, and hurry to put them on when they expect visits from higher ups or when they go out of the office and thus risk falling under the gaze of their superiors. That a passenger's presence did not seem to produce the same effect on staff during my stay, suggests that the dress code is more likely to operate as an expression of internal hierarchy rather than as customer-oriented performance of corporate visual identity.

The spatial arrangement of the office is also ambivalent inasmuch as it exhibits a mixture of corporate aspirations and old-fashioned public institution ethos. The office is spacious and neat, with furnishings similar to those of many customer service offices operated by private corporations. This style is exemplified by the minimalist furniture that consisted of an Ikea-type

particleboard table painted in woody shades of brown. Two armchairs covered in black faux leather, one to either side of the table, complete the uncluttered atmosphere of the bureau. At the same time, however, there are clear material signs that distinguish the BRP from a stereotypical customer office and render it similar to a public institution.

The Romanian and the European Union flags that hang on brass poles in a corner of the office are but the most obvious markers of authority. Another symbolic vector is a chest-high windowless counter that delimitates physically the area in the office open to public access from the enclosed one occupied by staff. When addressing BRP personnel, petitioners must stand behind the counter, while staffers are usually seated at their desks. This spatial arrangement forces passengers to compose their petitions or complaints either seated at the only desk in the public area of the office, usually without assistance from staff, or to write standing at the counter. The symbolic separation is enforced even more clearly when passengers submit their complaints to the station's dispatcher's office outside of the BRP's working hours. Here, passengers are forced to stand in the station's main hall and write down their grievances in a large notebook that rests against a small windowsill, while staff members sit in an enclosed space. The only way to engage with dispatching staff is through a small opening in the thick window that separates the inside of the office from the public area of the station. Spatial arrangements such as these have a double role. They protect staff from potentially violent encounters with angry disenfranchised passengers, but also create a symbolic barrier that expresses a hierarchical differentiation between staff and passengers. This casts the latter into a role of supplicants petitioning a public authority rather than into one of customers demanding their consumers' rights be respected.<sup>64</sup>

---

64. There are other, more subtle material presences that contribute to the BRP's institutional air. One such marker that Romanians immediately recognize as element of a public institution office are the luxurious green potted plants (usually philodendron) that lay on the internal windowsill of the office and counter the minimalism of the office. The popularity of these plants had soared during state-socialism and made them a decorative staple of public offices staffed by women, from medical cabinets to the post office. Ambivalently enough, the same objects that women bureaucrats have employed to domesticate public offices have

Solely women staff the BRP. As is the case with the overwhelming majority of front offices of CFR Călători (i.e. ticketing desks), as well as of other public institutions or private firms that provide infrastructure or utility services, the affective labor of customer service is gendered. This reflects more general patterns of gendering that link masculinity with technical domains, and femininity with social domains. Men hold all the top positions in the company's hierarchy. This includes not only the position of CEO but also all the executive jobs in the traction and maintenance divisions, the "hard" part of infrastructure. In the few cases when women are in executive positions, they tend to be in charge of public relations, international relations, or financial services. Outside of the management structures, women are overrepresented in white-collar desk jobs and virtually absent from technical blue-collar domains. For example, most front offices like the BRP (information desks, PR bureaus, ticketing agencies) are exclusively feminine domains. Likewise, at the Bucharest Locomotive Depot (DC-C), which will feature prominently in the second part of the dissertation, women can be encountered primarily in white-collar positions in the main administration building (HR, acquisitions, accounting), usually under the supervision of a male head clerk. Men bureaucrats at the depot, on the other hand, are in charge of less secretarial procedures related to the actual activity of transport. Among the uniformed staff, the gender balance is slightly more equitable, with both men and women acting as train conductors and ticket inspectors. In sum, when encountering the state in bureaucratic situations, passengers are very likely to talk to women who occupy explicit or implicit positions of public authority.<sup>65</sup>

---

become, under post-socialism, means by which customers judge the encroaching of old-fashioned state authority over customer service. In the blogosphere and on social media platforms, state institutions are often described in relation to their old-fashioned materiality that signals dusty communist mentality. The presence of personal decorative items (flowers and plants, cut out posters, calendars and family photos) in particular is often taken to be a sign of a lack of professionalism.

65. This pattern of gendering applies outside of bureaucratic structures as well. For example, there are only two women train drivers working for CFR Călători. Both of them are assigned to drive computerized, Diesel-powered railcars produced by Siemens, usually on less challenging secondary routes, whereas the burly socialist-era locomotives that haul long trains on long



Another aspect that differentiates between corporate customer support and the public authority atmosphere of the BRP is the comportment of staff. Public servants in Romania are often described as stern, phlegmatic, and rude middle-aged women who look down on the general public. Gina and Alina, the two BRP staffers on whose shift I visited the office, were themselves no embodiments of the ideal-type corporate customer service officer who smiles, listens carefully, and talks respectfully either. My time spent with them coincided with a balmy fall during which activity at the office was relatively slow, with no more than a handful visitors a day and fewer complaints received than during summer and winter, the peak seasons for both travel and for infrastructural malfunctions. Nevertheless, I did manage to record in my notebook some of the ways that interactions between passengers and BRP staff unfold. The following three excerpts come from field notes taken in real time during my first week at the BRP, when I spent the entire shift in the company of the two women staffing it and provide a good range of interactional situations.

The first visitor is a man who had a train in two hours to Cămpulung. He came in to complain that security guards would not allow him inside the waiting room with his bike. He gave a brief monologue in which he compared Gara de Nord and CFR with trains in Slovakia and in Germany to illustrate how "normality" and "civilization" look like. He said that he had traveled abroad and has a good idea how cyclists should be treated. Gina, the head clerk, told him to head over to a ticketing desk to buy a ticket for the bike, then return to the waiting room. "There shouldn't be any problems, but if the guard says something come back and let me know," Gina told the man. The bicyclist returned after a few minutes, this time to make a suggestion. Namely he insisted that Gara de Nord should have a bike rack, "like they have in Košice (Slovakia)." Gina told him there was nothing she could do about it, because CFR Infrastructură owned the station not CFR Călători. She then handed him a form to write a petition. She assured him that the petition will be forwarded to the other company and that he will receive an answer within the legal time frame.

---

distance routes are operated solely by male engineers. Gendered patterns function similarly at the Bucharest Locomotive Depot (DC-C), which will feature prominently in the second part of the dissertation. Women can be encountered primarily in white-collar positions in the main administration building (HR, acquisitions, accounting), usually under the supervision of a male head clerk. Men predominate in manual jobs of maintenance repair, with only a handful of women doing technicians' work. When the latter is the case, they tend to be assigned to the "cleaner" tasks. In the electrical locomotive workshop, for instance, the two women workers handle fine electrical components, and are never put on devices that require climbing on locomotives' roofs or going through inspection pits.

\*\*\*

A young woman who claimed was a freshman studying criminology at the University of Bucharest was angry that a ticketing agent had refused to issue her a discounted ticket because her student transportation id was not valid. She claimed that the transportation cards for the new academic years had not been issued yet, but that she held a provisional note from the university (the note that she alleged served as replacement for the id yet unissued had expired two days prior). The more she talked, the more worked up the students got. Her speech was rushing, and her tone was rising: "This is not fair, these are my rights, and it is not correct to force me to pay full fare." Gina cut her off abruptly on an authoritarian tone. She opened a file register, browsed through it quickly, and showed the student that there was nothing in there about provisional student identification cards. No memo from the Ministry of Education, the University of Bucharest or CFR Călători. "That's it, without a valid id, a discount ticket is out of discussion. You should go and ask at your university!" The student got riled up even more in frustration. "You have a communist mentality. Why can't we respect one another? There are many people who travel without a ticket and bribe ticket inspectors. I want to be correct. I travel every week with CFR, and the one time when I want to ask for something, it can't be done! I want to speak to someone higher up, I need to be heard." Gina shrugged and gave the student the phone number of the company's PR department and asked her if she wanted to file a petition. The student punched in the number in her phone with fingers trembling in anger, then immediately stormed out slamming the door behind her. Gina rolled her eyes, and then turned to me. "See? These are the kind of people with whom we deal even day."

\*\*\*

An elderly man stepped in asking Alina for help while Gina was out of the office. The man explained that he did not have his glasses on him when he had filled in his pensioners' discount coupon. He was traveling to Braşov, but he misread the coupon rubrics. Due to this, he wrote down his destination under the "junction" rubric, and the junction under the "destination" rubric. As consequence, the ticketing agent told him he could only be issued a ticket to Ploieşti (the city the pensioner had written under "destination"), instead of his desired destination. Pensioners benefit from a certain number of free round train trips and each time they take such a trip; they use a discount coupon. Filling a coupon incorrectly would have left the man one trip short. Alina looked at the discount coupon closely and replied that there were two different types of handwriting on the paper, and thus she couldn't help him in any way. The man became irritated, and claimed he was 78 years old and not a liar. Alina replied on a stark tone that "with this coupon you cannot go farther than Ploieşti, and that's that!" causing the man to take offense and leave muttering in frustration.

As the examples above illustrate, Gina and Alina face significant numbers of disgruntled passengers on a daily basis. Many of them may be particularly outraged, and not always without good reason. Dropping by the BRP to argue may help some customers ventilate, but the sheer

number of complainers and the unchanging nature of the problems that they lament takes a toll on staffers' disposition. Both Gina and Alina described their job as "very stressful" because, as Alina put it, "no one wants to be yelled at every day for the same thing over and over again when you can't do anything about it." The women's eroding nerves coupled with their implicit position of authority often makes them snap back at plaintiffs or refuse to provide them with any comfort or help. Often, as the examples above show, such demeanor enhances rather than dispels the frustration of passengers. Even if Gina and Alina were willing to help, they have little power in actually doing so: most problems are produced by technical causes that are way out of their expertise. Under antagonistic circumstances, BRP personnel makes use of the complaint form as a pragmatic technology that enables them to deflect the heat off themselves, even when they know that filing a petition or complaint is unlikely to have any effects other than redistributing the fields of accountability.

### **Technical Reponses: On the naturalization of disrepair and the diffusion of accountability**

When it comes to passengers' grievances, all BRP staffers could do was try to placate the disgruntled customers to the best of their ability, then channel their outrage into more formal means of address. While written complaints are rarely solved in favor of the plaintiffs and are ineffective in producing changes, their circulation and modes of resolution provide valuable insights into the workings of state-sponsored infrastructural enterprises, into the relations between the firms that have emerged following the splintering of the monolithic state detailed in Chapter 1, as well as into the discursive means by which CFR Călători, the most public of all the companies given its specialization in passenger services, distributes responsibility internally and externally.

### *Circulation of complaints and the diffusion of responsibility*

Once entered in the system, a complaint follows a convoluted institutional trajectory, and generates other documents that move back and forth along the network of state agencies. Upon receiving and registering the complaints, staff at BRP scale them up to the company's main Public Relations Compartment which then redistributes them to the various territorial branches (the eight Regional Districts) under whose jurisdiction the problems raised in the complaints may fall. Some complaints, as was the case of the one submitted by the bicyclist demanding a bike rack in the Bucharest station, travel outside of the company but remain, nonetheless, within the sphere of the state. Most often, the recipient is CFR Infrastructură, the state company in charge with administering rail infrastructure, since tardiness and journey duration are often linked to the quality of the track network. In general, the chain of accountability trickles down to the bottom of the organizational ladder. Once complaints reach a Regional District, they are forwarded again to specific departments (HR for issues regarding the behavior of rail personnel, traffic management for delays, the traction or wagon divisions for problems with locomotives or rolling stock respectively, specific depots for maintenance problems etc.). Bottom-rung employees are demanded to produce reports on the causes of malfunctions which other agencies that are positioned higher-up then use to draft the responses that they communicate back to plaintiffs.

Take the following hypothetical example. A complaint may be lodged in Bucharest regarding a train coming from Timișoara. In its route, the train had passed through three Regional Districts (Timișoara, Craiova, and Bucharest). Depending on the issues raised in the complaint, the document may be forwarded to any or all of the districts. If the train was late due to a problem with the locomotive provided by the Timișoara District, it will go to the latter, and from there, it will move down to the repair yard to which the locomotive belongs. There,

depending on the situation, the driver may be summoned to provide explanations (if the analysis of the machine's "black box" suggests the engineer was at fault), or the explanation might fall on the supervisors of the repair enterprise if there was a technical problem with the machine. At the same time, the complaint might also be about the qualities of the carriages, which may be provided by the Bucharest District, or about the behavior of the conductors, or ticket inspectors who may be subordinated to Craiova District. In such a case, the complaint is also forwarded to the car maintenance enterprise in Bucharest and to the HR office of whichever station on Craiova District the ticket inspectors may belong.

As it is often the case in such broad organizations where accountability is networked, great efforts are put into framing the causality of a problem in such ways that responsibility is passed along or avoided altogether. A train's delays may be attributed to natural causes or blamed on the regulations enforced by another company. Technological malfunctions are often translated into neutral "unforeseen" technical causes or blamed on passengers themselves. Issues with personnel, in which cases the word of the plaintiff goes against the word of one or multiple rail staff, are often denied outright. Bureaucrats from the company sometimes refer to this strategy of generating paper trails as "covering one's ass in paper," a plastic metaphor that connotes the diffusion of responsibility and scapegoating without generating significant effects. The next subsection analyzes the ways that the company responds to complaints.

#### *Not Our Fault: The Naturalization of Disrepair*

As explained in previous sections, CFR Călători cannot be forced to refund passengers for their delayed journeys. Given this context, the company's responses to complaints primarily function to explain the causes of the problems that passengers have encountered, and, in some

cases, to provide official apologies. The explanations it offers are particularly interesting for a number of reasons. First, the responses testify to the cracks that the break-up of SNCFR has produced in the railroad system, and simultaneously to the intransigence of the links between the companies that have emerged. For example, CFR Călători, a company distinct from CFR Infrastructură, often takes the heat for the poor quality of the tracks that the latter administers. CFR Călători is both a provider of services and a client of the infrastructure company, both owned and ran by the state. Secondly, responses illustrate how the company rids itself of responsibility by blaming factors external to itself. Most often, it does so by framing problems as neutral technical or natural issues, by distributing responsibility along its various agencies, by blaming other institutions and passengers themselves, or by making use of legal provisions to avoid accountability.

The following is a response by CFR Călători to a complaint filed by a woman in January 2016 with ANPC after she had traveled from Timișoara (Western Romania) on a train that had been over 90 minutes late. It illustrates three of the above-mentioned mechanisms of deflection. First, it frames the delay in technical terms by breaking it down. Secondly, it attributes each bit of tardiness to other agencies (the Hungarian railways, the Romanian Border Police, and CFR Infrastructură respectively). Thirdly, it references legal provisions to push the grievance into a bureaucratic dead end that enables the company to avoid responsibility and compensations:

Following the petition you introduced at the Regional Commissariat of the Consumers' Protection Bureau of the Bucharest-Ilfov region, in which aspects related to the activity of SNTFC CFR Călători are presented, the latter responds to petitioners in conformity with the provisions of law no. 233/2000 and of Government Ordinance NO. 27/2002, regarding the regulation of petition solving activities [...] in the legal 30 day term:

The train IR 347-2 that circulated between Curtici (on the frontier with Hungary - *m.n.*) and Bucharest North, arrived in Bucharest North station at 17.24, with a delay of 94 minutes, distributed so:

13-minute delay recorded on the territory of M.A.V. (Hungarian railways - *m.n.*)

23 minutes control at the State Frontier, Curtici station

58 minutes due to speed restrictions

In regard to compensations for delays, national services of passenger rail transportation are exempted from the implementation of the provisions of Regulation 1371/2007 for a period of 10 years. The exemption had been approved through Government Decision no. 1476/2009 and Government Decision 1078/2014 regarding the establishment of norms for ensuring the application of European Parliament and European Council Regulation no. 1371/2007 regarding the rights and duties of rail transportation passengers published in the Official Gazette, Part I no. 833 from 03.12.2009.

Presently, these compensations are granted only for **international transportation services** (bold in original - *m.n.*), for delays to destination of minimum 60 minutes, in conformity with the provisions of European Parliament and European Council Regulation no. 1371/2007 regarding the rights and duties of rail transportation passengers.

Information about compensations are published on the official website [www.cfrcalatori.ro](http://www.cfrcalatori.ro) under the USEFUL INFORMATION tab, subsection Waivers from the Regulation no. 1371/2007 for national transportation services.

Similar technical details and diffusion of accountability are at play in the following example of the company responding to a plaintiff who complained about a substantial delay and about the malfunctioning of the train's air conditioning system. In this case, the passenger carrier blamed tardiness on natural causes (high temperatures) and on safety regulations imposed by the state company that administers infrastructure. With regards to air-conditioning problems, responsibility was devolved to a regional branch of the company. From there, the complaint appears to have gone to the repair and maintenance enterprise, which further blamed an unforeseen failure of a piece of equipment that they claimed to have been working fine when last inspected:

Following your complaint registered in the "Passenger's logbook" at the Bucharest Nord Station, we communicate the following:

The routing of all trains [...] is the attribute of CNCFR SA, the administrator of railway infrastructure in Romania. SNTFC CFR Călători is nothing more than a transport operator that has to abide by the train circulation rules imposed by the administrator of the infrastructure. During heat waves, the infrastructure company imposes speed limitations caused by high temperatures recorded at the level of rail tracks. These delays caused by heat are announced in mass media.

Upon the train's arrival at the maintenance depot, it was found that the static power source of car number 4 had gone out of order, which led to the stoppage of the climate maintenance installation. Due to the fact that the cars composing the train Interregio 1694 belong to STFC Timișoara, your notification has been forwarded to its management for details regarding the aspects that you have raised. The position issued by the management of this branch is annexed to this answer. [Response was that the static source had been inspected and was not found defective, it broke down en route].

We are sorry and we apologize for the discomfort. We assure you that our company makes efforts to serve better our passengers. Moreover, we ask you that you bring to our attention any other inconformity that you detect in your future travels, for the purpose of improving the services offered.

We thank you for your understanding,

Manager's signature

The final example regards a response to a complaint flagging multiple issues filed by a male passenger in December 2015. The man had complained about the behavior of company personnel, about the cleanliness of the train's toilet, and about a delay. Specifically, the passenger had claimed that the train conductors had refused to identify themselves by showing them their control authorization when they inspected his ticket. He also claimed that the inspectors had refused to take action when he had drawn their attention to some luggage stowed on the hallway of the car. The plaintiff also mentioned that the door of a restroom in the train was broken, and the toilet was clogged and overflowing. Finally, the passenger asked for a refund, given that his train was delayed. In its response, the company claimed that they had investigated their personnel, but found no evidence of inappropriate behavior. The response also blamed



passengers who "do not utilize this mode of transportation in a civilized manner" for breaking the sanitary facilities in the train car.

Following your complaint registered at the Public Relations Bureau in the Bucharest North station with no. 483/13.12.2015, investigations were undertaken following which we communicate you the following:

- according to investigations, the control activity on train IR 1824/13/12/2015 in cars 1 and 2 was done by special inspectors of SRTFC Galați. According to their statements, during the verification of tickets in car 2, you have refused to present your traveling ticket, demanding the organs of control to present you their control authorization alongside with the badge they displayed. According to the statements of the two inspectors, it has emerged that the luggage stowed on the train's hallway did not inconvenience passengers. Following the investigations done by SRTFC Galați, no sufficient evidence was found to adjudicate that the special inspectors have not fulfilled their duties correctly.

The train master who served the train IR 1824 between Craiova and Bucharest North [...] declared that none of the passengers had notified him about the malfunctioning of any doors or about any clogged toilets. Unfortunately, the traveling public does not always understand to conserve cleanliness during the trip and is thus possible that the aspects mentioned by you might have appeared because a part of them do not utilize this mode of transportation in a civilized manner.

In conformity with **Government Ordinance no. 1078/2014** [...] the conditions [...] regarding the implementation of CE Regulation nr. 1371/2007 [...] regarding the rights and duties of rail transportation passengers [...] are **suspended until 3 December 2019**. [...] During the suspension, no compensations or refunds are granted for traveling with train, in internal traffic, that have recorded delays. **Given that you have already taken this internal trip, CFR Călători cannot compensate you in any other way.**

Your solicitation cannot be resolved favorably, as legal provisions do not exist.

We are sorry and we apologize for the discomfort, but we assure you that our company is making efforts to serve the traveling public better. At the same time, we remain receptive to all the petitions made in good faith by the traveling public, which are of real use to eliminate all the negative aspects in our activity.

Thank you for the understanding,

Manager's signature

### **Matters of Agency: Networks, Assemblages, Agentive Relations**

There is a striking isomorphism between the ways CFR Călători justifies tardiness and explains it away, and the analytic focus of actor-network theory. One of Bruno Latour's favorite examples of the influence of non-humans over the texture of time is the French *train à grande vitesse* (TGV). An uneventful TGV trip, one that would not add unduly to the transformation of

the traveler by leaving physical marks on her body, or otherwise stifle her plans, is dependent on "the complete obedience" of "well-aligned intermediaries". Thus "all the atoms of steel, all the electrons, all the gates, all the switches" need to be "aligned in the same direction", and the functionality of the train company needs to be clockwork-like. In contrast, a malfunctioning of any of these actants,<sup>66</sup> or for that matter a railroad workers' strike, contributes to the trip's eventfulness, bearing more heavily on the passenger's temporal experience of the journey. In comparison to the smoothness of a bullet train ride, a journey on the same distance undertaken by foot, cutting a trail through the deep jungle with a hatchet, is more likely to be eventful and to take more of a toll on the body and the memory of the pedestrian traveler, inflicting corporal transformations, and altering her sense of time (Latour 2005a: 175–177). When functioning ideally, the technological ensemble of the TGV is cooperating and enables movement. The jungle, on the other hand, is resisting and constrains mobility, and so would glitches in the TGV system.

The *Bulgaria Express*, on that particular August day in 2013, felt far from the intermediating smooth running of a TGV, and closer to the mediating jungle. According to one of the main tenets of actor-network theory, a symmetrical anthropology, one that aims to minimize anthropocentric tendencies, should not deem agency a solely human attribute, but should also consider the wide array of non-human and inanimate entities "that can be causally significant in networks of relations," and can be agents as much as human persons, without unduly privileging any one over the other (Laidlaw 2010: 145).<sup>67</sup> In an ANT analysis, one that stresses not only

---

66. Latour borrowed the term actant from the structural semiotics of literary theorist A.J. Greimas (see 1976), for whom the term denotes the actions that contribute to the construction of a character (i.e. a character is not the entity that does things, but the things it does confer it entitativity). Latour prefers actant both due to the former's connotation of active relationality and to the term's apparent neutrality in terms of agentification, compared to the human connotations of actor.

67. The well-aligned atoms, electrons, gates, switches et alia that govern a TGV journey alongside track workers, train drivers, and traffic dispatchers should thus act, ideally speaking, like intermediary actants that "transport meaning or force without transformation". In other words when acting as intermediaries, human and non-human actants are defined by their transparent and

heterogeneous agency but also radical circumstantial irreduction,<sup>68</sup> the eventfulness of the Moscow-Bucharest train ride would be attributed to human, non-human and inanimate actants that took the role of transformative mediators instead of working like predictable intermediaries. The delay of *Bulgaria Express* was governed by misbehaving atoms of overheated carbonated steel, by the overloading of the freight train that blocked the line, by replacement machines moving slowly, by the lack of electrification, and by other misalignments on the network. Undoubtedly, the mediated Romanian part of the trip was more transformative of Ciprian's and my sense of time; the ten hours spent on board on Romanian territory felt much longer and strenuous than the same length of time across the well-aligned Ukrainian railroad. The contingencies in our journey to Bucharest made temporality literally and painfully gain flesh, as both Ciprian and I felt the effects of the delay in our joints. These mediating breaches in what should have been a perfectly aligned, time-compressing chain of intermediaries made the trip momentous, and qualified it as an introductory ethnographic vignette, whereas a smooth, uneventful ride would not have had the same explanatory traction.

What type of agency stands behind the time-thickening breaches in the alignment of potential intermediaries? We have seen that with Latour agency is relational and heterogeneous: it is attributed to relations between both human and non-human actants, rather than being reduced to one or the other, and that the category of non-human actants chiefly comprises technological artifacts (see his discussion of hinges, grooms and doors in Latour 1999). For political theorist Jane Bennett (2005), another proponent of systems thinking, it is the agency of the assemblage. Railroads, just as the North American electrical power grid – Bennett's example

---

predictable participation in a chain of cause and effect. By contrast, actants like the trees and bushes that, unlike well-behaved intermediaries, hinder the smooth movement of a traveler through the jungle can be grouped under the heading of mediators, as actants that behave unpredictably and make a difference in the causal chain. "Mediators transform, translate, distort and modify the meaning or the elements they are supposed to carry" (Latour 2005b: 39).

68. Rejection of essentializing concepts that reside outside of the event itself.

of choice – lend themselves as prime illustrations of infrastructural assemblages. Historian Wolfgang Schivelbusch has referred to the railroad as "the machine ensemble" (1977), stressing the interconnection of cogs and wheels, tracks, trains, telegraph wires, and posts. To these mechanical constituents, and to Latour's emphasis on technological artifacts, Jane Bennett advised attention to the powerful agency of other "natural" non-human actants, including "electrons, trees, [and] electromagnetic fields" (2005: 446). The coherence or non-coherence of the assemblage can be thus seen, via Bennett, as dependent not only on the organizational functionality and on the mechanics of trains and tracks, but also on the vagaries of the "vibrant and overflowing [...] Nature" (*ibid.* 448). If agency is an attribute of the assemblage, then all the components need to be accounted for, since this is what defines the "distributive and composite nature of agency" (446).

The plethora of complaints recorded in the passenger's logbook at Bucharest's North Station point in the same direction as ANT or assemblage theory. One relevant contextual detail in support of complex technical and natural causation is the temporal dynamic of complaints and the correlation of their frequency with technical problems and unfavorable environmental conditions. As it emerges from media reports and the logbook itself, complaint numbers tend to spike during the winter and the summer, when extreme weather conditions render infrastructures and technologies more fragile, especially under conditions of low investments in technological renewal and in deferred or poor maintenance and repair.<sup>69</sup> Complaints tend to correlate with technical problems even outside of these critical times of the year. For example, during my brief stint at the BRP, there was one particular day when the number of complaints soared. That day, a

---

69. Even the mildest of snowfalls lead to blocked lines and delays. Snow fences are missing, specialized snowplows are rare on the network, and underpowered locomotives fail to break snow and ice banks. In the summer, high heat dilates steel and forces trains to run slow on certain segments. Locomotives break down more often due to water infiltrations or overheating of equipment, which may cause trains to stop, and generate malfunctioning of other systems, most prominently climate control and ventilation.

power outage on a track segment between Bucharest and Ploiești, the most heavy-trafficked line in the country, caused the need to replace electrical locomotives with Diesel-powered ones, which caused delays and slower train journeys.<sup>70</sup>

Ciprian, my companion from Moscow to Bucharest, the protagonist of the first snapshot, did not care about such matters, although he acknowledged them. The same goes for a number of the passengers who filed complaints with the BRP. For instance, the following woman explicitly noted that something else must reside beneath technical causation:

Please communicate me the real motive of the delay, not claims that 'because of the heat, tracks have dilated.' I consider that this pretext is not justified, given that 20 years ago (in the 20<sup>th</sup> Century), the distance between Bucharest and Constanța (in a truly canicular area of the country) was covered in 2.5 hours.

Neither the vibrant chemical composition of the rail tracks, nor the agency of sun rays in relation to the carbonated steel elicited these passengers' interest. Their interpretations were not about foregrounding network alignments and mediators, nor about assemblages. On the contrary, by singling out the state for blame, Ciprian as well as the authors of petitions who demanded CFR Călători be privatized, were cutting the network (Strathern 1996), narrowing the range of actants to one socially relevant and accountable political agent: a post socialist state that was unresponsive, corrupt or incompetent. While the rail traffic manager, in his analysis of the causally significant actants, opened some infrastructural black boxes by explaining the freight incident, Ciprian resisted such a distribution of agency and immediately black boxed them back in. Through the lens of systems thinking, much of this techno-event can be explained. It is only

---

70. If we reconsider the event in my introductory story about the freight train stuck on the tracks because of overheating, this interpretation gains credibility. Passengers traveling by rail in Romania are quite accustomed to the role of Bennett's "Nature" in these events. During the hottest summer months, when temperatures often reach 38–40 Celsius degrees, the temperature of the laminated steel of the tracks can reach 55 Celsius or above. To counter the peril of derailment posed by the buckling of the hot tracks, the state rail infrastructure company (C.F.R. Infrastructură) enforces speed limitations, which consequently prompts delays from the official rail timetable for the trains of C.F.R. Călători (the state passenger operator). Because of such environmental factors, coupled with overhaul works that punctuate many major lines and overall decrepit tracks due to deferred maintenance, passenger trains travel with a national average speed of 43 km/h.

passengers' emotionally inflected political reactions that escape them. As I suggest below, such a concern is anything but trivial; on the contrary, interpretations such as Ciprian's, and the assumptions that underpin them reveal the ways infrastructures become objects of political and affective desire and contention, and afford potentially traceable effects at least as important as the causal links between material objects. Peircean semiotics, with its granular attention to the ways that material signs are producing meaning and affective responses (see Munn 1986) can lend a hand in teasing out these aspects, and to a semiotic interpretation I shall soon turn.

### **Sign vehicles on semiotic tracks**

The reason why Ciprian blamed the state for the entire affair, or why disgruntled passengers demand the rails be privatized remain off the radar of Latour's and Bennett's approaches, is intrinsically linked to a particular affinity they both share with objectivist sociology. Latour made his rejection of interpretative sociology explicit:

I have no real sympathy for interpretative sociologies. [...] I firmly believe that sciences are objective – what else could they be? They're all about objects. [...] They [interpretative sociologies] would say that human desires, human meanings, human intentions, etc. introduce some 'interpretive flexibility' into a world of inflexible objects, of 'pure causal relations' of 'strictly material connections' (2005b: 144).

Bennett, on the other hand, in her discussion of agency and responsibility pertaining to the North American blackout of 2003, criticized people's propensity to cut the network by holding accountable politicians and corporations, thus human or anthropomorphized agents, instead of distributing agency across the whole assemblage:

If one looks closely enough, the productive power behind effects is always a collectivity. [...] Autonomy and strong responsibility seem to me to be empirically false, and thus their invocation seems tinged with injustice. In emphasizing the ensemble nature of action and the interconnection between persons and things, a theory of vital materialism presents individuals as simply incapable of bearing full responsibility for their effects. [...] A

distributive understanding of agency [...] reinvokes the need to detach ethics from moralism, and to produce guides to action appropriate to a world of vital, crosscutting forces. (2005: 463–464 first and third emphases are mine).

The red thread that runs through both passages cited above at some length is a belief in a sort of objectivism beyond human representation. If only one would look "closely enough" and "detach ethics from moralism" the desideratum implicit in Latour's claim that "sciences are objective", then the whole array of always already related human and non-human actants would be revealed at their fullest causal potential. While this stance is noble in its quest for a flat description of agency, one that would open up new and more flexible avenues for political action and critique, it is not always applicable to how everyday people make inferences about causation and attribute responsibility.

On the one hand, being able to grasp the entire network or assemblage requires a very high degree of expertise, a special position in what philosopher Hilary Putnam labels the "linguistic division of labor" (1975) that few people possess. In the same way that what I take to be pure gold might be proven to be an embellished piece of tin by a chemist running specialized tests, it takes an engineer (Latour's choice of profession fetish) with a particular type of rail-related expertise, such as the dispatcher in my story, to open the black boxes of train tracks, switches and gates, or an entire commission of analysis to crack the enigma of the electrical grid failure. Thus, from an objectivist point of view, the blame for causing the techno-event that delayed the *Bulgaria Express* could not lay just with the state, or not even primarily with such a composite agent. The state couldn't have been causally significant (for where are the traceable effects of this networked actant's agency?). Ciprian's interpretation, undoubtedly moralizing, would entail too much "'interpretative flexibility' [...] into a world of 'pure causal connections'" or be not actualized at best. Had he been a rail engineer, or for that matter, an anthropologist with

some knowledge of ANT's outlook, he might have sought the cause in other components of the assemblage. But he was not, and, like him, most people are not.

For example, in July 2017, media reported that a locomotive had become disconnected from the passenger cars it was pulling, leaving them in plain field for more than an hour, as the train driver had reportedly forgot about them. News outlets described the incident as "shocking" and a "disgrace." One passenger declared that the locomotive "got lost," and that the passengers were "abandoned." Outrage died down a few days later, when an engineer explained in a blog post that when a train breaks, the pressure in the air brake pipes drops and automatically brakes the locomotive, prompting it to stop after a few hundred meters. This means that the driver could not have abandoned the passengers. Nor could he return and get them, because when such incidents occur, the locomotive must be checked, and a written order allowing it to reverse on the line must be obtained. The national scandal proved to be a mere technical accident followed by rigorous observance of rail regulations. But this arcane knowledge was available only to people cognizant of train shunting and of rail regulations.

Secondly, the power of assumptions, even if "empirically false" *pace* Bennett, employed in interpreting the (mal)functioning of assemblages is largely sidelined by ANT and assemblage theory. The connections between the human and non-human actants of the network assemblage are considered to be there, regardless of what people might think of them. But this need not be the case, as some actants and some relations between often emerge as more socially salient than others:

[T]he determination of what is and is not causally significant is not, as the rhetoric of ANT sometimes suggests, a straightforwardly factual matter, but a matter of interpretation [...] Our routine, everyday interaction is shot through with, and its course is pervasively affected by, our ongoing judgments about whose presence or absence, whose actions or omissions, whose words or silences, have contributed in which ways to things turning out



as they are doing, and by our assigning responsibility accordingly. And here lies ANT's blind spot (Laidlaw 2010: 146).

The effects of assumptions derived from the material world need not be understated. As illustrated by Webb Keane's research in Sumba, Indonesia, local residents are likely to impute agency and intention to what might otherwise be interpreted as mere coincidences. The recipient of a cloth might interpret a torn discovered in the gift as a sign of malevolent intent, and will act accordingly, often in anger (Keane 2003: 419; 1997). By the same token, just imagine a CSI detective mistaking a bullet hole for something else, dancers in a nightclub taking the smoke in the room to be produced by a fog machine and not by a burning fire, or, to keep close to home, a train traveler like Ciprian who blames state negligence rather than mundane environmental and technical factors for a train delay, and, becoming convinced that the state is incapable of properly managing infrastructural commons, ends up voting for a political party that favors further privatization of public enterprises. All these examples illustrate that interpretations of material occurrences and the assumptions that inform them can be made and can have effects irrespective of whatever the objective chain of causality might be.

Webb Keane's story of torn cloth shows not only that what a sign is taken to represent does not necessarily map on whatever might be considered objective causation (also see Evans-Pritchard 1976), but also, very importantly, testifies to a particularly intertwined relationship between humans and objects that involves human accountability. "[H]uman arrangements and relationships create a possible separation between the causally effective doer of a deed (or the proximate cause of a state of affairs) on the one hand, and on the other, its responsible author" (Laidlaw 2010: 148). In lesser words, "you are responsible not simply because of a chain of cause and effect, but because these entities stand in a particular 'agentive' relation to you" (*ibid.*

151). Such interpretations are not only to some extent independent from the actual cause-effect relationship, but they also testify to the near impossibility to conform to Bennett's call to "detach ethics from moralism" (2005: 464).

Read against the grain from this perspective, Latour's famous vignette about the handwritten notice affixed on the door of a university building in Paris, that read "The Groom is On Strike, For God's Sake, Keep the Door Closed" (1992: 227) can be a fine illustration of this connection between the accountability of humans, or other human-driven entities, and the deeds of objects. The notice can indeed be taken to indicate that the Parisian students attribute agency to the groom itself and that, in the absence of a working technology, the responsibility to "keep the door closed" is delegated back to humans, as Latour interpreted it. But it can also be read as a moralizing sign meant to ironically remind whomever was supposed to repair or replace the groom that went "on strike," and failed to do so in a timely fashion, of their responsibilities. The same can be said about the plethora of complaints received by the BRP at Gara de Nord in Bucharest: they are methods through which problems are channeled to the attention of the agencies that passengers consider responsible for fixing them.

A semiotic approach derived from the works of American pragmatist philosopher Charles Sanders Peirce, rooted in the under-determination of signification, has the advantage of accommodating both of these aspects. Recall that the train experience prompted my temporary companion on the train, Ciprian, to comment about the callousness, the disarray, and the incompetence of the Romanian state. The scruffy, wrinkled uniforms of the border guards, and the train delay were all signs pointing to the state. Ciprian's remarks bring to the fore the assumptions he holds about what the state was ideally supposed to have done in order to prevent

the occurrence of train delays, as well as to the qualities that contribute to the state's failure to do so.

Material signs prompt us to make suppositions about their objects based on experience (Peirce 1955). This cognitive process is called abduction. It means, "postulating that which must, or is most likely to be, the case such that what we actually do perceive has the character that it does" (Keane 2006: 201). Two types of semiotic relations can be extracted from Ciprian's reading of the train event: an indexical one, and an iconic one. First, as a material index, purporting to a physical or causal link between the sign and its object, the long stopover of the train was a sign from which he made an abduction of agency. To him, and other fellow travelers, the state was the agent accountable for causing the event. The state, in this case, was a particular type of agent. Following Alfred Gell's reading of abduction, the index points to a causal relation with an intentional agent (1998). For Ciprian, however, the agency of the state which "couldn't do shit" was passive rather than active; he was not blaming the state for countering the anti-program of the misbehaving tracks with an inadequate program, but for not having a program at all (Latour 1999). Secondly, as an icon, a type of semiotic relation that works by means of resemblance, the bad shape of the uniforms and the sluggishness of the conductor stood in metonymically for an insensitive, weary, and disorderly Romanian state.

In themselves, icons and indexes like the ones described above "assert nothing" (Peirce 1955: 111; also, Keane 2003: 419). As the interpretation of signs, the connection drawn between the sign and its object is always underdetermined (Keane 2003: 415), it is contingent upon the mediation of "semiotic ideologies", a set of "assumptions about what signs are, and how they function in the world" (*ibid.* 419). Semiotic ideologies provide instructions about which material qualities are recognized as socially significant, about what can count as an agent, the quality of

such agents, the role of intentions, the type of signification that can be imputed to them and so forth. These sets of instructions are historically contingent, and materially dependent. They need not be treated as ethereal ideologies, spawning from a lofty domain of arbitrary social construction, but they gain contour through means of material experiences (Peirce 1955). Ideology and materiality here stand in a kind of dialectical, albeit imperfect, mutually producing unity. What needs to be accounted for in the following section is the historical-material processes that contributed to the positing of the Romanian state as the prominent agent involved in train travel and the common association of the state with apathy and incompetence that Ciprian's reaction so vividly illustrated.

### **"They": The infrastructural agency of the state**

Ciprian's insights resonate with many other passengers of the railroads. On the Pietroșița-Târgoviște rail line in Southern Romania, the cancelling of trains produced uproar, and prompted locals to question their relationship to the state. "To whom are we left now?" – an elderly retired man from Pietroșița, a small mountain village north of Bucharest, rhetorically asked during a media interview after the state-owned CFR Călători shut off all train service to the commune. In May 2013, as the line was classified as "unprofitable", CFR Călători simply discontinued passenger service on the line connecting Pietroșița to the neighboring towns, to the county capital, Târgoviște, and to the capital city, Bucharest. "They are not serious!" (my emphasis) – the man continued.

The feeling of being abandoned by "them" – the all-encompassing, diffuse, pronominal form employed during socialism to refer to "any aspects of the state" (Berdahl 1999: 69) – expressed by the pensioner in the vignette above illustrates the strong connections between the

state, railroad infrastructure and train services. These links date to the substantive economy (Polanyi 1977: 19–20) organized by state socialisms and had been inherited by their post-socialist heirs. States are more than pure theoretical concepts or distinctly established bounded entities. They simultaneously consist of ensembles of institutions, procedures, things, human and material interactions, events, and representations. Beyond being immobile concepts, states are processes that give life to visible forms that produce the effect of structure (Mitchell 1991). Bureaucratic proceduralism, the routine and repetitive practices of state institutions, and the ways in which citizens interact with these practical articulations of states, is of chief importance in Sharma's and Gupta's highly influential take on the performative ontology of the state:

The structure of bureaucratic authority depends on the respective re-enactment of everyday practices. These iterative practices are performative in that rather than being an outward reflection of a coherent and bounded state "core", they actually constitute the very core. It is through these re-enactments that the coherence and continuity of state institutions is constituted and sometimes destabilized. (2006: 13)

The two scholars wink at the interlinking of representations, symbols and practices with materiality in the cultural constitution of the bureaucratic "core" of states, but do not take this material link outside the bureaucratic practice itself. In the Romanian state socialist planned economy, the enactment of the state extended much beyond the field of institutions, permeating all levels of social life through centralized planning, production and distribution of goods and services (Fehérváry 2009). The sphere of substantivist material interactions with the socialist state can further be expanded to include all kinds of infrastructural facilities such as heating, running water, electricity, housing, roads, and railroads (see for example Fehérváry 2002; 2009; 2013; Humphrey 2003; Collier 2011; Hitchings and Lee 2008; Dalakoglou 2012; Schwenkel 2013).

In none of these spheres did the state ever actually function as a coherent monocephalic entity, but through its various, often conflicting, institutional articulations. Nevertheless, in the eyes of its subjects, the state was often conceptualized as unitary, as the sole provider of goods and services (Humphrey 2003; Fehérváry 2009). In this sense, almost all of the material aspects of social life under state socialism, together with institutions and their embodiments can be interpreted as metonyms of the state itself. Since goods, services and infrastructures stand in a particular agentive relation with the state, the state was held accountable for their functioning and malfunctioning. Precisely this overarching accountability for materiality, corroborated with the failure to provide as promised led to the alienation of the citizens from the Party, and consequentially to the idealization of Western capitalism (Fehérváry 2009: 428-429), ultimately contributing to the de-legitimation and demise of Romanian state socialism (Verdery 1996).

What Stephen Collier (2011) called "the intransigence of infrastructure" has materially connected successive political regimes. State socialism has built on and expanded the system put into place under the preceding monarchy, and neoliberal post-socialism has inherited the result (Turnock 2011). The post-socialist reforms of the 1990s aimed, and to a great extent succeeded, to reorganize the system by breaking up the tightly knit and vertically integrated organization of the rails. However, many passengers still view the system as a monolithic state agent. The railroads proved to be intransigent not only materially, but also politically and symbolically. For instance, in responding to a complaint filed by a passenger who was discontent with the delay of his train and with the malfunctioning of the air-conditioning system, the national passenger operator tried to diffuse agency by blaming the heat-induced speed restrictions enforced by the infrastructure company for the delay, and the owner of the car, actually one of the national passenger operator's subsidiaries, for the malfunctioning air-conditioning. Yet, this answer did

not convince the passenger, who published the reply on his website referring to the national company and the state, and not to their institutional agencies (Constantinof 2012).

As the example above suggests, the materially mediated relation between the state and its subjects in socialist and post-socialist contexts was never unilaterally top-down. Referring to the case of Russia, Caroline Humphrey demonstrated that the built environment not only encoded official Soviet ideology, but elicited imagination from below, contributing to the peoples' imagination of alternative socialist moralities (Humphrey 2005: 55). Rail-mediated interactions in post-socialist Romania follow a similar pattern of bottom-up commentary and critique. For instance, in a widely circulated article about his own experience traveling by train, a journalist blamed and cursed the "imbecility of SNCFR"<sup>71</sup> for the painfully hard seats, and expressed his frustration pertaining to the impertinence of the conductor who dared to treat him condescendingly, although he was an employee of the state (Goțiu 2012). By commenting on the hard seats, the journalist was blaming a lack of vision by the passenger company. In condemning the conductor's brash conduct, he was also indexing his expectation of how a public employee should have related to a citizen.

In other cases, it is the slowness of rail travel that prompts passengers to comment on the incapability of the state to provide a proper Western social modernity, a comparison that the socialist state had encouraged both directly and indirectly, by promising a type of modernity that would eventually surpass Western capitalist welfare. Comparisons between the average speed (26 miles/h) and accumulated delays (over 5 years in 2011 alone) of Romanian trains and Japan's famous Shinkansen high-speed rail (average speed of 198 miles/h and average delays of 36

---

71. As in the vignette above, about the defective air-conditioning system, this journalist's account also illustrates the way that the railways continue to be seen as a single entity that instantiates the state. More precisely, SNCFR, the company whose "imbecility" the writer condemned for the quality of the seats, is actually the infrastructure company, which, unlike the passenger company, does not own any coaches, having thus no word to say in the acquisition of seats or in the provision of air-conditioning in the train. Yet, in the text it works as a general moniker for all things public railroad.

seconds) are frequent topics of debate and lamentation among travelers. Furthermore, even when the responsibility for various malfunctions is easily attributable to someone else, the state lingers as secondary agent. For example, while traveling by a privately-owned railcar without air-conditioning, an elderly lady complained to me about the lack of respect from "these privates," then hurried to add that it was the state's fault for allowing "such old tin cans to run" on national rails.

So far, this section has sought to show that through ownership and administration of the railways, the socialist state and its post-socialist heirs retain a high degree of involvement in the substantive economies of Romanians. The rail system not only asserted the state's involvement in the everyday life of the population, but it was always both a tool for top-down subjectivation and control, and a locus for bottom-up commentary and critique. However, this visibility is not enough to explain the degree of agency and responsibility that Ciprian, my companion from Moscow to Bucharest, attributed to the state. As Daphne Berdahl has shown in her ethnography of an East German border village, the opacity of the socialist regime, its so-called culture of secrecy, contributed just as much as its visibility and penetrating involvement in peoples' everyday lives to its mythical image of a "super-agent" allegedly capable of knowing and planning almost everything:

[D]espite its high visibility, the regime remained an enigma. With its actions (and some actors) shrouded in secrecy, and with its seemingly arbitrary use of power, the state was able to sustain a mystique of the unknown. This state of secrecy [...] endowed the regime with almost supernatural quality [...] [and] invested the state with an idealized power and knowledge – an imagined omniscience based on the state's omnipresence. (Berdahl 1999: 45–46)

Such a degree of opacity and arbitrariness is applicable to transportation in both socialist and post-socialist Romania. During the austere 1980s, travelers could never be sure whether the



public buses they were waiting for would come at the scheduled time, how long the delay would be, or even if they would come or not. Unlike buses, trains never stopped running, but they did run on curtailed schedules (especially on secondary lines where, due to lack of electrification Diesel locomotives burning scarce fuel were used) and accumulated massive delays that were rarely announced even in the train station. This opacity with regards to scheduling kept the passengers in a nearly perpetual state of uncertainty and waiting, expropriating their personal time away and subjecting them to the caprice of the state (Verdery 1992). It is exactly this lack of predictability that the passengers of post-socialist Romanian railways keep complaining about adamantly. Although delays have been recorded constantly for more than a decade on many routes because of speed limitations related to lingering infrastructural works or to weather conditions, the national rail company has so far refrained to adjust the timetables to this regime of speed. This disjuncture between the "real" and the "official" journey durations may be connected, on the one hand, to the national railway company's desire to retain its prominent position in the distribution of agency over scheduling. This retention of scheduling agency is also illustrated by the ways that, until recently, the state company excluded the trains operated by private firms from its timetable, although both public and private companies run on the same lines and connect in the same train stations. On the other hand, it may also be related to fare prices. If the company would schedule the "real" journey time, then it would be forced to downgrade the speed category of the train and, consequently, to adjust the fare prices downward.

## **Conclusion**

This chapter argued for the semiotic interpretation of railroads and trains as sign vehicles by focusing on the disjuncture between technical explanations of malfunction stressing the

distributed nature of agency that railroaders provided, and the deeply moralizing political interpretation of technological failure that many Romanian laypersons resonate with. I have shown that various rail related techno-events, prompt passengers, like my Moscow-to-Bucharest companion Ciprian, to make logical-causal abductions of agency often indexing the state as the primary causally responsible agent, through which they assess and critique the quality of their relationship to the state. The semiotic approach that I proposed here is rooted in the vulnerability of the cognitive process of abduction to misinterpretation and in the underdetermined nature of material signs, and thus has the advantage of accounting for potentially erroneous conclusions derived from true empirical premises and their effects. Moreover, it is prone to opening directions of inquiry that consider how the semiotic ideologies that mediate representation themselves come into being through material interactions that simultaneously constrain and invite interpretation.

The tendency to index the state as the agent that causes the conditions of travel is contingent upon the inextricable historical relation between the Romanian modern state and the railways, and on the lingering effects of the state socialist substantivist economy and its connected moralities. The state that was so dumb that it "couldn't do shit", as Ciprian put it, is qualified as such because, by allowing for unpredicted material mediations to occur in the railway system, it failed to conform to its image of omnipresent and omniscient entity to which people keep holding it accountable. While objectivist descriptions of concrete, materially traceable effects face the risk of abstracting away what non-experts make of material encounters, their articulation with semiotics afford a more comprehensive understanding of the dynamic of representation, materiality and temporality.

From such a perspective, infrastructures emerge as networks of composite actants that, especially upon malfunction, mediate the temporality of mobility, a mediation that passengers often experience in their bodies. Minute attention to the various actants whose behavior and relations predispose peculiar temporal experiences may provide insights into the ways often black boxed technological systems leak into a multitude of realms of social and economic life on various scales, ranging from global finance and supranational politics to local governance and relations between mutually dependent state and private companies. Yet, it bears upon ethnographers to also consider how technological objects, in their sheer materiality, have social lives that transcend their immediate functionality. As I have illustrated throughout, trains lend themselves to sensorial assessments. The way they smell, how they move (or do not move), the hardness of their seats, the attire and comportment of their servicemen etc., are material qualities that may provoke affective reactions and moralizing political judgments.

Passengers' judgments regarding attribution of accountability over infrastructural failure, especially since these abductions appear somewhat disconnected from the effective technical producers of malfunction, may illuminate some peculiar aspects of cultural constructions of the Romanian state, and may contribute to more refined theorizations of postsocialism. A main feature of Romanian socialism was the agglutination by the state of agency, and the responsibility that comes with it, over the material lives of its people, which rendered it vulnerable to any failure in providing the promised goods and services. Ulterior neoliberal governments have struggled to disavow themselves by decentralizing infrastructures and services. The 1998 reform that broke up the monolithic railway system into multiple enterprises, and the subsequent opening of the system to private operators are cases in point for this

centrifugal distribution of agency. Paradoxically, perhaps, this process has not helped the state get off the hook, as infrastructures proved to be both materially and symbolically intransigent. This material and symbolical intransigence, objectified in the state's continuous involvement in railroads (through its ownership of infrastructure, its provision of discounts for students, veterans and pensioners, the spatial arrangements of the PR office, the dress code of PR staff and the uniforms of rail servants) and in the lingering expectations for it to perform and provide, might also help salvage some of the analytical purchase of the concept of post-socialism that to many scholars has long outlived the condition it purported to describe (Dunn and Verdery 2015; Rogers 2010; Verdery 2001). One might rightfully ask what is post-socialist in a place like Romania, one of the poster children of East-European neoliberalism (with its lax institutional decentralization, rising economy of service, and dwindling social welfare)? Chelcea and Druță (2016) have shown, for instance, that while the institutional and economic framework of state-socialism has been disbanded, what they call zombie socialism, the actualization of totalitarianism as a threat, is employed by the winners of transition to stifle welfare demands and to promote further liberalization. Socialist-era infrastructure, with its visibility, its potential for collapse, its resilience to fragmentation and delegation, might be a similar type of zombie, this time one that governments would be keener on avoiding or vanquishing rather than keeping alive.

### Snapshot: "No Such Thing as 'Can't'"

It was an unusually slow August morning in the wagon repair shop of the train station in Petroșani, a mining town in Southern Transylvania. I used to spend time there, shadowing wagon repairmen ("lăcătuși de revizie) working for C.F.R. Marfă (Romania's state-run rail cargo carrier) whenever I visited family during breaks from my regular fieldwork in and around Bucharest. At noon, a loud ring on the landline phone dispelled the pleasant idleness that had engulfed the shop, interrupting the light banter, YouTube video watching, and cracking of sunflower seeds. At the other end of the line, a different station's dispatcher announced that an eighty-ton heavy cargo wagon had been cleared for the road erroneously: a leaf spring suspension meant to absorb the shocks on one of its bogies was broken and posed the risk of derailment.

The train was bound to deliver coal to a gigantic thermal power plant, so the men had to get on the move quickly. Iosif, the master workman, scavenged a rusty spring blade from the pile of scrap that towered by some bushes in the shop's yard. The said spring was designed for a different type of freight car, but after some evaluation Iosif deemed it just "good enough." Helped by Stelică, the shop dispatcher, Iosif loaded the 270-pound used part onto an old two-wheeled cart that the two pulled by hand. Radu, a manual worker, grabbed a shoulder bag containing a couple of wrenches, a suspiciously small hammer for the task at hand, and a crowbar. Vasile, another worker, picked up a six-foot long iron beam and slung it nonchalantly over his shoulder like a baker carries a bag of flour. He had stumbled upon that beam some time before on a construction site nearby and had been keeping it around the shop because "it's good to have it around, you never know when you'll need it." I initially shrugged off the strange

repurposed beam, but its mystery was dispelled later, as the unassuming construction material became a crucial instrument for solving an unexpectedly difficult and exhausting task.

The crew was understaffed due to a wave of layoffs prompted by the government's recent austerity policies leaving the shop short of two handymen, so any extra muscle power was welcome. Iosif asked me to come along, and Vasile cajoled me into making myself useful by handing me two small yet heavy hydraulic jacks to carry. Just as with the iron beam, my extra-body weight was to play a surprising role in fixing a complex industrial machine. Four veteran skilled workers all over fifty years of age, and a clueless anthropologist in my thirties, marched thus encumbered for a good quarter of an hour straining to pull the cart over the rugged terrain along the tracks, our heavy panting interrupted only by elaborate curses mumbled each time one of us got stung by a thistle or nettle hidden in the dense weeds and bushes that had overgrown the unkempt rail. Technicians had sweet words especially for their former colleagues from C.F.R. Infrastructură, the ones whose neglect of their duties to take care of the span of the tracks had turned our walk into a time-consuming and body-taxing off-road adventure.

The problems began as soon as we reached the busted car sidelined in the middle of nowhere. The first had to do with the very instruments that should have helped with the work. The crank of one of the jacks that I carried and that was meant to hold up the 81 tons of coal and steel was dangerously loose. Repair could not start before the crank itself was restored. After minutes of head scratching, debating, and scouring the tall grass scouring for something useful, the workers improvised a fix. They jammed the crank with a piece of metal that one of them had found under a freighter parked on another line. Using the head of the steel rail track as an impromptu anvil, Radu first tapered the recycled piece of metal to make it fit into the small opening in the jack, then hammered it into place. Even patched, the tool was still useless. Much

to the chagrin of the servicemen, its piston had sunk into the tubular bar of the undercarriage by which it was supposed to elevate the wagon. With the bar deformed, the range was not as tall as needed to lift the machine to the proper height for operating underneath it. Vasile scurried back to the workshop from where he retrieved a banal triangular piece of hard wood, the kind used as door stopper. The wood was lying around in a corner of the dispatcher's office, but Vasile quickly identified its usefulness. He wedged it between the piston and the bar so as to cushion the dent against further deformation and to gain a few more inches of elevation. With the wagon finally jacked up, and the faulty spring loosened from its bolts with wrenches and dislodged with a few hefty blows of the hammer, the job of replacing it promised to be a walk in the park.



*Illustration 27. Repairing the spring leaf. The red instrument to the right is the defective jack.*

It was anything but. Rain began pouring down. In the endless process of cutting expenses, CFR Marfă had not furnished workers with the raincoats that would have enabled them to keep on working. The five of us crawled under the wagon to take shelter, but only after jacking it back down for fear that the shoddily patched crank might surrender under the load and maim us, if not worse. Work resumed about half an hour later, but the replacement spring, already worn, rusty, and imperfectly compatible with the wagon as it was, stubbornly refused to fit into the vacated slot on the bogie. The workers cursed and lamented about not having raincoats, adequate wrenches, solid jacks, a portable crane, and at least a couple of massive sledgehammers that would have made work safer, faster and easier. Basic equipment for their job that was nonetheless sublimely absent. Although this scarcity of tools, equipment, and parts had been going on for years, workers were still fuming that they had to operate with little more than their bare hands.

Getting over the technological deficit took a mix of improvisational creativity and plenty of brawn. Vasile's salvaged iron beam suddenly came in handy. The workers repurposed it as a makeshift lever to lift the heavy spring and push it into position. But even with the combined weight and strength of the five of us, the part wouldn't budge. Technicians asked around the station for help. Track repairmen from CFR Infrastructură, former peers of theirs before the break-up, laughed in their faces. Two men from a rival private cargo company came out but only to watch and sneer from the sidelines. A passenger train passed by, with passengers clearly entertained by the sight of the bedraggled, struggling workers. Denied of their peers' solidarity, but now with an unsympathetic audience, the technicians kept on straining and swearing, and straining and swearing some more, over and over and over again. It was hard to avoid the

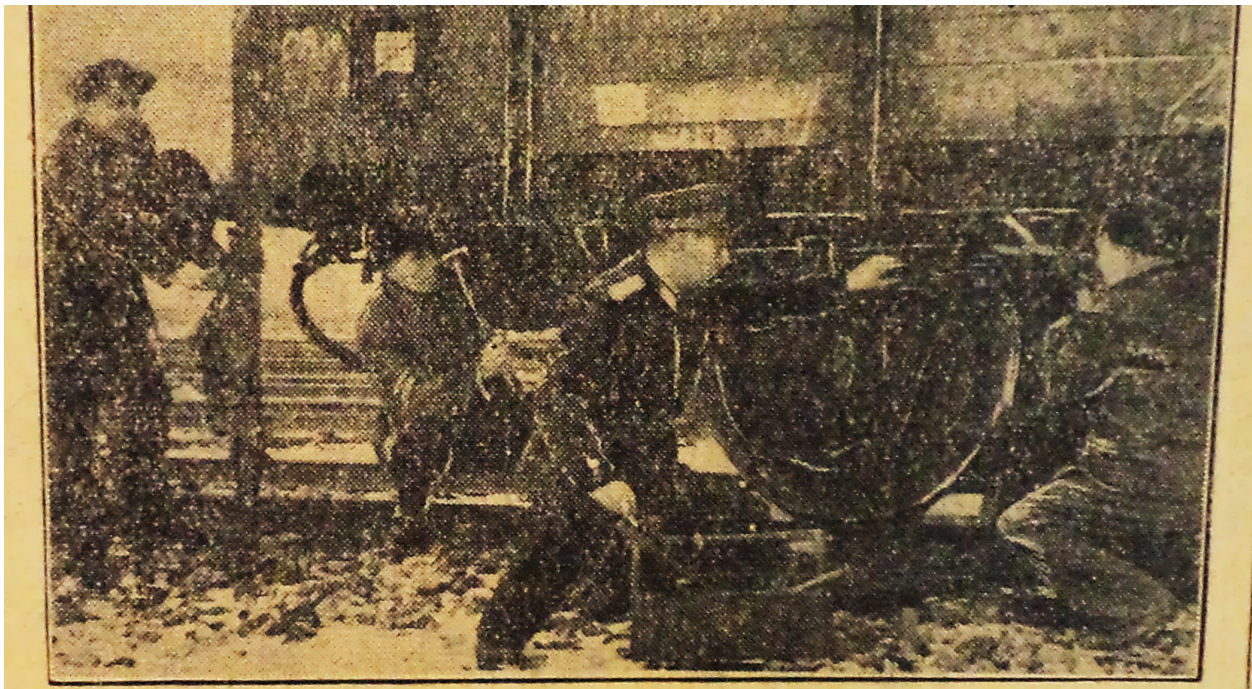


thought that we were engaged in an absurd Sisyphean task, repeatedly pulling and pushing, only to have the spring fall off again.

There was no time for workers to philosophize; somehow, anyhow, the task had to be completed somehow, and as soon as possible. Bodies, mine included, were pressed into action. One worker pulled the improvised lever down, wrapping his arms and legs around it to hang on it from below like children do on monkey bars, and asked me and two other workers to balance on top of the beam to push it down with our considerable combined weight. The fifth man guided the slots of the spring onto the bogie using nothing but a metal crowbar and his glove-covered hands, while at the same time signaling the human weight system for when to push down or release pressure so as not to crush his fingers. Countless attempts later, the two openings, the one in the spring and the one on the bogie, overlapped just enough for the technician to hastily drive a bolt through both of them and set the spring into position. The bolt entered at a bit of an angle rather than perfectly straight, but since the spring was stable enough, it had to do. Undertaking the whole operation again would have been madness, the workers agreed. If it fit, it fit, and that was it. At the same time, they were also wary that the fix might not hold for long and feared the potential consequences of a failure. "I don't know if I'll sleep tonight," said Stelică, the dispatcher. "I just hope I won't get a phone call that, God forbid, it derailed, and something happened."

Replacing the spring was supposed to be a routine task. *Lupta C.F.R.* ("Railroaders' Struggle"), the weekly newspaper published by Romanian railroaders' union during state socialism, described it in these terms back in 1955. In its March 24<sup>th</sup> issue, the outlet published a photo depicting a crew of four workers huddled around the wheel of a freight wagon as they replaced a shock-absorbing spring, a scene similar to the operation described above. The caption

boasted: "The method of repairing wagons without uncoupling them from the train is applied in full measure by repairmen. [...] Here they are, in only 8 minutes, they managed to replace a defective spring, working within the stoppage time of the train." But by August 2015, the task had turned from routine into eventful, strenuous, and frustrating. There we were, 65 years since the publication of that article, 25 years after the fall of state-socialism, and 8 years into Romania's EU membership, four seasoned technicians aided by an unskilled and a-technical but advantageously portly anthropologist, taking nearly six hours to complete the same task that had taken less than 10 minutes six decades before. As explored in Chapter 2, conditions had deteriorated in the intervening decades. The workers in the old photograph did not face the same precariousness of supplies and equipment, deficit of labor power, and increasingly vulnerable machines that are a daily reality for contemporary Romanian railroaders.



*Illustration 28. 1955. Replacing a spring in 8 minutes. Source: Lupta CFR, March 1955.*

But lamentation about the erosion of their trade and their degraded and degrading work conditions is not the only register in which railroaders describe their labor. Despite having been engaged for hours on end in a frustrating task, the workers still had the strength to banter. "What do you think, are we working like the Germans, or what?" Radu, one of the elderly technicians, asked me with a chuckle on our way back to the shop. "Yes, of course, but like the Germans did in 1907," chimed in Iosif, another seasoned railroader, adding to the self-mockery. The others nodded their heads in approval. Iosif's reference to 1907 was not arbitrary. That year, hungry peasants mutinied against exploiter landowners. It was remembered in Romania's history as a moment of extreme poverty and underdevelopment that pushed the downtrodden to desperate violence. Tellingly enough, Iosif associated that moment with their current conditions of precarious work that feels oddly exploitative. For him, it was not only that they hadn't reached Western standard in their work, but also that they had experienced involution into a pre-modern condition, much worse than under communism. This jocular exchange between Radu and Iosif expressed both their aspirations to working conditions akin to those in an idealized technologically developed West, and their sense of backwardness, a feeling of loss and degeneration even from communist times.

Back in the workshop, I asked the men what would have happened had they not managed to fix the issue with the faulty spring. Iosif looked at me with an expression of amazement that made my question feel embarrassingly silly and naive, even by my usual standards of technical ignorance. The possibility simply seemed to have never occurred to him. Not only was the task absolutely crucial for averting a potential accident, but their bosses would not have allowed them to refuse. Their sense of workmanship would have barred such inclination in the first place. "We'd have brought more wood, chopped it into wedges and lifted the rattler on stilts. Or

whatever else it took, really," he grinned, an odd mixture of dismay and reserved pride in his voice. "There's no such thing as can't at C.F.R., my boy!" Critique of material conditions went hand in hand with expressions of self-confidence and moral virtuousness.

The following chapter on embodiment, bricolage, and workmanship begins by describing how post-socialist shortage of parts came into being. With this background established, it turns to the ways that workers deployed embodied affordances and material improvisations to compensate for these deficits, and their ambivalent discourses regarding essential work under conditions of quality compromise.

**CHAPTER 4.**  
**"Turning Shit into Gold"**  
**Embodiment, Bricolage, and Workmanship**

The saga of the rogue suspension spring that the four wagon repairmen and their temporary assistant eventually tamed using makeshift solutions and sheer body power encapsulates some of the structural, practical, and ethical dimensions of infrastructure repair and maintenance labor that this chapter sets out to investigate. CFR Marfă technicians as well their former colleagues from CFR Călători and Locomotive Repair work for economically depleted and institutionally disorganized state-run companies that nonetheless provision critical public transportation services. Underinvestment in technology and basic supplies makes taking care of infrastructures simultaneously more important, more difficult, and more stressful. Workers service machines in advanced states of dereliction that may be hazardous to the safety of passengers, and are required to do so with improper parts, tools and equipment, and often with insufficient labor force. Under these circumstances, as the strain and creativity of the likes of Iosif, Radu, Stelică, and Vasile suggests, technical work depends on the embodied knowledge and on the material improvisation skills of workers. How do servicemen cope with technological dilapidation and scarcity of supplies in keeping machines alive? Given the social importance of train mobility and the hazard associated with rail accidents, how do technicians understand the social value of their labor under conditions of perpetual improvisation and compromise over work quality?

Service technicians at the Bucharest Depot, who are in charge of locomotives involved in some of the delays that informed the aggravated petitions analyzed in Chapter 3, describe their work as "We need to turn shit into a whip, and make it go 'crack!'" I have heard this particular expression so many times during my stay at the Depot that I began believing it was a punch line that marked episodes of struggle and breakthrough. By putting a somewhat positive spin on the Romanian adage "nu poți face din căcăt bici," loosely translatable as "you can't turn shit into gold" or "one can't make a silk purse out of a sow's ear," repairmen simultaneously critique the crappy resources at their disposal, lament the significant pressure put on them by their bosses to make do with little, and boast about their capacity to transform value against all odds. Not only can shit be modeled to appear like something else, but more importantly, that something can be made functional (a working whip). The foremost goal of this chapter is to investigate how workers generate value, how they turn "shit into a whip that goes 'crack'," as it were, thanks to their sense of workmanship. Following Laura Bear's adaptation of Thorstein Veblen's theorization of labor in her ethnography of the effects of austerity on a South Indian waterway, I understand senses of workmanship as "forms of practical knowledge and descriptions of the world that are generated from encounters in labor with it" which include "skillful human practices, aesthetics of well-made objects, and expertise about non-human processes" (Bear 2015: 18; also see Veblen 1924; Stoopes 1921; Cordes 2005; Bear 2012). At the same time, workmanship allows for self-actuation "in relation to a wider conduct of productivity" that enables one to "be an ethical person and to assert a distinct class position" (Bear 2015: 18-19).

In exploring the workmanship of railroaders, I thus dwell on the physicality of repair labor, on technicians' commitment to creative improvisation with materials, and on the ways these practices enable workers to assess the material quality and social value of their work. In

coping with aging technologies and dwindling resources, repair workers rely on solutions that foreground the use of the body as primary tool (Ingold 1997), and the importance of technological fixes (Bear 2015) and of techniques of *bricolage* (Levi-Strauss 1962). While scholarly literature praises skillful improvisations and makeshift solutions that allow "the work of maintenance and repair to go on when things may seem bleak" (Graham and Thrift 2007: 4), Romanian technicians feel that they are unduly held to standards of work that they can only approximate under their precarious circumstances. Being forced to make do with little informs an uneasy ambivalence in technicians' valuation of their labor that ranges from boasting about resourcefulness to lamenting about having to compromise on the quality of their work, all the while worrying about the potentially deleterious consequences of such improvised work.

In the following, I first address the resources available to railroad repair workers. I propose that shortage is not solely an attribute of centrally planned state-socialist economies but may just as well occur under neoliberal market conditions. Flagship state-socialist companies like CFR were not impacted by the shortage of spare parts that plagued ordinary consumers and less privileged enterprises. Postsocialist industrial collapse, de-statization, institutional reform and austerity policies formed a perfect storm that rendered splintered rail companies unable to obtain many of the parts and equipment that are essential for maintenance and repair. The second section moves to consider how technicians working in low-tech settings plagued by underinvestment and shortage utilize their bodies and senses in their everyday work. Given that repair presupposes material interaction, the role of the senses is particularly heightened in activities of troubleshooting and diagnosis, especially when technological aides are not available. The third section moves from diagnosis to remediation and discusses the forms of skillful improvisation that workers deploy to overcome deficiencies in equipment and spare parts. These

strategies involve mundane tools being bought from workers' own pockets, borrowed, or forged in the workshop, the recycling of used parts from defective locomotives, and even the fabrication of parts *in situ*. The final section discusses technicians' ambivalent valuation of their work in a context of heightened importance of maintenance and of symbolic and material degradation of manual work. On the one hand, workers are often proud of the resourcefulness that enables them to overcome economic difficulties and material paucity and generate value by keeping machines alive. On the other hand, they lament that their skills are not adequately recognized by the general public, by their bosses, and by official schemes of remuneration, and they are wary that making compromises in terms of repair quality may further erode their social prestige and may lead to them being held legally and morally accountable for potential catastrophes that emerge from shoddy work.

### **Shortage: Then and Now**

The striking contrast between the ways the replacement of a leaf spring was performed in 1955 and in 2015 respectively foregrounds the post socialist condition of many critical infrastructures (Collier and Lakoff 2014) that have decayed or collapsed since the fall of communism in Central and Eastern Europe, what Graham and Marvin described as "a striking process of demodernization" (2001:3). It points to the fall of once-privileged state railroad companies from the high productivity standard and socio-economic prestige that they had enjoyed under state-socialism to the dire economic situation of neglected, underfunded, and underproductive postsocialist enterprises. The firms are barely getting by despite, or more precisely because they are encompassed by the state, albeit a much weaker state that has divested itself from public services (see Chapter 2). Two decades after the process of de-statization,



institutional unbundling, and firm splintering described in Chapter 1 began, the rail companies established through the division of CFR (including CFR Călători and its maintenance subsidiary Locomotive Repair) are on a gradient of quasi-bankruptcy, which generally means less money for investment in machines and in their maintenance and repair. This transformation, one that railroaders perceive as a form of decay and involution, has visibly impacted the material condition of locomotives and wagons and of the infrastructure on which they run.

Before delving into the forms of repair work born out of precarity, a discussion of the sources of postsocialist scarcity is in order. The classical anthropological theoretical model of the political economy of state-socialist economy is Katherine Verdery's (1991a, 1996) theory of shortage that she adapted from Janos Kornai's (1979, 1991) criticism of East European planned economies. The Hungarian economist argued that the chronic shortages that plagued economies in the region beginning with the late 1970s were not caused by planners' errors or by inadequate pricing but were the consequences of systemic flaws stemming from the very centralization of economic planning. Applied by Verdery to Romania's economy in the 1980s, Kornai's mechanistic model emphasizes the faulty organization of production, the consequences of endemic shortages on consumption, and the role that frustrated consumer desires played in concentrating overt or implicit political opposition to state-socialism among the citizenry. If shortage was supposed to be a tenet of a state-socialist past, why is it an everyday reality of present-day state-run railroad firms operating under free market conditions? To cite Popică, a veteran electrician at the Bucharest Depot, "how is it possible not to find one damn drill in this entire depot? What the hell is this?" Furthermore, why do contemporary railroaders, confronted with scarce or shoddy replacement parts, remember the period before the structural reforms of the late 1990s, including the ill-fated austere 1980s, as a time of abundant supplies?

There are serious grounds to take issue with the theory of shortage, and many scholars have critiqued it pertinently.<sup>72</sup> Another glaring flaw of this model more immediate to the scope of this dissertation is that in aiming to deliver a totalizing theory of what state-socialism was, it fails to account for differences between economic sectors and between types of enterprises. In this section, I show that while a shortage of spare parts for industrial machinery, cars and motorbikes, and household appliances were a reality in Communist Romania that often forced consumers and repair technicians to resort to the secondary economy and to DIY practices, this systemic problem did not impact all industries equally. Specifically, strategic enterprises like the railroads were better supplied throughout state-socialism than those that had not been "highlighted" in the same way. Rather than a problem confined to the socialist past, shortages of spare parts, equipment and labor for the maintenance and repair of industrial machines emerges as a distinctly neoliberal problem (Fein 2013).

### *Socialist Politics of Repair*

How did shortage play out with respect to infrastructure maintenance and spare parts in the past? While analyses of consumer goods under state socialism abound, there is a glaring absence of analyses of spare parts for industrial machinery and public infrastructure maintenance (Cucu, personal communication). Communism societies surely were no throwaway societies (Gille 2007: 6-7). Repair, maintenance, and repurposing were general features of the management of consumer goods and other objects that were scarce (Verdery 1996), shabby

---

72. First, it is glaringly asymmetrical as it implicitly compares "actually existing socialism" with ideal-type capitalism (Burawoy and Lukács 1992). Secondly, while it purports to define "what was socialism" in general, it is influenced by a focus on Romania in the 1980s – a rather peculiar combination of late Stalinist industrialism, airtight sovereign policy, and debt-related austerity (Kideckel 1996). Third, the focus on production commits the same sin it imputes to state-socialism by neglecting the political implications of consumption and materiality (for critiques and analyses of consumption, Chelcea 2002 on Romanians' culture of shortage; Fehérváry 2009 on Hungarian "normalcy"; Farquhar 2002 on frugality and sexuality in China's "transition"; Lemon 2009 on the gendering of objects; Oushakine 2014 on "storage economy"; Reis 2009 on frugality and the symbolism of the potato in Russia).

(Fehérváry 2009,2013), inaccessible (Oushakine 2014), or expensive or otherwise difficult to (Chelcea 2002, Gătejel 2011, Jderu 2014, Moser 2011) to the common folk under state socialism. Besides everyday consumers' care for their TV sets, motorcycles, and cars, the vast infrastructures of repair in Eastern European countries demonstrate the extent to which an economic and moral concern with repair infused state politics as a way of compensating for glitches in the production system:

The economy of insufficient and low-quality goods prompted people to keep their repair skills honed [...] State regulation of consumption and propaganda urging a certain standard way of relating to things promoted the practices of repair. [...] The state's effective 'repair strategy' was to develop a huge sector to repair things and keep a large network of people employed. A whole network of household service centers and various repair services (which did not, however, perform outstanding work) partially offset the failures of production. (Gerasimova and Chuikina 2009: 61-69)

The constant need to repair goods imbued technical work with a great deal of social value and enabled skilled repairmen to make quite a decent living. Not only did technicians earn a regular though usually modest wage, they were also able to operate successfully in the second economy (on the social capital of craftsmen and skilled repairmen, see Berdahl 1999). According to Lewis Siegelbaum, "the savior-magician role assumed by the auto mechanic essentially overturned the hierarchy according to which [...] manual workers stood below members of the intelligentsia" (2009: 20). My father remembers the 1970s and 1980s, when he worked as a technician for a repair cooperative in a small mining town, Petrila, as a time of prosperity and prestige. During that time, he was tasked with fixing a variety of electrical appliances (toasters, vacuum cleaners, water heaters, refrigerators, washing machines, etc.) for household consumers and for local businesses. Repair services were in such demand that he was also moonlighting - both during and outside working hours - fixing appliances for friends, friends of friends, and important people in town. It was an extraordinarily advantageous job, as it gave repairmen like

him the possibility to use their skills to earn additional income and to build social connections that would turn lucrative when they needed goods in short supply. He remembered, for instance, that the bread truck would first stop by their workshop before supplying the bakeries in town. Thanks to connections built around repair, my family had access to fresh bread, but also to other rare goods like meat and sausages, bananas, Mars chocolate bars, whipped cream, and Pepsi soda. These were obtained from butchery shops, "Alimentara" grocery shops, and restaurants and bars that needed their freezers, refrigerators, and washing machines fixed. Thanks to mending the electrical fixture at local bookstores, my father was also able to provide me with fairytale and adventure books that were in short supply and were selling like hotcakes.

Although repairs were often in demand and technical workers enjoyed a great deal of socio-economic prestige under state-socialism, but the much-needed spare parts were not always available or easily accessible. Writing in 1980, a Hungarian economist noted that "the spare parts situation in Hungary [was] clearly one of shortage" (Schweitzer 1980: 248; for a similar argument regarding the ubiquitous scarcity of spare parts in the USSR, see Siegelbaum 2009). From the Hungarian case, Schweitzer extrapolated to claim that spare parts shortage was one of the most "spectacular" symptoms of the socialist economy and was "in fact greater than that of commodity shortage in general" (1980: 247-248). Schweitzer distinguished between what he called "absolute" and "structural" shortage respectively. The former was caused by inflated absolute demand relative to supply owing to the "obsolescence of machines and equipment, their fragmentation by country of origin and machine type, and the malfunctioning of the (commercial) organization of machine distribution" (*ibid.* 249). In other words, due to a number of factors including the low quality and breakdown rate of machines and parts, a lack of specialized production of replacement pieces, poor anti-corrosion measures, and other

misgivings of maintenance, "a lot of machines manufactured in the socialist countries require(d) more spare parts than the machines turned out in advanced Western countries." (*ibid.* 253)

Structural shortage, which Schweitzer contended trumped excessive demand among causes of spare parts shortage, meant that supply (domestic production and imports) was not adequately adapted to demand which led to high production and stockpiling, while a considerable part of demand remained unsatisfied. Most frequently, because plan figures targeted primarily the number of finished pieces that were to be manufactured (i.e. 200 vacuum cleaners/month), factories primarily focused on manufacturing parts that would go into these finished items to the neglect of spare part production.

Under these circumstances, many enterprises had to resort to emergency solutions (i.e. parts being manufactured by other factories or improvised in the maintenance shops of factories). Private owners of various machines and appliances often had to wait for months on end for repairs in state service stations or repair cooperative workshops such as the one where my father had worked. Alternatively, they resorted to the second economy to find parts, and had to keep their tinkering skills honed by earning some degree of technical literacy. Investigating automobility in the USSR, Lewis Siegelbaum noted the existence of a veritable Soviet car culture, largely dominated by men. In coping with the pleasure and burden of car ownership, male motorists sought supplies sold "on the side" and learned a plethora of DIY practices that were needed, for instance, to adjust brake sleeves that did not necessarily fit discs. Soviet car culture was also supported by the proliferation of specialized magazines featuring articles teaching car owners how to maintain and fix their machines, by the transmission of technical skills from father to son, but also by the repair-friendly design of many Soviet cars:

DIY repairs could flourish because Soviet cars, while not known for their reliability, were relatively easy to fix. The inline 4 engines on the Moskvitch series 1 and 2, for example,

came with removable aluminum heads and steel cylinder liners that obviated the need for total overhaul. The Zhiguli came with an all-purpose tool kit that supposedly enabled owners to perform all but the most complicated of repairs. Maintaining and fixing one's own car could be time-consuming, especially in a country where precision instruments, power tools, and other appurtenances were hard to come by. (Siegelbaum 2009: 13)

My father, for instance, recalls that finding adequate spare parts took effort and good social relations. While spare parts were never produced in quite enough quantity, and problems of distribution often left workshops and consumers wanting for supplies. To obtain mundane parts such as electrical resistors for space heaters and water boilers, rotators for vacuum cleaners, washing machine motors, and thermal relays for refrigerators, repair cooperative workers had to visit appliance factories. They had to call the warehouse clerk in advance and be ready to forward a bribe - usually consisting of sugar, oil, processed meats and other foodstuff in short supply - to be able to buy the parts needed. My father and his colleagues also exchanged spare parts with electrical appliance shops and with hardware stores, a tactic that involved considerable juggling with balance sheets and inventories. With larger enterprises, such as the industrial engine repair plant where my father worked in the 1990s, these trades were done at a higher level, usually between the top managers of firms. My father recalls with admiration his factory manager's ability to get by during that time. In exchange for equipment and spare parts, the managers of the producing firms would receive customized desk lamps, hunting knives, meat hammers and other goods that workers manufactured on the side.

Shortage of parts, however, did not impact all sectors of the economy to the same extent. While some enterprises that were ascribed lower importance were more likely to face shortages, those that were "highlighted" as especially valuable for the national economy were privileged by production and distribution schemes (Schweitzer 1980: 251). Unlike technical car stations and household appliances workshops, essential services like healthcare, and strategic industries like

energy, mining, railroads, airlines, water shipping, and the military were more likely to be adequately supplied. In this sense, CFR was at the top of the spare parts food chain, with several factories producing almost exclusively for a railroad system that was prone to buying in bulk and stockpiling. Even within the monolithic enterprise, there were districts and divisions that were more privileged than others depending on their importance and closeness to the centers of power. This was the case with the Bucharest Railroad District, and with the Bucharest Depot that was considered a first-grade maintenance and repair facility (see Chapter 2). For this reason, railroaders who had held managerial positions in the 1970s and 1980s at the Bucharest Depot recall that spare parts and equipment warehouses at the outskirts of the were abundantly stocked.



*Illustration 29. Old-style notations on locomotive equipment.*

There were other factors that safeguarded enterprises like CFR from spare parts shortages under state-socialism. These had to do with the close integration of production and repair under conditions of economic centralization and institutional coordination that were especially salient in heavy industry. Rolling stock was manufactured domestically, which reduced the reliance on

imports significantly. At the time, locomotives and carriages were relatively new, there was a low degree of fragmentation and diversification of machine types, and parts were fairly standardized, allowing for a high degree of substitutability. For example, an engineer who had worked in the 1980s for Navrom - the state-run maritime transport company - told me that his firm would trade with CFR for traction engines that would fit riverine ships. Furthermore, the design of electrical locomotives, fabricated by Electroputere Craiova under license from ASEA in Sweden was particularly repair friendly. In a monograph chronicling the history of electrical traction along Romanian railways, historian and ex-train driver Mircea Dorobanțu, the director of the National Railroads Museum, highlighted that "the design and construction of the locomotive were done so as to minimize the maintenance work and cost of ownership. Worth noting are use of rubber elements at joints and bogie springs (minimize the need for lubrication) and electrical equipment arranged in cabinets that made for very easy swapping during repairs" (Dorobanțu 2010: 23).

This did not mean that horizontal trade did not happen and that various forms of improvisation were not required. Railroaders from the Bucharest Depot recall having to adjust various parts that didn't always fit perfectly. Drivers who were tenured on a locomotive would often obtain custom modifications to their machines by bribing technicians from the locomotive factory in Craiova when they left the machine in their garage for capital repairs. Repair technicians also remember participating in similar exchanges for equipment, parts, and technical upgrades for the Depot's best machines that repairmen invested with personal pride. Improvisation and horizontal exchanges of goods and favors for spare parts and equipment were more widespread in the 1980s. During that decade, the manufacturing of new machinery had slowed down substantially because of communist governments all over CEE privileging the heavy industrial sectors producing steel and chemicals (Gille 2007: 8), as well as the



construction of high-difficulty mountain roads, highways, and waterway canals in Romania (Murgescu 2010: 384).<sup>73</sup> Adaptation and craft were indeed staples of shop-floor work in a majority of state-socialist firms, regardless of whether they were "highlighted," as Schweitzer put it, or not. Take the example of the Polish baby food factory Alima:

Always, aging machines were breaking down. With parts in shortage, workers had to use their ingenuity to improvise solutions and get the freezers, cooking vats, labelers, and palletizers back online. Just as in most state socialist enterprises, Alima's workers deploy craft knowledge in order to make the necessary adjustments in real time and ensure that the line continued to run smoothly (Dunn 2004: 17; for machine breakdown and shop floor improvisation in a Hungarian steel plant, see Burawoy and Lukács 1992: 103).

In sum, centralized planning privileged strategic industries, established forms of coordination between production and maintenance, provisioned significant numbers of skilled laborers who enjoyed substantial prestige, and allowed mechanisms of getting by outside of the state's purview that helped offset structural imbalances.

### *Post-socialist struggles with supply*

Postsocialist transformations not only splintered CFR, introducing the resulting state-run rail companies to hard budget constraints, but they also produced cascading economic downturn which unraveled the institutional and functional embeddedness of manufacture and repair. These changes made maintenance and repair generally significantly more difficult. First, due to economic troubles and privatization, the vast majority of machine manufacturers (i.e. Electroputere Craiova for electrical locomotives, Uzinele "23 August" in Bucharest for Diesel locomotives, Astra Vagoane Arad for passenger coaches and freight wagons), and parts suppliers (Geamuri Mediaș for windshields, Elba Timișoara for light bulbs) that had traditionally furnished

---

73. The production of electrical and Diesel-powered locomotives had dropped from 276/year in 1980 to 152/year in 1989. Passenger car production dropped from 601 to 203, and that of freight wagons from 13,244 to 11,213.

the rail system have either closed down, changed industrial profiles, or are unwilling to sign long-term contracts with famously indebted companies like CFR Călători. Secondly, in the absence of domestic production and of institutional coordination, postsocialist rail firms like CFR Călători have contracted with a variety of international firms (Siemens for one class of electrical locomotives and for light Desiro railcars, General Motors for modernizing Diesel-Powered machines), and private domestic manufacturers (i.e. Softronic and Reloc, both private off-shoots of the defunct Electroputere Craiova) for retrofitting a proportion of its machine fleet. Such collaborative projects did modernize a part of the rolling stock, but also had significant side effects pertaining to their maintenance. On the one hand, this move significantly diversified the types of machines; a fragmentation that led to needs for a wider variety of spare parts and reduced their substitutability. On the other hand, it rendered the Romanian state company vulnerable to private firms' shifts in production, and to their strategic design of machinery. For instance, Siemens stopped manufacturing the equipment used to retrofit a part of the heavy-duty electrical locomotives owned by CFR Călători and closed the production life of Desiro railcars, leading to the majority of these machines becoming "carcasses" due to a lack of replacement parts. Unlike rolling stock manufactured by Electroputere between the 1960s and the late 1990s, locomotives manufactured by Softronic are anything but repair-friendly: the range of computerized diagnosis that they provide is extremely limited, nuts and bolts are often difficult to reach, functional diagrams are lacking in details, and various subassemblies are difficult to identify even by the most seasoned of workers.

Besides problems that stem from the disbanding of traditional economic links, supply issues also emerge from the special public status of companies like CFR Călători. Unlike the private rail carriers that have emerged since the early 2000s, the expenses of CFR Călători are

governed by legal procedures of public acquisitions. These bureaucratic procedures are simultaneously convoluted and long-winded, and often lead to a race-to-the-bottom in search of the lowest price, especially in a context of reduced public spending. When spare parts are needed at the Depot, shop managers from Locomotive Repair, the insolvent repair enterprise, draw up a necessity report that they forward to the repair office of CFR Călători, the mother company and the owner of all machines. If approved by the repair office, the document is forwarded to the CFR Călători supply office at the Depot, where it undergoes the same process of verification, transformation, stamping and signing. Supply clerks can also decide whether the goods required can be bought from the funds of the depot or if they require other sources of funding. Once the document leaves the supply office, it reaches the Depot head manager or his deputy who must sign and stamp it in his own turn. The managers can decide to return the document for corrections to their subordinates who have drawn it, they can approve action if the goods qualify to be covered from the depot's own budget, or alternatively, decide to forward it for further approval to the administration of the Bucharest Rail District to which the Depot is subordinated. At the level of the rail district, the document undergoes similar procedures. District clerks can approve the document and thus authorize the depot to go further with the acquisition procedures or send it further up to the management of CFR Călători, to the Ministry of Transportation, or to both.

As I witnessed on numerous occasions at the Depot, the document goes back just as it proceeds forward. Most of the time, the documents return with notes that require cuts in the original demands (too many windows, too many rearview mirrors etc.). Once returned, responsible clerks need to either rewrite it or to draw a memo to accompany the original document that adds further justification to the acquisition requested. So altered, the document,

either rewritten or backed up by a memo, must undergo the cycle again. It is rarely the case that initial requests are approved in their original quantities and form. Usually after several cycles of forwarding and returning the document, a middle ground is reached (i.e. instead of the 20 windshields requested by the workshop, the acquisition of 12 will be approved, sometimes with the promise that the other eight will be bought at a later date). Once the order is approved, a very lengthy and complicated procedure of public acquisition begins, unless the expenses are low enough to be pursued with Depot money.



*Illustration 30. Shortage of parts force train engineers to drive locomotives with cracked windshields.*

Given this rigid bureaucratic itinerary, the process of acquisition of the most mundane parts (such as replacement headlights, rearview mirrors, windshields, or glass weather-strips) can take several months under the best of circumstances. Any confusion in the chain of command can deepen the tardiness. At the beginning of my stay at the Depot, people anticipated the sacking of the head manager for bureaucratic negligence and mismanagement. Given his murky position, the manager was rarely seen on the premises, which placed the burden of leadership on his

deputy. However, the deputy manager had grown wary of the risks of signing off on documents, and often weaseled out of countersigning paperwork, constantly deferred the task to his various subordinates. Since the depot managers did their best to avoid signing and stamping documents, this often meant that requests for acquisitions were drawn up without regard for the established procedure. This in turn, led to them being nullified by the management of the rail district, and sent back to the depot, which extremely delayed these important procedures. This was the case, for example, with a batch of electrical measuring devices requested by the Locomotive Repair workshop at the end of 2014 that finally reached the depot in 2016.

One way for CFR Călători to circumvent this bureaucratically dense and time-consuming procedure is to mandate Locomotive Repair, a subsidiary that is not considered a state company and is thus not held to procedures of public acquisition, to buy certain parts, usually in small quantities, directly from suppliers. For instance, Depot administrators and workers alike repeatedly complain about the lack of replacement locomotive windshields and rearview mirrors, mundane parts without which, theoretically, locomotives are banned from hitting the tracks. Traditionally, these were provided by Geamuri Mediaş, a factory in Transylvania that specialized in the production of safety glass. Provisions in the law of public acquisitions require that public companies demand a minimum of three bids for their supplies, which means they cannot contract directly with Geamuri Mediaş any longer. No other domestic producers have the capacity to manufacture the required safety glass and foreign producers sell either at higher prices or are not certified by the Romanian Rail Authority as suppliers. CFR Călători thus mandated Locomotive Repair to make the purchase directly from the Romanian-based firm. While this tactic can reduce waiting times, it is itself rife with problems. On the one hand, Locomotive Repair acts as an intermediary, and sells the parts it buys from suppliers for a much higher price to CFR Călători.

According to a Depot clerk's estimate, CFR Călători pays roughly \$340 for a windshield that Locomotive Repair buys for \$224. On the other hand, because Locomotive Repair and Geamuri Mediaș are not bound by a long-term supply contract, they can only buy small batches, usually when the need is pressing, and have to wait long times for their delivery. This means that stockpile reserves are impossible to assemble, which leads either to drivers being asked to take locomotives out with cracked windshields or without rearview mirrors, or to the consignment of machines to the garage until parts emerge.

When equipment and parts finally arrive, workers often discover not only that they are fewer than initially demanded, but also that they are of dubious quality, since the impoverished state company is often forced to buy the cheapest parts available on the market. Repair workers scoff at the low quality of imported cheap parts like electrical resistors and mechanical ball bearings and call them “Chinese trinkets” (“chinezării”). For instance, in May 2017, a day after having replaced all the ball bearings on the six ventilation engines of a locomotive, the workers discovered that the fans were rattling loudly. The Locomotive Repair branch manager accused them of carelessness, suspecting that they had damaged the parts while hammering the fan blades back into position. Workers countered by claiming that the parts themselves were of poor quality. While the ball bearings were supposedly produced by SKF, a German manufacturer, the box reads, “made in Italy.” Mihai and Viorel, two electricians, insisted that they were actually made in the Philippines or Malaysia, hence their shoddy quality. Workers often suspect that even parts sourced domestically are in fact of dubious origin. Marin, for example, recalled that a few months before, the shop had run out of Romanian-made bolts, and they were forced to use a batch of bolts imported from China instead, which “would not fit the holes and would bend easily.” When domestically produced bolts finally arrived at the shop, Marin found them of lesser

quality than expected, and, based on the fact that he had found a "piece of a Chinese newspaper" in one of the boxes, concluded that they had to have been imported. In general, parts made in Germany are most cherished for their superior quality. Romanian-made parts tend to be indexed as inferior to Western ones, but are described as sturdy, despite some productive glitches. Chinese trinkets, a blanket term for everything sourced in Asia, on the other hand, are lambasted for being flimsy in quality, and unfit in form for Romanian machinery.

### **Reading Signs: The Diagnosing Body**

A shortage of tools, parts, and labor force foregrounds the body as primary work tool. Recall, for example, that the protagonists of the preceding snapshot subdued the leaf spring with the combined weight of our bodies and guided it with our bare hands in repeated trials until we tamed it into position. In the work of maintenance and repair, it is the stage of diagnosis that involves the body and the senses to the greatest degree - the process by which workers assess whether a problem exists or not, what its manifestations are in any given condition, what the sources and causes for such events may be, and what the course of action should be for remediating them. This is due to the need for material interaction (Dant 2000) between workers and machines. Cracks in a wagon wheel are visible with the naked eye and produce a certain sound when hit, a loosened bolt jiggles when touched, a broken ventilation system whirrs loudly, a short-circuit that flares up the plastic insulation of a cable releases a burning smell. These are all signs that servicemen appraise through their sight, touch, hearing, or smell, and take as material indices pointing to a fault that needs fixing by replacing a train wheel, tightening the bolts, straightening the blade of a fan, or making a new electrical connection.

*Embodiment as top-down obligation and bottom-up adaptation*

In underfunded low-tech contexts like the ones of state-owned rail workshops in Romania, computerized tools of diagnosis that can put distance between workers' bodies and the machines are largely absent. Japanese technicians who service the famous Shinkansen bullet trains, the infrastructural ideal of many Romanian railroaders, use, for example, high-tech ultrasound scanners to detect cracks in the wheels. Rather than hitting the metal with a hammer and assessing the sound the blow produces, like their Romanian counterparts are still required to do, Japanese scanners transmit detailed data directly into a computer frame that analyzes the parameters and displays the diagnosis on the screen. Unlike the computerized diagnosis of high-speed trains in Japan, the work of Romanian wheel-tappers like Iosif, Stelică, Radu and Vasile, who are tasked to inspect the integrity of the coaches and wagons while trains are en route, is extraordinarily sensorial. The very persistence of the wheel-tapper job, an activity associated with the steam age, is indicative of the outdated technology operated by Romanian railroads, and other state-run firms in the region. Newer types of freight wagons and passenger cars have wheels cast in solid steel, an update that makes wheel-tappers redundant. Older models, which make for the majority of rolling stock that run on Romanian railroads, have their wheels made of an iron core surrounded by a hoop of steel that comes into contact with the tracks. The latter type of wheels still requires physical inspection (see Gamst 1980: 89-90).

Making use of the body's sensorial affordances is deeply embedded in the very rules and regulations that govern infrastructure maintenance and repair in Romania; they are part of a standardized process of labor emplaced during state-socialism with regard to the particular machines that operated then. Instruction manuals demand wheel-tappers to "monitor [...] the train upon arrival, for defects that can be heard or observed only during motion." (Ministerul



Transporturilor 1997: 26). Repairmen need to point a torch light at the axles of moving trains and have to stare attentively and listen carefully for any visual or acoustic cues that something might be off. Seeing and hearing are also engaged in detecting malfunctions in the structure of the wheels. According to the same instruction manual cited above, "the tightening of the wheel band on the hoop is verified visually and through knocking with the hammer" (*ibid.*). Workers must scan the wheel closely with their eyes, then, using a hammer fashioned with an elongated wooden shaft lined with metal rings for calibration of weight and sonority, they strike a blow to each of a train's wheels, listening for the sound tapping produces, and paying attention to the vibration that the blow transmits into their hand. Given their reliance on a hammer for doing their work, wheel-tappers are disparagingly referred to as *ciocănari* ("hammerers"). The procedure itself is quite straightforward and uncomplicated but requires a certain sensorial sensibility. Only a trained ear can make the difference between the high-pitched sound that a wholesome steel wheel makes when struck with metal, and the out-of-tune clang produced by one that has even the smallest of cracks in its structure. While schooling me about the use of senses in repair work, workers barely contained their laughter at my aural inability to distinguish between the two sounds. "No one hears the difference straight away," Radu, a wheel-tapper, told me, then promised that if I stuck around long enough, I'd end up hearing it instinctually just like him and his peers.

Besides developing an acute sense of hearing and having to train their sight to detect even the smallest of cracks, wheel-tappers are also required, according to their profession's manual, to employ haptic forms of diagnosis to assess overheating. For example, "the heating of the axle bearing is verified through the application of the back of the hand on the side of the axle box" (*ibid.*). Iosif, the master workman, explained this requirement by pointing out the specific

sensitivity of this body part. "It's the same thing as when you are testing a baby's milk bottle. You pour a few drops on the back of your hand or here [pointing to the inner side of the elbow]. If you have to pull your hand back, then it's too hot." Wheel-tappers' work of diagnoses draws in part upon the body's haptic vulnerabilities (touching with the most sensitive parts of the arm's dermal cover) and on automatic reflexes. Similar to wagon repairmen, electricians working at the Bucharest Depot, for instance, were taught to use only the parts of the arm connected to extensor muscles for touching materials that, for whatever reason, they suspect might be electrically charged. Upon stimulation, extensor muscles trigger push reactions that move the body away from the source of stimulation, whereas flexor muscles, like the ones in the palm, trigger grasping reactions and thus risk making the worker hold on to the source of electrical or thermal innervation.



*Illustration 31. Use of bodies in repair work.*

It is not always the case that outdated technologies and regulations emplaced in the past demand workers to use their bodies in the work of diagnosis. Sometimes, it is technicians themselves who find ways to involve their senses in extending their understanding of machines. Oil, grease or grime in an electrical-power locomotive's machine room can function as a special kind of material index that technicians read by mobilizing their senses and interpret based on their familiarity with technological processes and on their long-term engagement with each particular machine. When they stumble upon oil spills in the machine room, they get alerted even if the machine shows no other external signs of malfunction, as the leak may come from a faulty part that will likely cause trouble in the future. According to Emil, a locomotive electrician in his fifties who had been working at the Bucharest Depot since 1989, the first thing he does when encountering leaked oil is to assess its texture by rubbing some of it between his fingertips. In this way, he can tell from which part the leak is likely to originate. "Compressor oil is thicker, very consistent. The gearbox and the convertor use a different type of oil that is more 'washy.' It rinses more than it lubricates." Using touch to apprehend material qualities such as the consistency and texture of leaked oil through touch points railroaders to its origin. If the oil is thick, they check the compressor. If it feels waterier, they search for other clues to help them determine whether the gearbox is at fault or the convertor.

*Machine opacity: Embodied struggles with design*

The examples above demonstrate how the use of the senses is engaged in the work of repair as a chief tool of diagnosis in low-tech contexts. Situations like these show that embodiment can respond both to official requirements, and also to function like informal artifices, vernacular practices that workers deploy to simplify their labor, by cutting corners and

bending norms. Emil's haptic focus on the texture of oil is an example of workers' ingenuity in engaging with the world around them through their senses, in a way informed by already acquired practical knowledge. It is not always the case that technicians are required to use their bodies or that they themselves invent these procedures on their own, acting as creative beings for which thinking and doing, mind and senses are laminated together in practice. However, embodied practices of diagnosis can also arise as by-products of a variety of structural factors such as scarcity, personnel deficit, or the disregard for repair by designers and producers. In particular, the use of imperfect or incomplete tools or the intransigent opacity of machines forces the imagination to develop the skills to repair and to improvise.

Consider the following story from my field diary which details the exploits of Popică and Viorel, two veteran electricians from the Bucharest Depot who were trying to troubleshoot a locomotive whose power would switch off at will:

EA 477 888 (dubbed The Dolphin) came into the depot with a faulty circuit breaker (the switch system that commutes on and off the intake of electrical power from the grid). Sometimes the system would switch off unexpectedly. This machine was retrofitted a few years ago by Softronic Craiova, a private firm founded in the early 1990s by two engineers that had left Electroputere, the original, now defunct, producer of this class of machines. They produce the very few new locomotives bought by CFR Călători. Softronic is also the one that has retrofitted all locomotives in the 477 series like The Dolphin. Among the changes was the implementation of the so-called ICOL system that enables the electronic command of the power circuit (the traction engines) and of auxiliary systems (heating, ventilation etc.). A special monitor was installed on the dashboard to display the status of these systems.

The display marked the problem with a warning text that read "circuit-breaker commuting failure." No other indication about where exactly the fault may be on the very complex circuit-breaker system. At the depot, no one seemed to have the adequate technical documentation with detailed diagrams of this type of modernized circuit breaker. Viorel and Popică, the two most experienced electricians in the shop were assigned to mend this machine, and they fumbled in the dark for a proper diagnosis using diagrams of this locomotive series from before the retrofitting, and a very general diagram of the mechanism. From the start, they suspected the malfunction was caused by a particular electronic chipboard. They came to this hypothesis based on prior knowledge that this part had caused similar problems before with other machines.

How to know it decisively? Both of them are old-school electricians with no specialization in electronic components. So are all their colleagues. Even had they possessed such knowledge, they had none of the specialized tools needed to verify and repair electronic components. There is an electronics workshop in the depot, but it exists only in name: its outdated equipment is of no use for the new systems installed, the test bench had been broken for years, and after a respected specialist's retirement, no one knows how to repair it or to use it anyway. Vlad and Doru, the two *electroniști* (“electronics specialists”) working at the electrical locomotive workshop have been transferred from the Siemens railcar shop, where they only worked on fully electronic Diesel machines, not on the electrically powered heavy class machines that the Depot administers. They have no idea how to repair electrical locomotives and see their transfer as a demotion. They feel useless and are treated as such by their more seasoned colleagues.

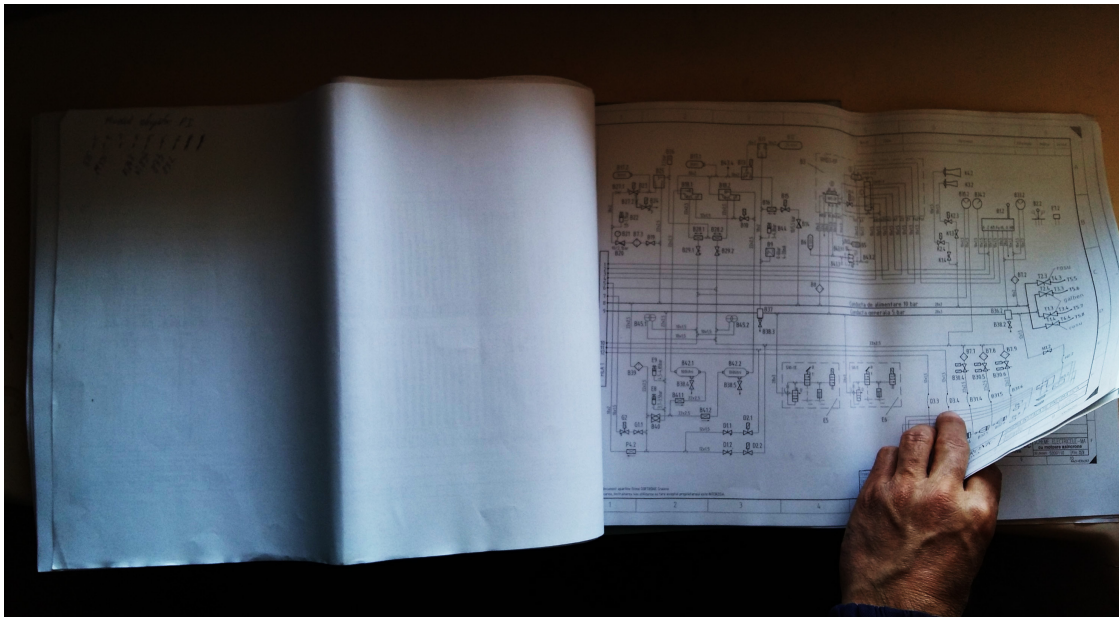
Popică and Viorel dismantled the board from its slot, then mobilized the only tools they had on them: their senses. The board travelled from hand to hand, and each of us looked at it very closely, searching for anything that might stand out. We verified each component by hand, jiggling it lightly to assess whether it was stable in its position. We drove our fingers over its surface, trying to feel with our nails whether any cracks had occurred that were not visible to the naked eye. We studied every inch of it under a magnifying glass, to see whether there were any dark spots that might have indicated a burn mark. Popică insisted that all of us smell the piece too, just in case something had burnt without leaving a visual trace. All these to no avail.

They then decided to go on an alternative path of verification. They phoned Voicu, the foreman, who emerged, a few minutes later, with an identical board that he had dismantled from a different defective locomotive. If the error went away after installing the new board, the problem would be settled. Quite the contrary, a new problem manifested all of a sudden. Besides the circuit-breaker not switching on, the pantograph - a device for transferring current from an overhead wire to an electric locomotive emplaced on the machine's roof - also stopped working. Perhaps the problem was somewhere along the circuit, surmised Popică, and they turned to measuring with an electrical meter the voltage on the cables powering the subsystem of which the suspected board was a part. The process revealed nothing. By now frustrated and angry, Popică decided to measure randomly various parts of the circuit, just in case some clues popped out of the blue. Viorel moved to the cabin and would commute the circuit breaker on and off each time Popică called on him to do it. "We're looking for a needle in a haystack now, that's what we are doing," Popică said. Still nothing.

At 2.45, with only 15 minutes before the end of working hours, the head engineer showed up in the locomotive's machine room. He scolded his subalterns because they "didn't have it in them to fix this," ("n-ați fost în stare să faceți revizia") and demanded them to stay overtime. By late evening, the technicians still couldn't make head or tail of the circuit breaker. It took two more days to solve the problem, with the locomotive grounded in the shop for all this time to the distress of the depot managers who were unsure whether they had enough machines to power trains. Engineers from Softronic came with detailed diagrams that solved the needle-in-the-haystack situation. The problem was on a connected circuit, namely that of the emergency break switch. Opening the emergency switch, the workers finally noticed that a contact played loose, and thus commuted off or on the entire

circuit breaker system regardless of any electronic parts. It turned out that Popică and Vasile had been looking in the wrong haystack all along.

Although Popică and Viorel had a hunch of what might have caused the problem, they lacked the tools and the know-how to verify it. Their first instinct was to assess a complex component by mobilizing their senses in looking for any index of malfunction: they looked at it, scratched it, and smelled it. When this strategy failed, they used an identical part, taken from another locomotive, to confirm or falsify their hypothesis. When this didn't work, they surmised that the problem might be on the wires connecting the board with the circuit breaker and went through hundreds of cables in trying to find the cause or eliminate other potential causes. On top of all this, they finally had to face their aggrieved boss, who scolded them, questioned their skill, and had them do unpaid overtime, accusing them of having slacked off all day.



*Illustration 32. An electrical system's diagram.*

The opacity of the machine's circuit-breaker system provides an illuminating example of workers having to use their senses to find faults in conditions of technological darkness rooted in the design of the locomotive. The electronic system flagged an error but did not specify its source. The manufacturer of the electronic ensemble also had little incentive to furnish the buyers with the detailed diagrams that would have made diagnosis easier. Unlike the defunct Electroputere, a state company which produced almost exclusively for the national railways, Softronic is a private firm that operates on profit that it derives not only from the production of machines, but also from running activities of maintenance and repair. Depot workers are very much aware of this asymmetry of information that works against them. "Those bandits [from Softronic] know how these ensembles work but won't give away diagrams for others to know too," Viorel ranted while fumbling through the wires. "They are slick, they want to make you call on them every time. There are parts we have no idea what they do. Is this a solenoid valve or what the fuck is it?"



*Illustration 33. Repairing a locomotive's gearbox*

Such critiques of design are a staple of technical workers' around the world. Many technicians accuse manufacturers of not taking their work into consideration (Orr 1996). Because of this disregard of maintenance and repair on the part of designers and manufacturers, the bodies of the workers become not only tools of repair, but also victims of the process. "They don't think about repairmen at all, about whether they have access to the components. They don't give us any room to do our job," Nicu, another electrician from the same workshop as Viorel and Popică told me on another occasion. "You always have to stretch yourself to reach a nut on these modernized blocks, and most of the time you can't see what you are doing, you just feel your way around. You're always hunched or slouched or stretched, and the back is killing you." Nicu insisted that the improper design of the machines impacted not only his body, but also his prestige in the eyes of his employers who may accuse him of taking too long to complete a task. "Here you also have the sort of bosses who ask you 'What the hell have you been doing?' Because they have no idea how long it takes to dismount parts and to screw bolts back when you can't really see or reach them."

### **Skillful Improvisation: Repair and the Art of *Bricolage***

Underinvestment and poor supply mean not only that workers have to rely on their bodies to "read" material failure that can be hidden behind opaque features of design, but also bear on the restorative work of repair. Technicians often toil with inadequate equipment, if they are furnished with any equipment at all. Recall that the CFR Marfă wheel-tapper who struggled to repair the leaf spring grumbled about not having raincoats or an automatized crane that would have lifted the part in no time. Furthermore, they had bought the two jacks, which they had used to elevate the coal-loaded wagon with money from their trade union, not with company funding.



This enabled only the acquisition of second-hand jacks, which, as the behavior of one of them made annoyingly clear, are more dangerous than new ones would have been. Repair crews also respond with a wide array of improvisations to the dire scarcity of reliable parts. Workers in the opening story countered the various hindrances that Latour (1984) would call "mediators" - human and non-human actants that oppose rather than aid projects of repair - with a series of makeshift solutions they had in store or otherwise found and adjusted ad hoc to the task. They used a rusty spring from the scrap stockpile instead of a new part, they repurposed an iron beam used in construction work as a lever to make up for the absent crane, and they tinkered with scrap metal to fix the broken jack. This section explores workers' struggles to acquire tools and equipment, and their skillful improvisation in adapting parts and constructing them from scratch.

### *Tools*

Basic tools like electrical multimeters, adjustable spanners, power drills, and handheld power cutters can be hard to come by in the workshops of the Bucharest Depot. Workers have several options for obtaining them: they can buy tools themselves, borrow them from colleagues, or, in a limited number of cases, they can manufacture certain specialized instruments in the shop. Ordering new ones was not an option.

Veteran technicians usually have already accumulated a considerable arsenal of tools and instruments during their years of work. They are also most prone to expanding their toolboxes with instruments bought from hardware stores or from flea markets. Having a wide range of specialized tools transcends their functionality, as they stand for a worker's professionalism and dedication, and are often conducive to colleagues' admiration. This is the case of Valentin, a man in his late forties, who had worked at the Depot since the late 1980s. Valentin works round-the-

clock shifts, is obsessed with locomotives, loves his work, and identifies with it to an extreme. For this reason, his peers and bosses hold him in high regard as a skilled handicraftsman ("meseriaş bun"). Not only is he utterly proud of his work, but he also cherishes workmanship and industriousness more than anything else: his favorite compliment is calling someone "a man with the utmost professional training," ("un om cu o înaltă pregătire profesională") irrespective of whether the recipient is an electrician or an ethnographer. An outlier among his colleagues, Valentin wears on the lapel of his overalls an old-fashioned nameplate, from the early days of his employment that reads "locomotive electrician-fitter." He also keeps a generous stack of technical manuals, each carrying his name, function, and workplace written in cursive on the first page. But his most prized possession is his impressive tool cabinet, a monument of order and abundance replete with equipment ranging from wrenches of all possible spans to a high-tech multimeter for which he parted with a months' wage. Valentin is proud enough of his equipment that he sustains on his own expense that he never shies away from bragging about it and showing it and to every visitor.

Workers who are not endowed with the same range of equipment as Valentin often have to borrow tools from their colleagues. The following example illustrates both the embodied skills that workers need to master, and their need to borrow tools. One day at the Depot, Claudiu, the youngest electrician in the crew whom his colleagues dubbed Copilu' ("The Kid") accidentally ruined the screw heads on a coupler - the mechanism used to connect locomotives and carriages - when he was fitting the part back after cleaning. Screwing a bolt too tight runs the risk of breaking it and can also make the job of unscrewing it later for other maintenance procedures awfully straining. For this reason, errors like the one made by Copilu are considered rookie mistakes, signs of inadequate training and skill. His older peers scolded him for screwing the

bolt too tight. "Why don't you tighten [screws] la simțul mâinii ("to the sense of the hand")?" Popică told him. "Careful with the fingering ("digație"), otherwise we're fucked. Fingering, like you do with a pussy." Such sexual analogies between the sensorial treatment of industrial machines and the handling of women's bodies illustrate the embodied sensitivity that is involved in the work of repair and is representative of the semantic universe of male industrial workers. Such sexualized references function as discursive strategies to teach and critique others' skills. The following phrases that I either overheard or were addressed directly to me by Depot workers should provide a good illustration of how good workmanship and sexual prowess are associated in workers' discourses: "you need Vaseline, like with women, you can't hit it if it's dry, because you'll wreck the cock's head," "put it in like you did last night with your missus," "this is not like when you fuck, you shouldn't hit the walls," or "what's the matter, are you tired? Is that how you run out of breath when you visit women?"



Illustration 34. A repair manual from Valentin's tool cabinet.

After mocking Copilu's poor "fingering" skills, the veterans then went on to help him out. First, they removed the bits of screw that had remained lodged in the slot, and then moved to repair the damaged thread of the coupler. Three workers struggled for a while to dismount the piece, then took it to the break room, where they nipped the defective part in a mechanical cramp. In the meantime, Copilu' went around the depot to borrow some tools. He came back with a power drill that technicians from the pneumatic workshop lent to him, with a tap borer - a screw-like device used to drill thread fillets - from the mechanics shop, and with a special spiral drill head from Valentin's capacious collection of instruments. Once the gear was put together, Emil, another veteran worker, pushed a short and thin hose through a hole that he made in the cap of an old shampoo bottle and improvised an oil-dripping device to lubricate the bore hole that was about to be re-drilled. Upon finishing the job, Emil was satisfied. "With borrowed tools, from begging, here you are, the job is done. This is how you turn shit into a whip that goes 'crack!'," he told me.

Given the significant economic investment that goes into their tool cabinets, and the strong symbolic association between their gear, workmanship, and masculine prowess, servicemen at the Bucharest Depot cherish their instruments. After each job, they carefully degrease their personal equipment with alcohol, and then wipe tools clean and dry with cloth, inventory their arsenal, and finally lock everything in their assigned tool cabinets. Convincing other workers to part with some of their tools, even for a short period of time, can thus be quite difficult. Railroaders are wary that others might misplace the gear, appropriate or ruin it. Take the following conversation between Laurențiu, a team leader, and Doru, an electronics specialist, an exchange that was prompted by the latter's decision to spend 50 RON (approximately \$15) on a wire stripper - a type of pliers used to strip rubber insulation off electrical cables - that he wanted

to keep and use at work. "Take care of it if you bring it here, because you know there are some who want to have it too, but for free," Laurențiu cautioned. Dorin responded that despite the risk of being seen as "stuck up," he does not lend his tools out, and tells whoever asks to "go get their own from the market." Valentin is also very parsimonious with his gear, which he only lends to the closest of his friends. For this reason, when Copilu' needed a spiral drill from Valentin, he told him it was for Popică, a respected handyman and Valentin's closest friend at the Depot.



*Illustration 35. T-shaped "Gypsy" spanners.*

Not all tools are bought on the market or borrowed from charitable colleagues. Certain specialized instruments can be put together using material supplies and labor available at the Depot. This is the case with certain socket wrenches, consisting of a tubular-shaped wrench furnished with an elongated T-shape handle. Called "Gypsy wrenches," ("chei țigănești") because of their rudimentary makeshift nature associated with traditional Romani artisan metalwork, these instruments are particularly useful for working on retrofitted machines, as they enable the loosening and tightening of bolts positioned in places hard to reach. One day I

witnessed Emil instructing Mihai and Gică, two new hires at the Depot, to fashion such a "Gypsy wrench." Emil provided them with his own makeshift socket wrenches that Mihai and Gică used as model. The two cut several metal rods to dimensions modeled after Emil's tools, then took the parts to the welding shop to be welded together. "You can't buy these tools, and they don't have them in the storeroom either. If the new guys make their own tools, then they won't go about asking people 'give me a 17-inch spanner' and 'do you have a tubular box wrench?'"

### *Parts*

Some supplies are impossible to put together in the shop, while others are more amenable to improvisation. If the Depot is lacking in windshields, rearview mirrors, or antifreeze, technicians have no other option than to wait until funding is available for purchase and then for them to be delivered. Other cheap parts that can be bought in bulk like nuts, bolts, and screws, light bulbs or electrical resistors are usually readily available in the depot's stockroom. However, more complex mechanical, electrical, and electronic parts are either in short-supply because of lack of funding, or, more likely, they are inexistent on the market, due to outdated technology, suppliers having gone under, or due to the original manufacturers (i.e. Siemens) having closed a specific production line. Compensating for the absence of such vital spare parts depends upon workers' resourcefulness. Technological fixes can involve a variety of material strategies, depending on the situation. The functional modification of a machine can result in a subassembly being circumvented altogether (i.e. the shuttering of locomotive engines that are impossible to repair). More often, workers will replace a defective part either with an identical one (i.e. the recycled electronic chip board that Popică and Viorel used to verify the soundness of the board

installed on The Dolphin) or with one similar enough to use with only minor adaptations (i.e. the rusty spring that Iosif, Stelică and their team scavenged from the scrap yard).



*Illustration 36. Cannibalized carcass.*

Less often, but more challenging, workers will try to assemble a replacement part from scratch by creatively using and repurposing various recycled parts and materials. The Depot's yard, its repair halls, workers' break rooms and their tool cabinets are replete with piles and piles of parts some labeled "good," others, "not in conformity," and the majority with no label at all. Besides recognizable parts, one can also find stored in various corners of the repair facility, depleted batteries, fasteners of all types, shapes, and sizes, electrical cables, metal wires, and other items that, while not immediately recognizable as useful tools or parts, may garner some use value in context (i.e. Vasile's wooden door stopper, or the empty shampoo bottle used by Emil to improvise a lubricant dispenser). As was the case with Vasile, whose recycled iron beam had come in handy as a makeshift lever, Locomotive Repair workers at the Bucharest Depot

rarely throw anything away. This is generally the case with bricoleurs who endeavor to assemble wide and heterogeneous arsenals of stuff that can allow for recombination (Lévi-Strauss 1962).

The following is an example of a functional improvisation that involved the adaptation of a new part to fit an older subassembly with the help of recycled scrap metal. This was caused by workers having to fix urgently a machine despite the fact that the electrical contractors that were specially designed for that model were not available in the stockroom. One day, in May 2017, I found Popică, Viorel, and Emil in the machine room of a light 4600 horsepower locomotive of the class dubbed Bobica ("Little Bean"). The machine's traction engines, responsible for setting the locomotive into motion, were not turning on. It took a while until the technicians figured out what was the matter with it. Initially, they suspected that an electrical reel had burnt-out. Using his personal multimeter, Popică measured the very complicated circuit, and ended up eliminating the initial hypothesis and several others. Luckily enough, Viorel, who was revising a different subassembly, accidentally discovered a faulty electrical contactor - an electrically controlled switch used for switching an electrical power circuit - on a different subassembly that was linked to the one controlling the traction engines. The solution was to replace the contactor, and, luckily enough, the shop did have such parts. It just didn't have the exact type of contactor that was needed. Originally, the locomotive was equipped with contactors that were produced domestically by Telemecanica, a flagship electrical equipment firm that had been bought out by a German-based multinational. Telemecanica contactors could not be found in the stockroom, which meant that the public acquisition procedure would have been in order. But that would have taken too much time, and neither the workers nor the locomotive had any time to spare. For this reason, they decided to use a substitute contactor produced by Lovato, an Italian firm based in Bergamo that had a manufacturing branch in Bucharest. The two types of contactors had the



same technical parameters, but not the same fixtures, which meant workers had to improvise a new mount by fitting two recycled metal strips onto the mount in the machine room. Then they drilled a new set of holes into the strips so that they could fit the Lovato contactor onto them. While the procedure in itself was relatively simple, they did not have a drill head of the right size so Viorel had to make several phone calls and go around the Depot in search of one.

The most prized inventory are already broken locomotives that can be stripped, their parts cannibalized, and transplanted to other machines that thus get another shot at life. Technicians call these machines that are out of order *mortăciuni* ("carcasses"). By talking about *mortăciuni*, workers employ an organic metaphor to simultaneously express a living past, a moribund present, and the potential of life in the future. While stripping carcasses is a productive endeavor, it can be a very contentious issue. On the one hand, because CFR Călători owns the actual machines, when stripping and recycling are undertaken, it is by Locomotive Repair workers. This means that, given widespread suspicions of scrap metal theft, recycling needs to be approved both by Locomotive Repair branch managers and by CFR Călători clerks at the Depot. On the other hand, stripping and recycling must be done with care and moderation, because it may risk putting functional machines permanently out of order. This is actually how ordinary broken locomotives become "carcasses." Many of them return to the depot with mendable damages, but repairs are stalled, usually due to unavailability of parts, and in the meantime more of their parts go missing, as they are used to urgently fix other locomotives.<sup>74</sup>

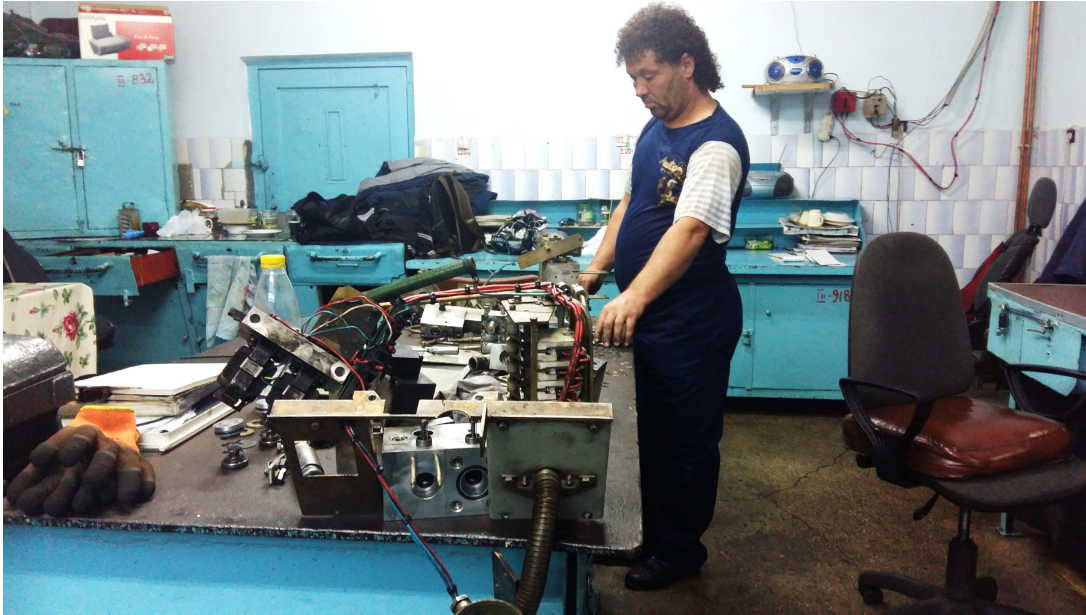
Adjusting parts taken off carcasses to the recipient machine takes artful *bricolage* and plenty of muscle power, as illustrated by the following example. One day, I arrived at the Depot and found the entire crew of the electrical workshop working on a locomotive parked in the

---

74. It is worth mentioning that not all the parts of carcasses are utilizable because they do not always fit other locomotive types and because parts wear out if they are not put to use and maintained.

roundhouse. The branch manager of Locomotive Repair and two other engineers were there to supervise, advise, and, according to their subalterns, to confuse the workers. The task was to replace two defective pantographs on a machine that had been retrofitted by Softronic, but no such part was available. The initial plan was to strip one of the carcasses - a busted locomotive that had been modernized by Siemens in the 1990s - but the fixtures on the Siemens parts did not fit those on the roof of the locomotive under repair, which was retrofitted by Softronic. Engineers imposed an alternative, and a very unorthodox one. Namely, they asked technicians to switch the roofs of the two locomotives, with the pantographs still mounted. The whole operation took two entire days and was more complicated than anyone had predicted. It required the dismantling of the two roofs, followed by their removal from the machines with the use of sliding cranes mounted on the ceiling of the repair hall, and then the fitting of the Siemens roof on the Softronic machine. Dismounting went smoothly, but the refitting part did not. "It is like trying to replace a car door with one from a different model," Emil exasperatedly commented. Workers had no other choice than to take the path of brawn: first they deformed the U-shaped fasteners on top of the locomotive to allow for the roof to stick somewhat closer to body of the machine, then, armed with chisels, they struggled to force the metallic lateral ends of the new roof under the rubber fixtures on the locomotive. Finally, they hammered the roof down using sledgehammers. Despite the best of their efforts, the replacement roof simply did not fit perfectly: in one corner there was a visible gap between the roof and the locomotive's body. Technicians eventually gave up and left it like that, reasoning that given the positioning and angling of the gap water would probably not infiltrate the engine room through that unwanted opening. Popică was especially frustrated of having to make such a compromise that might result in a potentially deadly short-circuit. "That's

what the bosses decided, but I've never done something like this in my entire time as repairman," he told me, and then quipped. "But we have to turn shit into a whip, and make it go 'crack!'."



*Illustration 37. Building a replacement part from scratch.*

Another episode in which the workers had to perform alchemy, using parts stripped from carcasses involved the *disjuncteur* ("power switch") of an electrical locomotive. This power switch is a circuit-breaker device installed on the roof of an electrical locomotive that switches electrical transfers from the overhead power wires ("catenară") to the machine. The core of the power switch consists of a system of highly conductive and very expensive thin cooper rods. Once allowed in by the power switch, electrical flows go into the locomotive's main electrical transformer, where they are converted into different voltages to power the various subassemblies of the machine. The foreman assigned Popică, Viorel, Costel, and Copilu' to repair the power switch of an electrical locomotive, and I joined them. When we took the piece apart, we were struck by a strong burning smell and found out that a tiny rubber gasket had crumbled and caught fire, leading to the shutdown of an entire "plant on wheels" ("uzină pe roți"), as workers

sometimes describe the technical complexity of locomotives. Since the broken gasket was not able to insulate other parts from the electrical charge, several of the copper rods were badly burnt and deformed. There are no copper rods in the Depot's stockroom, thus carcasses were the only available source of such parts. Once the management approved the stripping, the workers and I went scavenging in two sidelined machines, and eventually found four used rods that looked usable. The scavenged rods, however, were not perfect; years of use had worn them down partially. For this reason, workers had to be extra-careful when fitting them to make sure that none of the damaged surfaces were in contact with other functional electrical or mechanical parts.

Scavenging for parts at the Depot can be quite an adventurous and clandestine job and can ignite tensions between workers from different divisions. During a night shift in the square shed, Valentin, whose nickname is Speedy, and his colleague Manole, who is dubbed Migală ("Carefulness"), sought me in the break room because they needed an extra man for what they described as an "orientation" mission. "Orientare" ("finding one's way") and "descurcăreală" ("getting by") are two popular euphemisms at the Depot for making do. The two repairmen needed a solenoid valve - a mechanism used to control the flow of air into a locomotive's braking system - for a machine that they had to fix that night. The stockroom was closed at that late hour, and the workers surmised it didn't have spare valves anyway. Managers were also off duty, which meant that we could not get approval for raiding any carcasses until the morning. That night "orientation" meant a combination of vandalism and quasi-larceny. The three of us snuck from one end of the Depot's yard to the other, taking advantage of the pitch-black darkness. We only turned our flashlights on when we reached a carcass. We all knew that carcasses were locked, but Valentin was also privy to the existence of a tiny trap door that could be accessed by crawling

under the machine, then up through the undercarriage in the machine room. Short and slender as he was, this mission was on him. Valentin returned from the expedition empty-handed. The solenoid valves had already been stripped. We tried our luck with another locomotive, this time a functional one slated for inspection the next day by the electrical crew in the roundhouse. Fortunately, the machine was not locked, so we stole in, took down a solenoid valve and replaced it with the defective one. Needless to say, we had no idea whether the part we had just scavenged was any good because we could not test it on the spot, but it was our only option. Valentin reasoned that the next day, the electricians would discover that the valve was not working and find another replacement themselves.

### **"Vulcanizing Condoms:" Pride and Frustration in Workmanship**



*Illustration 38. Electrical improvisation.*

In the preceding two sections, I showed how workers compensate for aging technologies and poor supplies. Workmanship, in their case, materialized in their great reliance on sensorial input and embodied knowledge in the process of troubleshooting, and in skillful improvisation with recycled materials in their efforts to keep functional locomotives from becoming carcasses. It is precisely their kind of manual job, together with the embodied knowledge and the improvisational practices that come with it, that has become necessary to hold together the disarticulated system. This kind of work has also suffered devaluation following the withering away of state-socialism and its cult of labor (Dunn 2004: 75-82; Fehérváry 2013: 178-181; Kideckel et. al. 2000; Kideckel 2002). This is the paramount contradiction of post-socialist maintenance and repair labor, that it has undergone a process of material and symbolical degradation just as such work has become more important than ever for the continued operation of a public service. Not only is this work crucial, but it is also done with dwindling resources that force workers to compromise on quality. How do technicians negotiate the contradictions of their work?



*Illustration 39. Valentin in action repairing a space heater.*

*Mocking manual workers*

For a vivid illustration of how workers are perceived by the general public in Romania, let us return briefly to the scene of the rogue leaf spring from the snapshot preceding this chapter. Minutes before the part had finally slid into position, when our strain was peaking, a passenger train passed on the neighboring line. From the speed of the train, a teenager voice yelled out at the top of his lungs "Doreeeelllllee, ce-ai făcut, mă?" (Hey, Dorel, what have you done?). The disparaging shout echoed the recurring punch line of a series of advertisements broadcast on national television and triggered full on belly laughter among the other passengers. The young passenger's derision only added insult to the injury of a tiresome and frustrating task. Railroaders turned red with anger and embarrassment and replied by shouting harsh sexual expletives referencing the kid's mother.



*Illustration 40. Still from the Dorel advertisement series.*



*Illustration 41. Meme mocking "Dorel from CFR." Source: [www.facebook.com](http://www.facebook.com)*



*Illustration 42. Meme attributing shoddy improvisational work to "Dorel." Source: [www.facebook.com](http://www.facebook.com)*

There are few things more offensive to a Romanian blue-collar worker than being ridiculed in this particular way. Dorel is a character from advertisements for "Unirea," a cheap



industrially produced brandy targeting the poorest of working classes. The commercials feature the shenanigans of a group of workers usually on a construction site or in a factory. No stereotypical tropes are spared in their portrayal. Protagonists have a generally unkempt appearance including scraggly hair and beards, generous bellies exposed, soiled "wife-beater" undershirts, mismatched uniforms and ill-fitting overalls, and knitted hats tilted all the way to the back of their heads. They drink hard liqueur, make jokes in poor taste, prank one another callously and laugh boisterously as a result. Dorel, the only named character, bears an archetypal proletarian name, something akin to "Chuck" or "Billy" among Americans. The rest of the crew are shown lying about doing nothing, playing cards or backgammon instead of doing the backbreaking work they are getting paid for. Most often, they make fun of Dorel, the only one actually toiling. Despite the best of his intentions, Dorel invariably ends up either messing something up, falls victim to his mates' pranks, or discovers that his drudgery was pointless. Originally intended by its creators as a cheeky portrayal of good fun masculine chumminess, the meaning of "Unirea" advertisements was hijacked by Internet-savvy members of the middle classes and turned into pejorative meme material. "Dorel" has become an icon of idiocy, coming to stand in common Romanian parlance for the stereotypical blue-collar manual worker who might be driven by good intentions, but is also stupid, lazy, and inefficient, an incompetent muddle-head who is unobservant of procedures and work safety regulations. When public infrastructures are broken or poorly executed the archetypal Dorel is generally blamed. If the platform in a train station is too tall and passengers have to climb out of the coaches when they exit? "Dorel did it again!"<sup>75</sup> Improvisations? Dorel's fault again. Undoubtedly, the seemingly unorthodox strategy of repair that the technicians were using on the spring, combined with our

---

75. <https://www.stirilekanald.ro/dorel-de-la-cfr-a-comis-o-din-nou-in-gara-din-galati-oamenii-coboara-in-tren-nu-urca-17142650>

disheveled appearance and the presence of audience members who contributed nothing to the task, invited the association with Dorel shared by the laughing train passengers.



*Illustration 43. Still from Jobzz.ro advertisement. In this scene, the two mechanics exchange dumbfounded glances.*

The Dorel series is not the only instantiation of post-socialist pejorative projections of working-class comportment and skill in which the middle classes revel. Since 2017, Jobzz.ro, a job listing website, has been running a commercial that pokes fun at technical workers' pretense of superior embodied knowledge, casts it as sheer stupidity in disguise. If the Dorel series contain a seed of empathy toward workers, the Jobzz.ro one has none. The video shows a small orange car slowly pulling into a garage, while an older mechanic schools his apprentice on how sensorial knowledge makes a good mechanic. "A good mechanic doesn't even need to watch. Closed eyes, [only] smell and hearing. What's the noise that tappets<sup>76</sup> makes (sic!)" the older

---

76. In an internal combustion engine, a tappet is the component that converts the rotation of the camshaft into vertical motion, which opens and closes the intake or exhaust valve.

workman asks his companion.<sup>77</sup> The apprentice emits a clicking noise in response, only to be corrected by the former. "Nope, that's the ignition! Tappers go <imitates high-pitched screeching noise>." The apprentice was actually right, while the master mistakes one noise for the other. But the commercial is not after technical accuracy; its aim is simply to ridicule the workers. The master continues by instructing the apprentice to close his eyes and pay attention to what his olfactory senses pick up. The fumes smell indicates "oil in the gasoline," the elder worker pronounces in a self-assured, apodictic tone. When the two finally lift up the front hood and bend over to inspect the car's engine, their faces are shrouded in a perplexed expression and they exchange dumbfounded glances. The client, a young woman driver wearing a fuzzy pink jacket and a fashionable scarf, scoffs audibly, rolls her eyes, then walks to the back of the car, where she opens the rear hood. Her vintage Volkswagen Beetle was a rear-engine car. As the men stare in disbelief, the woman takes up an arms-crossed stance, head tilted to one side with a condescending scowl on her face, and drops the punch line: "Are you looking for better employees?" Not only are the workers purportedly uncultured, inept at their job, too reliant on senses, and cartoonish self-assured, but the commercial hits where it hurts most, namely in their technician masculinity. After all, they are shown to know even less than a pink-clad woman.

*Ambiguous workmanship: Pleasure, pride, shame, and fear*

Although manual work indexes them as belonging to a derided social class and professional category, the overwhelming majority of railroad technicians whom I shadowed and interviewed during fieldwork insisted that they loved their work to the bone. Diagnostic work and repair more broadly are often depicted in literature as occasions for processes of

---

77. Note that, in his speech, the worker makes a subject-verb disagreement stereotypically associated with uncultured speech. Alongside the actors' appearance, this error in agreement serves as a meta-pragmatic index of workers' social position.

identification and means of self-actuation (Sanne 2010: 55). Applying embodied knowledge and hands-on practice can be a source of pleasure and satisfaction for technicians, as it enables them to use their minds and bodies to get to the heart of a problem, to cope with the perverse opacity of machines and to assume control by repairing it (Mellström 2002; Orr 1996: 98-9). These are direct forms of pleasure that stem from a certain sense of masculine power over technology (Mellström 2002) manifested in the performance of agency in meaningful work with immediately observable results. Depot workers frequently expressed such feelings of pleasure and pride. On numerous occasions, I heard technicians brag about having made "a work of art" (lucrare de artă), boasting about having a "golden hand" (mână de aur), or describing their activities of diagnosis and improvisational repair as "the dance of the snake" (dansul șarpelui). Such descriptions are part of the same semantic register as the mantra of turning shit into gold, inasmuch they reference the same feelings of pleasure and pride that workers derive from breaking through difficult tasks in adverse circumstances.

Besides the tremendous sense of agency that it enables, there are also indirect sources of pleasure in the type of work that wheel-tappers from CFR Marfă and Locomotive Repair technicians do. Divining the causes of failure and successfully restoring technological order confirm and reassess technicians' individual competence and responsibility (Sanne 2010: 56). Valentin, for example, takes great pleasure in being able to tell his foremen and managers off from the height of his technical skill. He also revels in the attention that is bestowed on him, and in his colleagues' feelings of jealousy of his prestige, skill, and equipment. Identification and involvement in work are also fostered by a sense of service to clients (Henning 1998), as well as by the possibility of claiming a form of responsibility for other's safety as it is also observed among train engine drivers, air traffic controllers, firemen, or police workers (Gamst 1980;

Brown 1995; Scott 2005). Railway technicians' occupational discourse is also framed by their assignment to other's safety, transportation quality, and punctuality (Sanne 2008). In the case of those employed by state-owned enterprises like C.F.R., a sense of providing a service to the greater public, to citizens rather than just to anonymous passengers, to the nation rather than to individual clients or small-scale communities further enhances the value they attribute to their work. Sergiu, for example, is a young graduate of the Polytechnic Institute in Bucharest who works as clerk for CFR Călători in the Depot's administration building. One day, he confided in me about how his white-collar friends who work for multinational corporations belittle him for having chosen a job *la stat* ("for the state"), the public domain now associated with corruption, incompetence, and with an endemic lack of efficiency. "They don't know that if I don't do my work, maybe they won't be able to take the train any longer."

Notwithstanding the pleasure and personal prestige derived from knowledge, experience, and skills, and the high value that they attribute to their work, depot railroaders also hate their job, and constantly grumble about it. Subpar supplies dampen the pleasure that comes with the agency of getting to the root of problems and fixing them. Working without adequate equipment, spare parts, and sufficient labor power makes railroaders feel less modern than they think their jobs should be, informs their discontent with the quality of their labor, and worries them about the potentially disastrous consequences of any blunder that they might make. Besides displaying a sense of workmanship derived from their ability of getting by and making do, Iosif's emphasis that there was "no such thing as can't," that failure was not an option, also conveyed a fatalistic sense that they were subjected to forces they could not themselves alter or control, and were held to the standards of an industrial ethos of hard work and productivity that they could only

approximate at best. With scarce resources to mend aging infrastructures and technologies, workers felt that they were forced to make do no matter what.

Improvisations in particular are a hot topic of debate and inform simultaneous discourses of pride and among depot workers. One day, Popică rang me up and insisted I find him immediately, because I needed to see and photograph "a Romanian-style insulation of a traction engine." I scurried to the overhaul plant to find a bunch of technicians huddled around an opening in the roof of a locomotive that belonged to another depot but had broken down near Bucharest. The men were pointing to something in the machine room, taking pictures, laughing and shaking their heads in disapproval. The "Romanian-style" insulation consisted of a pair of rubber work boots that had been pulled over the two jack plugs of a disaffected engine. Popică spoke of the improvisation ambivalently. He described it both as a sign of backwardness, and as an "ingenious solution that did the trick in the absence of something better." Viorel intervened in our discussion to give another example of "Romanian-style" improvisation. The previous day, he had to fit an electrical connector - an electromechanical device used to join electrical conductors and create an electrical circuit - on a ventilation engine. He could not find adequate screws for this part, thus fitted it with a piece of string instead. On the one hand, makeshift solutions enable workers to perform agency and competence. On the other hand, it underpins strong feelings of inadequacy.

The fact that locomotive technicians assign a certain nationality to improvisational work - "Gypsy wrenches," "Romanian-style insulation," "Chinese trinkets" - is illustrative of workers' feelings that their work, while crucial, is not up to the standards of workmanship that they desire. This is often expressed in ambiguous comparisons with imagined workers from the West. "It's good that we have a roof, so that Americans can't see us with their satellites," Emil told me one

day, after tinkering with a makeshift replacement part in the break room. "Don't film us, Adrian, because they'll come and kidnap us," added Stelică, another old-timer at the Depot, adding a veneer of jest and ambivalence over Emil's lament. On another occasion, I had the following conversation with Valentin, in which the same tropes of subalternity and boastfulness in comparison to perceived Western standards of infrastructure and work. "What do you think, does the German work like this?" Speedy asked me quite rhetorically. "But between you and the German, who is a better workman," I pushed back. "Me, of course," Valentin replied with no hesitation. "The German only takes the bad part out and puts in a new one. I know how to make parts!"



*Illustration 44. Rooftop power system on a locomotive.*

Functional improvisations and parts scavenging can aid the restoring of a machine, but can also, in time, produce new technical issues, as makeshift work can result in the attrition of other parts. Workers find it difficult to keep track of the myriad adaptations and patchwork improvisations that they, their colleagues from other depots in the country, and train drivers make

on any particular locomotive that the Bucharest Depot owns. The proliferation of improvisations makes machines both less reliable in the long run, and much more difficult to inspect and troubleshoot. Such feelings are best encapsulated by one expression that workers use often to describe the futility of their work: "vulcanizing condoms." A condom can be vulcanized, but it shouldn't, and furthermore, it cannot last for long, and when it fails it will have bad consequences. "There's no satisfaction with work, it's like vulcanizing condoms. That is to say the locomotive won't run for long. It will get back to the shop with the same problems soon, because spare parts are shoddy or already worn out with use."

Finally, workers' ambivalence is also linked to the social importance of their job and to the dangers that failing to do their job right can beget. As encapsulated in Stelică's anticipated insomnia linked to the fate of the wagon that he and his colleagues had dubiously fixed, railroaders live with the sense that people can be seriously hurt if they do not get the work done properly. The fears and stress of repairmen, who take care of machines that carry passengers, as is the case of technicians working at the Bucharest Depot, are even more pervasive than Stelică's loss of sleep over a freight wagon. If they do not do the job or if they do it poorly, they risk administrative and legal repercussions, and, most importantly, have to live with the deleterious effects that their failure might engender. In case something happens, say a train derails due to a worn out shock suspension replacement, it is the workers whom the management holds accountable (through the means of embarrassing scolding, pay docking, disciplinary transfer to other work assignments within the firm, or, more rarely, the extreme measure of discharge). If shoddy work turns out to have more serious consequences such as the destruction of property or the loss of life or limb, workers fear that they can face criminal charges. "Who do you think goes to jail if something happens? You don't think they're gonna lock up the guys who actually broke



the railways? It's Acarul Păun (Păun the Switchman) who takes the fall," a train repairman from another part of the country explained. Romanians use "Păun the Switchman" as a synonym for scapegoat. The origins of the expression date back to a gruesome collision between a passenger train and a freighter that took place in 1923 in Vintileanca station (95 kilometers NW of Bucharest), killing 66 people and injuring 105, the majority of whom were traveling on top of the carriages. Ion Păun, a modest switchman at the station was the only one who was tried and imprisoned for the accident even though the newspapers of the time linked the catastrophe with systemic problems and demanded the resignation of the army general who helmed the Ministry of Communications.

## **Conclusion**

This chapter has dwelled on the ways locomotive technicians working at the Bucharest Depot transform, as they put it, "shit into gold." By "shit," railroaders mean the dwindling labor force, the inadequate supplies of tools, parts, and equipment, or the altogether lack of such supplies. While shortage of spare parts for industrial machines has been often described as a staple of the structural pitfalls of the planned economies of the state-socialist era, in this chapter I have demonstrated that, in the case of C.F.R. Călători and Locomotive Repair Ltd., this is primarily a postsocialist phenomenon. Like several other large-scale enterprises that were deemed particularly important during state-socialism, the national railways have held a privileged position within the food chain of spare parts, meaning that the company was among the first to access such resources. Furthermore, state-socialist centralism made it so that there was a close integration between the production of industrial machinery and the repair enterprises that took care of these technologies. At the same time, a repair-centered ideology made it

possible for technicians to circumvent relatively easily the problems of supply: parts were standardized and thus interchangeable, and technologies were designed to be easily understood and taken apart.

Postsocialist transformations of state enterprises and the reforms that the rail industry has undergone made the obtaining of supplies a much more complicated endeavor. Not only did the linking of production and repair dismantled, leading to the disappearance of traditional suppliers and the proliferation of private firms that build opaque technologies, but universal standards were largely dropped or at least left unenforced. Changes in the acquisition process for state-owned companies in the past three decades also forced enterprises like CFR Călători and Locomotive Repair Ltd. into cutting costs and settling for lower quality supplies.

Under such circumstances, repair workers are called to produce value out of very little. Instead of proper equipment, technicians often revert back to forms of manual labor that they deem backward and rely on complex forms of embodied knowledge and hands-on experience. Often, they have to use makeshift tools and equipment that make them doubt the quality of their work and improvise various fixes out of scrap. Making do with sparse resources can be a source of professional pride for many of them, being forced by circumstances and by their heavy-handed management to get by in spite of their shoddy equipment is a constant source of outrage and anxiety at the Depot. While improvisations help technicians take care of the machines and to prolong the lives of the locomotives administered by DB-C, *bricolage* also inform agonistic competition for tools and resources among depot workers, and contentious discourses regarding the value of their work, and the physical and moral risks that they may face if fixes lead to failures that endanger the lives of passengers.

### Snapshot. "Had it with all the filth"

One afternoon in November 2016, at 2:15 p.m., Bucharest Depot repair workers gathered in their break room in the roundhouse to kill time until the end of the workday. Technicians clad in navy blue overalls lounged on vinyl-covered benches or on repurposed locomotive driver's chairs pushed against the walls of the stuffy windowless room. They exchanged war stories, gossiped about their technically clueless bosses, bickered about football, exchanged sports gambling tips, and played practical jokes on one another. There was a distinctive musty smell in the air that mixed with the sour pungency of oxidized motor oil, body odor, and a lingering whiff of the pork stew from lunch. An old Sony boom box suspended on a corner shelf accompanied the wingding of chatter, banter, and laughter with upbeat Romanian pop tunes played loudly and distortedly. Compared to the workspaces at the Depot, the relative cleanliness, the decorations, the appliances, the food smells and the music made the breakroom feel almost homey.

There was Popică, the finest electrician in the shop according to friends and foes alike, meticulously wiping grease from a tubular wrench with a soft cloth before depositing the tool in his cabinet. Viorel, also known as "Sile," a towering man with a lampshade mustache and shovel-sized palms, was there too. He was taunting Popică for having bet unwisely the day before on a football team that had been on a losing streak. Then there was Mihai, self-dubbed "Viteză" ("Speed"), a seasoned electrician, yet a rookie ("biban") in his first month on the job at the Depot. He was telling one of his fast-paced and verbose tales about his former workplaces *la patron* ("in the private sector," literally "at the boss's") as he paced between the communal fridge and a workbench covered in pornographic cutouts from tabloids. His exploits entertained George, also known as "Gică," another Depot rookie. While also entertained by Mihai's antics,

Emil, a soft-spoken veteran electrician, missed no chance of calling him out for his predisposition to hyperbole.

Nicu was by the sink, scrubbing his hands and arms all the way up to the elbow with a pungent, clay-colored degreasing paste that had mildly abrasive qualities. He kept looking over his shoulder, on guard against pranksters who might throw snake-shaped toys at him to mock his herpetophobia, something that happened almost daily. Marcel, in a corner by the communal washing machine, was surely not a threat. Reclusive and morose since he was diagnosed with chronic depression and had to take time away from work, he sat on a cushy chair, faux leather peeling at the seams, alternatively dozing off, staring blankly across the room, or releasing the occasional heartbreaking sigh. In the adjacent room, Doru and Vlad, the two electronic specialists ("electroniști") on the team who never hung out or ate lunch with their colleagues and were thus often described as snotty by their peers, were watching a sci-fi flick on a laptop.

Codruța, a pious Orthodox who adorned her workstation with Christian icons and kept mostly to herself, was not there any longer. She had left an hour before, as she frequently did, to pick up her son from school. Mărioara, the other woman in the shop, had retreated to her ramshackle bedroom in one of the yard's deserted administration buildings. She found an abode there after losing her husband to a heart attack and her home to foreclosure. Johnny – "as in Johnny Walker," he once told me with a wink, - and Ghiță, red-faced friends of the bottle, had also snuck out to catch an early train to their homes several hours away. Their departure upset the foreman known as "Meșteru" ("The Ace"), whose permission they should have obtained before taking off, and outraged their coworkers who were left with the cleaning work that the two had skipped. Ștefan, known as "Fane," and Stelică were also missing. Both of them were on long-term unpaid leave. Fane was in Zurich undergoing medical treatment on his Swiss brother-in-

law's insurance and was hoping to find better paying employment there. Stelică had been living for nearly one year in England, where he was working without paperwork as an electrician on a construction site. Neither Fane nor Stelică ever returned to their jobs at the depot.

Laurențiu, the team leader, was sitting opposite me at the communal lunch table. He was inquiring about my early impressions of the shop when Claudiu stormed in, mumbling curses that evoked a penetrative encounter between his genitals and his job. At twenty-seven, he was the youngest electrician-fitter in the team and bore the nickname Copilu' ("The Kid"). "So, tell us, how do you like it here, Adrian?" he interjected. I had barely muttered the first syllables of "I'm enjoying it very much," a wrong answer to the ears of these men who earnestly hated their job and grumbled about it incessantly, when Copilu' went on a tirade about the unbearable dirtiness of the workplace. "You can't be serious. Look at all this jeg ("filth") around. No matter what you touch or where you sit here, you get soiled ("te murdărești"). These pants...straight from the wash and see what they look like after a day?!" His body indeed showcased dirtiness: a grey undershirt smeared with dirt, work pants stained with oil, hands and arms covered in a grimy mix of soot and grease, and two furrows of black dust on his forehead. "You get dirty here even if you just stand about." He then spread his arms wide and twirled on his heels to demonstrate theatrically how dirt penetrated even the quasi-domestic space of the breakroom, and even the air that we were breathing was polluted and harmful. Immediately after, he bolted for the showers, slamming the door on his way out.

Copilu's monologue struck me as odd. Wasn't maintenance work inherently dirty? Hadn't workers got used to it by now? Why all the fuss? Later that day, Copilu' himself provided the first clue that dirt transgressed its routine technical presence and gained affective and symbolical dimensions. When we ran into one another in the trolley bus station outside the yard, he was

changed. He had emerged from the showers wearing fashionable Zara skinny jeans, white Le Coq Sportif trainers and matching t-shirt instead of his soiled overalls. He had also scrubbed the grime off his skin, and his cleaned fingernails revealed a glimmer of clear polish that had been concealed under layers of filth. Copilu' apologized for having gone overboard earlier. "Sorry, brother, but I've had it with all this filth!" By "all this filth," he meant the working conditions. He bemoaned that he and his colleagues must service decaying locomotives in a depot with crumbling infrastructure, exposing their bodies to industrial substances and the elements, and that they have to use outdated equipment that makes their job more difficult. On top of that, they made pennies above the minimum wage and were employed by an insolvent firm that used another firm's premises and could not afford to furnish its workers with equipment to shield them from exposure and with adequate cleaning supplies to rid their bodies of contaminants.



*Illustration 45. Copilu's hands after replacing graphite brushes.*

"Filtth" ("jeg") is a term that differs from the neutrally descriptive "dirt" (murdărie), due to its strong moral connotations<sup>78</sup>. By employing this word, Copilu' described something more than his embodied exposure and feelings of abjection. He also linked this experience to wider structural factors which he deemed immoral and outside of workers' agency. Such a dualistic view of dirtiness recalls the ambivalence of discourses about shame among miners in Romania encountered by anthropologist Jack Friedman (2007). A privileged category of industrial workers in state-socialism, miners - much like the railroaders - saw the pedestal unto which the state-socialist ideology of the "cult of labor" had elevated them crumble since the 1990s (Kideckel *et al.* 2000). Miners' "shame talk" simultaneously describes their personal experience of defeat and works as critique of the shameful socioeconomic context that made them feel embarrassed of their condition and of their identity as workers (Friedman 2007: 235; for similar findings about Estonian miners, see Kesküla 2012).

Copilu's outburst was compelling because it was directed at me in a way that highlighted the chasm between our bodies, jobs and class positions. This class distance was evinced symbolically by my not having to wear overalls to shield me from grimy, slimy, or viscous materials that would stick, ooze, drip, and cling to technicians' bodies. In a sense, by cleansing his body, changing his clothes, and covering his nails with polish, Copilu had shed the most visible embodied indices of his work, blurring class boundaries. Sometime later, another incident corroborated the class undertones in Copilu's tirade. It impelled me to record how workers dealt with dirt as part of their everyday work, how they talked about it, how it impacted their bodies,

---

78. In Romanian argot, jeg („filth," „muck") and jegos („soap dodger," „filthy," „mucky") can be used with reference to one's character or with the characteristics of a situation. Jeg/jegos can mean both that one is unwashed, but also that one is lacking in moral fiber, a person without character, vulgar, uncivilized.

and how it structured their social relations and identities.<sup>79</sup> One winter evening, on one of the very rare occasions when I wore overalls at the Depot, I was returning to my home in an uptown neighborhood by subway. I was aghast at the middle-class riders who left the seats in my vicinity or actively sought to sit as far from me as possible in the train (see Lemon 2000: 31-34 on similar judgments regarding Roma on the Moscow metro). In the shop, my "civilian" clothes and clean hands indexed me as a middle-class non-worker, prompting technicians to mistake me in the beginning for a newly hired engineer. In the subway, however, the overalls and the odor of diesel fumes that impregnate one's clothes after only a few hours spent in the locomotive repair sheds enabled me to inhabit for a short spell of time, the working class social skin that technicians wear, conceal, and reject every day.

The following chapter explores the sources of pollution and the practices of cleanliness and contamination at the Bucharest Depot as a means of understanding how the materiality of the workplace intersect ideas of dirt, shop floor hierarchies, and workers' identity and belonging. Specifically, it dwells on maintainers' skin, as both the canvas onto which the signs of work and stigma are marked, and as a site for the negotiation of self-image and class identity in the context of postsocialist industrial decline and decaying working conditions. A skin whose aesthetic and sensorial quality enable workers to code their work as masculine and rugged, but also erodes their health, self-esteem, and public appearance.

---

79. While doing field research, I did not conduct any interviews about workers' relationship to dirt and their strategies to deal with it. Most of the material presented here comes from direct observation of their work, and from handwritten notes recording the ways they talked about dirt among themselves during their work or during breaks, or to me, while they were explaining different repair practices as they were performing them. The quotes that are provided, come either from verbatim hand-written transcriptions of their words, or from audio-recordings that captured such talk accidentally.



**CHAPTER 5.**  
**Maintainers' Skin**  
**Filth, Exposure, Abjection, Resistance**

Copilu's rant was not the first time I heard Depot technicians talk about dirtiness, nor would it be the last. Some of them worded their displeasure in even stronger terms. Laurențiu, the team leader, always replied to my asking "How are you?" with "at 'scârbici!'" A vernacular term that fuses "scârbă" ("disgust") with "servici[u]" ("job"), "scârbici" is a bitter jocular expression of state workers' alienation from decent work conditions, and their feelings of abjection (Ferguson 1999: 234). Shame and disgust are not the only registers in which workers talk about dirtiness. They also link it to valuable hard labor (Soni-Sinha and Yates 2013; Ramirez 2007), and to rugged masculinity (Slutskaya et al. 2016). This constant balancing between disgust and pride in relation to the workers' exposure to materialities that contaminate their bodies and soil their equipment encapsulates the practical, affective and symbolic valences of dirtiness that this chapter investigates. What makes locomotive maintenance and repair dirty work? How do materials encountered on the shop floor become "filth"? How do they negotiate their experience of class, status, and belonging under conditions of post-socialist ruination and workers' degraded identities?

In answering these questions about technical workers' practices of contamination and cleanliness, I employ skin as a heuristic device to the broader experience of class. Ideas about class are manifest not only with respect to one's position within relations of production in the

Marxian sense, but are also displayed and reproduced in more subtle symbolic ways such as embodied behavior and appearance (Bourdieu 1986; *cf.* Hayes 2019: 3). Terence Turner famously defined skin as the "language" through which we make our identities, and communicate "our social status, attitudes, desires, beliefs and ideals [of propriety]" through the means of dress, cosmetics, and bodily adornment (2012[1980]: 487-6). In Turner's account, as well as in the description of "artefactual skin" put forward by Alfred Gell (1993) in his study of tattooing in Polynesia, skin emerges as the medium onto which people assert their creative agency by superimposing a second social layer indexical of their social identity (Allerton 2007: 37). Copilu's showering, his changing of clothes, and cosmetic intervention are all illustrative of how such agency geared toward self-presentation is manifested inside and outside of a work setting like the Bucharest Depot.

Nonetheless, these approaches that emphasize individual agency to alter bodies in accordance to cultural norms capture only one of the ways in which skin is socialized. Recall that Copilu' justified his outburst by emphasizing economic distress, decaying technology, ruined infrastructure, and the postsocialist devaluation of working-class identities. Skin, then, is social not only because it works as a medium of agency and as an intersubjective communication device, but also because it is itself produced in social processes and labor practices that inform, structure, and limit workers' agency over their bodies (Hankins 2014). Understanding technicians' skin as a marker of class in a context of spoiled and stigmatized blue-collar identity (Goffman 1986) thus requires investigating the structural factors that soil their bodies and their techniques of negotiating class status.

I argue that railroaders' anxieties about dirt, cleanliness, and status are intimately linked to the postsocialist change from state-socialist "industrial citizenship," through which workers

were constituted as "industrial citizens with rights and obligations" (Burawoy 1979: 113; Burawoy and Lukács 1992) to what I call abjected labor (following Ferguson 1999). The right to a clean, urban, indeed modern way of life both at work and at home had been one of the main promises of state-socialist industrial modernity (Fehérváry 2013; Drazin). In postsocialism, industrial standards that linked the upkeep of the work environment with rail workers' wellbeing and with a heightened productivity of labor (Tudor et al. 1972: 24-26) were largely abandoned. This means both that workers are getting their bodies dirtier than before through contact with decaying machines and ruined workplaces, and that they are undersupplied with protective equipment, cleaning supplies, and personnel that would enable them to avoid or attenuate contamination. The combination of enhanced exposure and reduced protection impacts worker's bodies and their health, but also erodes their dignity by curtailing their capacity for self-presentation as clean, orderly, upstanding citizens. Like Zambian miners' "sense that the promises of modernization had been betrayed" (Ferguson 1999: 236), Romanian workers experience feelings of humiliation and abjection related to their work conditions. These feelings are heightened in a postsocialist context that privileges the middle classes and their struggles for political purity that are often expressed in tropes of moral and physical cleanliness (Winegar 2016), often in direct opposition to the increasingly debased working classes (Dunn 2004; Fehérváry 2013; Kideckel 2002, 2008; Deoancă 2017). Under these circumstances, at the same time as dirt informs their subaltern experiences, it is also a part of how workers attempt to re-appropriate a workplace and a world in which they are relegated to abjection.

To develop this argument, I begin by discussing critically the ways that scholars have articulated the links between ideas of purity, pollution, and social differentiation in the context of work. Building on these approaches, the first section shows that while repair work involves

managing dirt, it has only become "dirty work" in the context of their industry's depreciation after socialism. In doing so, it advocates for a processual approach that links dirty work with larger processes of economic and material ruin. The second section focuses on the types of dirt that workers encounter on the job and on the pragmatics of dirt management. Most notably, it shows that the work of repair involves complex practical interactions with materials that appear as polluting outside of their immediate technological context. Among these interactions, I highlight the efforts of Depot workers to remove excess materials as they endeavored to "read" residual substances in troubleshooting activities (Chapter 4). The third section moves from the routine management of polluting materials to discuss the symbolic division of labor at the depot, and the ways that the material brokenness of the workplace impacts workers' bodies.

Specifically, it draws inspiration from Mollona's (2005) notion of "microclimates of labor" to highlight how social differences are expressed and made in terms of who is exposed to dirt and the elements and who is not, and how these distinctions laminate onto workspaces at the Depot. Finally, I discuss the ways that workers negotiate their belonging and identity in relation to dirtiness. The final section shows that technicians cope with filth through dirt avoidance, cleaning rituals, jokes and nostalgia. It also highlights how rail workers foreground their physical resilience and endurance on the job in their struggles for redistribution and recognition (Honneth 2001).

### **Dirt, Work, Maintenance: Categories, jobs, processes**

Anthropologists have long been interested in the sociocultural construction of purity and pollution as an avenue into investigating social structure, class, and ritual (Bean 1981; Douglas 1966; Luthi 2016). Specifically, ideas of purity and pollution link with ideas and practices of

social differentiation by foregrounding cultural designations of people who are clean or unclean. Mary Douglas famously defined dirt as "matter out of place," and argued that it is associated with ideas of disorder, contamination, and danger (1966: 53). Claude Lévi-Strauss (1966) pointed out the ways that failing to keep order may index class status, and even lead others to question the very humanity of the culprits (also see Dumont 1980, and Leach 1964). As a wealth of semiotic-oriented analyses underscore, these designations are not arbitrary: the material qualities of things enable and constrain their meaning (Keane 2003). Among the materials that, due to their specific qualities, may be categorized as dirty, polluting, or dangerous when one entertains prolonged contact with them are certain industrial substances that have toxic properties like chemicals, coal, or petroleum derivatives (i.e. Kaminer *n.d.* on Vaseline) and the majority of bodily fluids, including urine, feces, blood, sweat, spit, and semen (Forth 2016; Nagle 2009). While linked to their materiality, the categorization of such substances is also context dependent. Blood for instance, can be seen both as clean and life giving (i.e. when used in medical transfusions) or threatening and polluting when it escapes its containment in human bodies or medical vials, and contaminates surfaces and other bodies. Dirt, in short, is that ambiguous category of things and people, which both challenges and reaffirms cultural systems depending on its qualities and the context of its manifestation.

Dirtiness is oftentimes symbolically constructed and ideologically instrumentalized through work activities and the social organization of labor. For example, in the case of India's caste system (Bean 1981; Dumont 1981) and of the burakumin of Japan (Hankins 2014), individuals of lower status are perceived to be dirty and dangerous. They are often relegated to jobs that involve the management of polluting substances in ways that express and reproduce their social position by marking it on their bodies. Among the professions stigmatized in this way

are janitors, custodians, garbage collectors, nurses, leather tanners, funeral directors, miners or certain types of line workers (Hood 2003: 246-7). Even within these broad categories, differential proximity to contaminating materials and the resources for dirt avoidance can inform nested hierarchies of social differentiation. Both surgeons and nurses encounter blood in their daily jobs, but the former enjoy a much higher social status than the latter (Hughes 1981: 52). Similarly, there is a sea of a difference between the social prestige attributed to hospital lab technicians who analyze fecal samples and the social stigma heaped upon sewage and sanitation workers (Nagle 2014). These class distinctions can partially be attributed to the different forms in which these categories encounter potentially polluting substances and to the different resources available to such workers to protect themselves from contamination. Hospital lab technicians usually shelter their bodies behind scrubs, latex gloves, and face masks and often have other subordinated workers who handle the dirtiest parts of the job. Sewage workers, on the other hand, are on the front line of dirt management, which means both that they are exposed for longer periods of time to pollutants and that they are unlikely to tackle waste with any real protection save for their overalls.

Inasmuch as it involves "tasks that are physically tainted," locomotive repair qualifies as "dirty work" (Hughes 1958; Ashforth et al. 2007: 149). As the following section will show, removing dirt from machines, parts, and tools is of chief practical concern for service and maintenance activities, and so is the decontamination of workers' bodies after encountering polluting materials on the job (also see Dant and Bowles 2003). There are three salient factors that inform the specific dirtiness of locomotive repair work at DB-C: the unpredictability of work sequences, the analog nature of the machines under service, and the technical diversity of locomotives. First, technicians' work is concerned with the repair of material artifacts, in contrast

to industrial manufacturing that produces new technological objects (Friedman 1961). Unlike in modern clean factories where new components freshly taken out of the box are being assembled through pre-planned sequences of work often undertaken with the assistance of machines, maintenance and repair work addresses already used, and thus contaminated machines. Such work involves a high degree of unpredictability in the type and succession of tasks and requires a much closer relationship between a worker's body and the machine. Alin, the head of the electrical locomotives workshop at DB-C, explicitly compared manufacturing and maintenance after he visited a plant in Arad (Western Romania), where Romanian workers assembled light Desiro railcars designed by Siemens. He contrasted the pristine plastic-coated coveralls of the plant workers, their use of disposable plastic gloves, and the spotlessness of the floors in the assembly room, to the filthy clothes of the workers he oversaw, and the slimy floors of the repair sheds where they work.



*Illustration 46. A locomotive's power switch.*



*Illustration 47. Popică's hands working on the power switch.*

Secondly, work at DB-c exhibits particularities not only compared to machine production, but also to other types of repair work and repair shops. In the immediate vicinity of DB-C, there is a rail shed for the Siemens Desiro railcars that were assembled in the factory that the head of the workshop was talking about. Activities there are relatively clean as they deal primarily with electronic components with the help of computerized diagnosis. In contrast, the analog locomotives repaired at DB-C require direct manual engagement with the mechanisms. Finally, another differentiating feature between the specialized Siemens shed and the main workshop where I did fieldwork is the diversity of the machines to be maintained and repaired. Technicians taking care of Siemens railcars engage with a single type of machine, whereas service personnel in the main shop work on three distinct types of machines (hydraulic, Diesel, and electrical), each category consisting of multiple subtypes. This diversity of machines and potential failures further accentuates the technicians' need to engage closely with the technological objects and expands the range of substances to which their bodies are exposed.



*The abandonment of maintenance: From Care to Carelessness*

An important blind spot of both structuralist accounts of dirt *qua* matter out of place and of anthropological explorations of jobs that have a history of stigma are the material and symbolical processes by which a manual profession that was not traditionally stigmatized as dirty becomes so. Rail maintenance is dirty work in the literal sense of the term - being drenched with perspiration, dust, oil, and grease. However, the application of the figurative sense - performing a job that is low status, routine and demeaning - is not immediately apparent (for a distinction between the literal and figurative senses of "dirty work," see Thompson 2003: 313). Compared to stereotypical dirty jobs that involve marginalized populations dealing with foul or otherwise repulsive materials (Hankins 2014; Reno 2015; Resnick 2016) stigma is not readily apparent with respect to industrial workers in postsocialist Eastern Europe such as railroaders at DB-C. Industrial oil, petroleum jelly, rainwater or snow, some of the materials that they deal with routinely, are not inherently repulsive or foul in themselves. Industrial repair workers also do not fit easily into the classical taxonomy of dirty workers who are lowly and unskilled and undertake menial jobs that subordinate them to a client (Slutskaya et al. 2016: 175). Working for an iconic national enterprise (Popescu 2014), they are part of a former aristocracy of industrial labor that was celebrated under state socialism for its "heroic and decisive contribution to the economic development of the country and to the general progress of the Romanian society" (Botez et al. 1977). Copilu' and his colleagues are skilled laborers working for a state enterprise, which lends them job security, steady, if precariously low wages, and trade union representation.

Despite still being subsidized by the state, unlike most other socialist-era state enterprises now defunct (Kideckel 2002) and taking pride in the social value and masculinity of their work, my interlocutors spoke of their jobs in affective registers that signaled a pervasive sense of

disgust and disheartenment. Their revulsion is primarily prompted by the relatively novel demeaning qualities of a job that should not have been demeaning. The plight of their industry is materialized in aging machines and worsening working conditions which increase their exposure to pollutants, and in the steady deterioration of the conditions that once separated these men from the shamefulness of dirt: clean pits, proper heating, overalls, gloves, degreasing paste and hand cream, work room paint, clean bathrooms, more people to do the work, etc. In this respect, repair work at the Bucharest Depot differs significantly from that performed in car service garages as described, for instance, by Dant (2008, 2010) and Dant and Bowles (2003). These ethnographic accounts based on research undertaken in the early 2000s in Great Britain focused on car service undertaken in privately owned garages that seem to be always abundantly supplied and staffed, and saw "no evidence that the technicians found any of the materials they dealt with" – including different types of dirt – "offensive or disgusting" (2003: 7). In contrast, technicians at DB-C work in a state-run shop, they service state-owned machines that provide a public service where they are undersupplied and understaffed. As Copilu's rant and Laurențiu's coding of his work as "scârbici," illustrate vividly, they are quite prone to experiencing the dirtiness of the job and workplace viscerally.

The ruination described at length in Chapter 2 of this dissertation illustrates of the consequences of abandoning workplace cleanliness standards that workers' technical schooling and past work practices had cultivated. A 1972 labor safety course book that all the workers had read during their training, and that is still used in rail trade schools today, detailed how workspaces were to be illuminated, heated, aired, and cleaned. In particular, it highlighted the importance of cleanliness to workers' wellbeing and their productivity:

To ensure the good course of the work process, and to achieve a high level of labor productivity, a very important role is played by: [...] the creation of a proper environment

that will not over-stress workers physically and psychically on their job. [...] A special influence on the capacity to work is exerted by the cleanliness of the workplace, as well as by the cleanliness of sanitary facilities, especially the bathrooms and lavatories. (Tudor et al. 1972: 24-26)



*Illustration 48. Accretion of filth. Note the imprint of feet on the soot and oil covered floor of the shop.*



*Illustration 49. Writing reads "Attention. Slippery terrain."*

Veteran technicians recall that these standards used to be adequately enforced and respected in the 1980s. Costel, an electrician who had been on the job since 1986 recalled that Saturdays, the last day of the six-day workweek in late socialism, were set aside for activities of upkeep in which everyone was obliged to participate, although not everyone did it wholeheartedly.<sup>80</sup> An article published in 1984 in the May 10 issue of *Lupta CFR*, the weekly newspaper edited by the Romanian railroaders' union, adds credence to Costel's recollection. Titled "Bucharest Depot. Order, discipline, and responsibility: Defining characteristics of the entire activity," the article commended depot employees for their care-taking efforts, and described how upkeep was enacted as a productive and competitive activity:

A mirror of the spirit of order is represented by the husbandry of the facility. At the interior spaces - cleanliness and faultless order. Outside, one has the impression of being in a well-groomed and tidy park. [...] The unit was split into zones that were distributed according to shifts and work formations, including office personnel. A veritable competition for the good husbandry and the embellishment of the allocated zones ensued. Presently, the top positions are occupied by the shifts headed by the dispatchers Ion Z. Grigore and Constantin Țara, and the work formations of foremen Filip Bădoiu and Grigore Popescu.

The abandonment of these standards and practices in the recent decades has enabled the redundant materials that occur in the work process to accrete, sediment, and become filth. The Depot, essentially a place of taking care and restoring things, has become a space that also contains an evolving carelessness<sup>81</sup>, which materializes in the lack of cleanliness and maintenance of most spaces. One day, when Alexandru, the young engineer who was my early guide, took me on a tour of the depot, a water pipe had burst, flooding the shop floor in the roundhouse. The worker who drained the puddle commented sarcastically "at least these floors get to see some water, for they haven't been washed in years." Indeed, the concrete floors of all

---

80. Several interviews with rail bureaucrats who had been active in the 1980s revealed that many white-collar workers found the so-called "patriotic labor" ("muncă patriotică") demeaning and resented the Communist Party for making them participate.

81. I am indebted to Alina Cucu for suggesting this phrasing.

sheds are covered in decades' worth of oil, grease and soot that had turned into a black slippery veneer on which workers have to tread carefully. Seen from outside the roundhouse, ruin takes potentially catastrophic dimensions. A crack wide enough to accommodate two fingers streams across the roof and ends at one of the supporting pillars. The area around the pillar itself is cordoned off with tape, for the concrete had eroded so much that the steel reinforcement at its core was exposed.

The decay of the buildings and the squalid conditions of the facilities are also rooted in the disorganization and uncertainty produced by the separation of enterprises and the division of Depot spaces between two firms. Following the 2001 break-up, CFR Călători was given ownership of all the buildings in the Bucharest Depot compound. Locomotive Repair rents from it the same workspaces that it had occupied before becoming a separate firm. Under these circumstances, it is unclear which firm should take care of the built environment. While each firm is theoretically responsible for maintaining the workspaces it occupies, they have different resources for doing so. CFR Călători outsources the sanitation of its spaces at Bucharest Depot. Cleaning staff sweeps and mop the floors in the administration building several times a week, take the trash out, and sanitize the communal restrooms.

By contrast, the insolvent Locomotive Repair has hired no such professional sanitation services for the offices and repair halls in the three facilities it rents at the depot. The spaces it occupies are most often left unkempt or are cleaned minimally by workers of the lower rungs, either at the behest of managers, or less frequently, on a voluntary basis. A few years prior to my research at the depot, there was one man who was informally charged with taking care of communal spaces. Paulică ("Little Paul"), a liminal character himself, embodied the dynamic of abjection and morality. He was a technical worker who had a mental disability that had made

bosses and co-workers avoid relying on him for high-risk duties of repair. Nonetheless, he was kept on the payroll in exchange for doing menial service work. His untimely death led to the general disarray of communal spaces. The restrooms available to workers were particularly stomach churning. Unlike CFR Călători clerks in the administration building, workers only have access to squatting toilets. Called "Turkish crappers" (bude turcești) in Romanian, this type of toilets is taken to index rurality and backwardness. Furthermore, they are rarely serviced. Instead of periodic cleaning, a hose that is always turned on spills water onto the restrooms' floors, and the workers use a makeshift wooden platform made of planks to cross over the room without stepping in the ankle-deep puddle of water, urine and feces.

### **Dealing with dirt on the job**

Technicians deal with dirt as part of their job, which means they get their hands, clothes, and bodies soiled as they work with machines and in an environment that is continually being contaminated by various types of materials and thus require cleaning. What kinds of dirt do workers encounter, and how do they manage it practically? This section describes some of the strategies employed by workers to engage with dirt by disposing of it from locomotives, but also by "reading" qualities of "dirty" materials as a way to assess the functioning or malfunctioning of the machine. Before turning to the practical management of dirt, let me introduce the dirt on locomotives first. Throughout this section, I highlight how the lack of adequate equipment and supplies make these tasks both more important than ever for the survival of machines, and simultaneously more difficult to undertake.

### *Sources of Dirt*

Modern locomotives are designed so that the bodywork is made up of hard, smooth, metallic and glass surfaces that get exposed to the elements during operations. They gather dust, get covered with mud, and are sometimes soiled with blood and other organic remains from the birds (pigeons and crows in particular) that the machines slam into while running on tracks at high speed. These materials require removal for both aesthetic and practical reasons (dirty windshields and headlights obstruct train drivers' vision). However, because the high-pressure washer and the rotating brushes system at the Depot have been broken for years, workers do not wash locomotives routinely any longer. When absolutely necessary, workers do the cleaning manually. Dirt may also gather on the rooftop, usually in the form of blackened snow and soot. Technicians remove these impurities from the air vents and from the power switch system to avoid electrical malfunctions.



*Illustration 50. Discarded soiled cloth used for cleaning equipment.*

Unless the machine is very new,<sup>82</sup> the undercarriage is almost always dirty, and is a major source of pollution in the shop. Unlike the smooth, rounded, and continuous surfaces that make up the bodywork, the undercarriage is a flat plane with a series of indentations and folds, with pieces of equipment attached. These surfaces gather dust, mud, soiled snow, and particles of highly toxic creosote (a tar-based chemical sealant used in the past to impregnate the wooden rail ties supporting the tracks). Organic material can also pollute the undercarriage if the locomotive hits animals wandering onto the tracks, or human victims of accidents or suicide. These materials that cover the bottom of the machine drip and ooze on the workers and on the floors of inspection pits. Here too, the broken or unkempt work equipment renders work difficult and workers vulnerable to contamination. The industrial grade heaters in the work sheds that served to thaw and dry the machines before repair have ceased functioning, which means that the bodies of the technicians are exposed to such materials during rainy days and during the winter season, when dirt is carried in as a muddy liquid. Likewise, the draining systems of the inspection pits are decaying. Since no resources and personnel can be spared to undertake such maintenance work now deemed unproductive, technicians working on the undercarriage often do it in a flooded environment.

While theoretically shielded from the elements in the machine room, the engines, gearbox, electrical convertors, electrical control units, and electronic circuits are often contaminated as well. Dust penetrates the room through faulty air ventilation sieves or openings in the improperly sealed body of the machine and remains there due to underperforming ventilation systems. Dirt in the machine room is also produced in the operation of the equipment itself. Electrical components may flare up during functioning and leave burn marks and grime on the protective gear that shields them. Grease used to insulate various electrical equipment may

---

82. Which is almost never the case. DB-C, the largest rail yard in Romania, has only one locomotive produced after 1995.



also burn and gather dust particles that have to be removed. Oil leaks pose the risk of fire or can lead to accidents if technicians working in the narrow and dark corridors in the machine room slip. Popică, my key research collaborator, would often scold me for the habit of resting my hands in my pockets while shadowing him in the machine room. "If you trip or slip, how should you find buttress? How will you grab onto something? How will you protect your noggin ("țeasta") if you fall?" His advice would have been useful to one of the engineers I once witnessed banging his forehead on a wall after slipping on an oily mat to the revanchist amusement of his subordinates.

Materials that technicians use in their everyday work also have dirtying qualities. When they arrive at the shop in sealed metal canisters or packaged in plastic tubs, engine oil and lubricating grease ("vazelină") are quasi-transparent, lightly colored substances with a dense sticky texture. Grease and oil lubricate hard, usually metal surfaces that run against one another and to insulate and seal off electrical components that are exposed. When they appear outside of the contexts of their functioning, for instance when vazelină accidentally gets on the surface of a piece of equipment rather than between the parts it is supposed to lubricate, or when oil spills out of its containers, they take a form that workers address as "dirt." Petroleum jelly and oil turn black and opaque as soon as they are used, and cling onto equipment, tools, bodies, and overalls. If the part in need of lubrication is within their reach, workers apply petroleum jelly using their unprotected fingers. The sticky, viscous material then gets transferred from their hands to their tools. For this reason, they need to wipe tools off before and after use. A slippery instrument can lead to injury or may be dropped in places difficult to reach where it can cause electrical (i.e. short-circuits) or mechanical problems (i.e. physical deformations of equipment). On one instance, Gică, the least experienced rookie, dropped his adjustable spanner while working on a

locomotive's roof. The wrench found its way into a ventilator, getting lodged between the blades. A special crane operator had to be summoned to lift up the roof, so that the workers could dismantle the ventilator to retrieve the tool before resuming their scheduled maintenance activities.



*Illustration 51. De-greasing hand cleaning paste.*

Greasy hands can pose other technical problems as well, as oil and petroleum jelly also have dissolving qualities. One day, I was shadowing Nicu while he was calibrating a locomotive's gearbox ("selector") that Laurențiu, the team leader, had dismantled the day before but was unable to put back. The gearbox is a large round vat that contains radially positioned copper bars fastened with retaining nuts made of white ceramic. Because the nuts needed to be fitted back in the same order as before to ensure that the distance between the copper bars was maintained, Laurențiu had numbered the position of each nut with a black marker. As we handled the nuts with our hands covered in oil, the numbers became illegible, and we had to guess their original position. Our guessing was severely off: the gearbox was skipping three quarters of a

gear. Nicu had to open the subassembly two more times. The first time, he tried to figure out which nuts had been misplaced but failed to do so. The second time, he decided to have some of the parts abraded in the tool-grading workshop so that they would fit. The whole procedure took Nicu the entire day, instead of the 3 hours planned, all because we had not heeded the solvent quality of gearbox oil.

Some spare parts are dirty as such. This is the case of electric brushes, for example. These are sliding contacts used to transmit electrical current from a static part to a rotating one in a motor, or carbon parts that collect electricity from overhead wires and transmit it to the locomotive. Given their carbonic origin (they may be made of graphite or coal) and brittle structure, these brushes deteriorate under normal conditions of locomotive functioning. This means that during every check-up, at least some of them require replacing, inevitably soiling the hands and clothes of the technicians working on the undercarriage with black or grey soot.

### *Removal of Dirt*

Removing these materials from surfaces and parts that they might damage is a crucial part of maintenance work. Technicians pay most attention to electrical conductors and circuits, where impurities threaten to interrupt the flux of electrical current or produce short-circuits. One afternoon, for example, Nicu was doing a summary maintenance check of two electrical block units that were designed to convert electricity from high to medium voltage to power the train's so-called auxiliary systems (heating, ventilation, and electrical braking). He began by looking closely at each wire and contact and checked whether they were tightly inserted in the right position by pressing on them and jiggling them with his fingers. He then removed the protection box from each of the switches that control the various auxiliary systems. With a sheet of fine

sandpaper, he removed the little grime and rust that had accumulated on the static contacts, then took out each copper plate from its slot, and scraped them and the sides of the protection box with sandpaper. He finished the job by wiping all metal components, wires, and fuse boxes with a soft cloth soaked in diluted industrial alcohol. "Look at them, see how clean they are?" he told me right before beginning the cleaning process. "I've done a good job, right? I did the previous check-up [on this machine] too, so there wasn't much to do now. It's good to be preemptive." As his attention to grime and rust and his use of sandpaper and alcohol suggests, dealing with dirt is not simply a matter of acting against a problem in the present, but also a preemptive strategy to shield machines from potential malfunctions, as well as a way to ease one's own work in the future.

### *Dirt as "witness"*

Dirt, however, is not always a problem that requires removal or fixing. It functions not only as material pollution and technical threat, but also as material sign that seasoned technicians learn to "read" by mobilizing their senses, and to interpret based on their familiarity with technological processes. Put differently, dirt has the potential to make technical problems more legible. During my stay at the yard, I heard stories about and was shown photos of two legendary locomotives that had been retired a decade before. The two have been given a pair of paronym nouns as nicknames to accentuate their differences. One was always pristine and orderly and was thus dubbed Regina ("The Queen"). The other, which its driver never cleaned, earned the nickname Rugina ("The Rust"). Depot tall tales claim that Rugina had outlived Regina precisely due to its extreme filthiness, which made signs of defectiveness easily legible. One day, when the driver was on holiday, a team of younger technicians had cleaned Rugina's machine room (the

compartment inside a locomotive that hosts technical subassemblies). Days later, the locomotive broke down on the tracks. No longer able to identify the problem and fix it, the driver had to request a replacement machine, a matter of great shame for old time drivers who take pride in their repair skills and punctuality.

Like the thick layer of soot on the entrails of Rugina, other materials afford interpretation too. Reading the properties of *vazelină* (“petroleum jelly”) may signal whether a problem in need of repair exists or not in the first place. One day, Popică was performing a routine check-up on an electrical locomotive. This included an inspection of the rooftop equipment through which electricity passes from the overhead wires down into the machine it powers. After the current has been picked-up by the pantograph, it reaches a circuit breaker (“disjunctor”) that consists of a mobile part gliding in and out of a static part. When the switch is on, the current goes through electrical wires to two separators made of ceramic that can be used to by-pass the switch altogether in case the latter malfunctions. During check-ups, technicians are required to apply a generous film of grease between the mobile and immobile parts of the switch, to ensure smooth gliding and to insulate the part from the elements. They also use grease on the ceramic separators that receive charge from the switch for insulating reasons. Popică pointed to the darkened film of grease within the switch:

This is a witness of functioning (“martor al funcționării”). It means that the mobile parts of the switch have been working, because had the *vazelină* not turned black, then no friction had happened. Now we need to clean all this dirty *vazelină* and replace it with a fresh coat. The problem with dirty *vazelină* is that because of the dust and soot that it gathers it won't seal the part well, and water might get in. When dirty, it also becomes abrasive and damages the metal.

In this case, changes in the color and consistency of grease point to the normal functioning of a mechanism, signaling to the technicians that they need not undertake further

action save for re-coating the part. In other cases, blackened petroleum jelly points to the exact opposite, as it can also be a witness of malfunctioning. Having finished working on the switch, Popică continued with the two ceramic separators connected to the switch through high-tension lines. Vaseline on these components had blackened too, but his reaction was less relaxed than when he had noticed the same manifestation on a different part just minutes before:

At the exterior separators, dirty *vazelină* is a sign of imperfect contact, because, if there's imperfect contact, the switch overheats, and the grease insulation burns. Now we know that we need to replace the fixed or the mobile part of the separator, or, at best, turn around the static part and juggle it so that contact will be right.

In other cases, the use of dirt as a litmus test is not as straightforward as simply looking at it or touching it. Other components and subsystems, such as the internal electrical circuit of the locomotive are less transparent and require different engagement with the material residues that they produce. The so-called "K-type contactors" ("contactori K") are metal mechanisms composed of an oscillating part and a static one in the gearbox system of the machine. They are designed to modulate the intensity of the current by opening and closing rhythmically in accordance to the gearshifts that the driver operates on the throttle. Because they operate under high tension, they are covered with boxes made of hard plastic so that sparks do not reach the machine room. When technicians inspect them, the first place they look is the interior walls of the boxes for signs of blazing caused by voltaic arcs. If there are no brown burn marks, no grime, or no signs of melting on the box, then the parts have not functioned properly. If marks exist, but they are either too large and/or too deep, this also indicates malfunctioning. In this case, it is the quantity rather than the consistency or color of redundant materials that workers assess. In these cases, most likely to blame is an imperfect electrical contact between the components of the part. To fix this, technicians use sandpaper to remove the grime consisting of rust and metal shavings

that deposits between the two parts of a contactor. If this is not enough, it means that either one or both parts of the piece have been physically deformed, in which case servicemen use a rough file to level the metal surfaces, or, if the part is damaged beyond repair, they have to replace it.

In the technical manuals for locomotive repair that I consulted, there are no guidelines for knowing precisely when these marks are too large or deep. Popică and Viorel explained that they know how to read such signs from experience, and from other technicians with whom they had worked in the past. Prior intimate knowledge of a machine's peculiarities, a form of experience earned through repeated engagements with the same locomotive during repairs, is also helpful. What is nevertheless crucial for such causal inferences is that the marks be removed with sandpaper from the box's walls during every inspection, to enable other technicians working on it in the future to notice whether new marks have appeared or not. This extra-work is directly linked, technicians claim, to their poor supply of spare parts. According to Popică, "back in the day, these boxes were replaced at each major inspection, but now we're told to hang on to them for as long as possible."

### **Microclimates of Labor: Workplace Exposure and Distinction**

Besides being a matter of immediate practical concern, dirtiness also encodes a moral division of labor in the workplace, in which distinctions are made concerning the proximity of dirty work and contamination (Hughes 1958). This division of labor reflects and reinforces several nested hierarchies at the Depot: it distinguishes between employees of CFR Călători and Locomotive Repair, between managerial and clerical staff and workers, and also between workers themselves in terms of seniority and skill.

In general, CFR Călători employees at the Depot (clerks and train drivers) have cleaner jobs than Locomotive Repair service workers. The clerks in the main administration building of DB-C, many of them women, have university degrees and are tasked with accounting, acquisitions, work scheduling, and repair oversight. Similar to the bureaucrats from CFR Călători, the Locomotive Repair engineers (all men) in charge with overseeing repair work have engineering degrees, the overwhelming majority from the Bucharest Polytechnic University. The symbolic distance between Locomotive Repair engineers and blue-collar workers is evinced by the former occupying separated offices tucked away on a higher floor above the repair workshops, and having access to locker rooms and restrooms separated from those used by the workers.<sup>83</sup> Finally, proximity to dirty work operates to distinguish not only vertically, between bosses and workers, but also horizontally, between technicians working in different sectors of the repair enterprise and between workers in the same sector who work on different parts of the locomotive. Experienced technicians generally work in the machine room, a part of the locomotive better shielded from the elements, where electrical and electronic components are housed. The younger and the lesser skilled, those new to the job, and those deemed morally flawed and unreliable (i.e. for drinking on the job and for skipping work) are more likely to be tasked with work on the external parts of the machines. Working on the roof of the machine or underneath means more frequent contact with dirt generated by the locomotive's exposure to the

---

83. A major exception was one engineer, whom the workers nicknamed "Umbra" (The Shadow) for his predisposition to watch them from afar or, alternatively to sneak behind them in the machine room. Umbra occupies a liminal position between engineers and workers. Several years before, he had suffered a psychological breakdown, and subsequently spent time in mental health institutions. According to several technicians, his predisposition to talk and work had withered away after the episode, and so did his investment in personal hygiene. Other engineers talked about him disparagingly, and workers mocked him behind his back for his bad breath, body odor, and smelly shoes. Moreover, worker's outright lack of deference towards him further illustrates the degradation of Umbra's position due to his condition and personal hygiene practices. For instance, technicians often shoo him away from the machine room, and ridicule their peers whom engage in chatter with him for being "buddies with the loony." Unlike the other engineers, Umbra never dresses casually. He wears a blue coat over his street clothes, similar to the ones traditionally worn by foremen like Victor "The Ace." Furthermore, allegedly because of his poor hygiene habits, the other engineers rarely tolerate his presence in the office they share (partially the reason why he could often be encountered hanging around in the courtyard with no apparent purpose), and had banned him from the engineers' locker room, which forced him to occupy a locker in one of the workers' spaces.



elements and implies touching parts that are lubricated with oil and grease and using dirty parts such as graphite electrical brushes. As Alin, the engineer overseeing the electrical sector once explained to me, the latter was:

Work for guys like this one, who don't know shit [points at Copilu' who was 30 feet away]. I can't have good technicians like Popică change the electrical brushes or replace the *vazelină* in the grounding conductors, unless there's no one else to do it, because *he'll be humiliated*. (Emphasis mine)

Rookies and the lesser skilled (the repair yard's resident ethnographer often included) were also more likely to be assigned the more abject jobs of cleaning the exterior of locomotives and sweeping the machine room. They were also expected to take care of the more menial, domestic jobs: taking out the garbage, doing the dishes, or running errands for their colleagues (shopping for bread, placing sports bets, paying bills etc.). As a non-skilled visitor, I was very involved in these particular kinds of work during my field research. The most unpleasant of these activities involve cleaning the organic remnants from the machine. Such organic waste comes from dead animals and from living humans. One day, Mihai and Gică had to wash the snowplow of a locomotive, after the machine had hit a herd of sheep. While the workers who were two months into their job at DB-C were explicitly retching from the foul smell of rancid tallow, Popică, a veteran, yelled at them "how do you like working for the railways now, rookies?" In this way, Popică reminded his colleagues what their status was at the Depot.

The most repellent type of pollution that rookies have to deal with on a regular basis is the litter that train drivers often leave behind them in the cabin or the machine room. Before the mid 1990s, each locomotive was assigned to up to three drivers, a measure that incentivized drivers to care for the machines by rendering them interested and responsible for their appearance. After the tenure system was scrapped, a driver could not be sure he would regularly

be assigned the same machine, or even frequently for that matter, leading drivers to divest themselves from the upkeep of the locomotive. Nowadays, technicians frequently find trash on the floors, ranging from candy wrappers and sunflower seed shells, to plastic bottles, paper tissues, and discarded clothing (such as worn socks). On several occasions, the strong, stinging, ammonia-like smell that our noses picked up in the machine room, led repairmen to conclude that some driver had again pissed in the metal tray designed to capture oil leaks from the compressor. I have witnessed such behavior on one occasion myself, while interviewing a driver in the cabin during a freezing winter day. At one point during our conversation, the driver left the cabin to relieve himself in the machine room, explaining that it was "too cold outside to get one's cock out in this weather."

*Sensuous perceptions of the work environment (temperature, noise, light, and air)*

Differences in the solvency of the firms and in the work duties they perform mean that employees of the two companies and the Locomotive Repair workers assigned to different tasks and workspaces experience the desolated materiality of the depot in divergent ways.<sup>84</sup> Mao Mollona described how workers in what he calls the hot and respectively the cold departments of a steel mill in Sheffield, England, "perceive and absorb differently the colours, smells, drafts and dust coming from the machines according to their different location in the production process" (2005: 182). There are several such microclimates of work at the Bucharest Depot that

---

84. For the purpose of this dissertation, I differentiate among depot employees in terms of their work conditions in the following way. I call clerks and dispatchers who do non-manual office jobs that are considered "clean" CFR Călători and Locomotive Repair white-collar workers. Train drivers who staff the traffic department are grey-collar workers. They do not hold administrative positions like white-collar clerks, but generally do not undertake manual labor either. Yet they do work on the often very shabby machines provided by the depot, which brings them in contact with technologies and exposes their bodies to their material degradation. Unlike technicians, road drivers, shunters, and locomotive inspectors engage with locomotives only on a superficial level: they drive them, and they make sure everything is in order when they take it over, and jot down any problems the machine might have when they return it to the depot. Maintenance and repair technicians, whose labor is predominantly manual, fall into the category of blue-collar workers. Given that they are tasked to take apart machines and that they work in those repair facilities that Locomotive Repair spares little on maintaining, their bodies are most exposed to the decay of the locomotives, of tools and equipment, and to the vagaries of the weather.

differentiate between management and workers and between CFR Călători and Locomotive Repair employees in terms of their engagement with the dilapidated work conditions at the facility. These not-so-subtle separations reflect the effects of the unbundling tactics that had reshaped the organizational structure of the national rail enterprise.

White-collar clerks from both CFR Călători and Locomotive Repair rarely go out of the administration buildings during working hours and, with the very few exceptions such as when some of the younger, lower ranked clerks lend a hand shoveling snow from the tracks, they do no manual work. They sit on plushy chairs in offices sheltered from temperature variation by air-conditioning, radiators, and double-glazed windows. Since there is no dress code, they can wear street clothes at work which enable them to exhibit their class identity through smart-casual dress styles: dressy footwear or sneakers, denim trousers, chinos and skirts, sweaters, shirts and blouses of various colors, even the occasional hoodie. Only the most formal of them, who make a point of displaying their rank and their loyalty to the railroads, pair white or blue shirts with navy blazers in combinations that mimic the traditional military-style color scheme of CFR.

Train drivers employed by CFR Călători are less protected than the clerks, but more than technical workers. When on duty, they either congregate in the drivers' waiting chamber on the ground floor of the main building, a room that is heated and air-conditioned like clerks' offices, or they sit at the wheel in the locomotive cabin. For this reason, they dress as casually as the clerks, albeit less formally as a rule of thumb. Unlike the clerks, drivers know that while in theory the cabin of the locomotive should be insulated from the elements, and the space heaters and ventilation systems must be fully operational when they take over a machine, there is always the risk of these subassemblies not working properly. The weather strips insulating the locomotive's cabin windows are old and permissive with draft and cold air, and faulty auxiliary

systems curtail both the heating and the cooling of the cabin. Also, the possibility of locomotives breaking down en route is always looming, which may leave drivers stranded on tracks in their minimally protective metal encasement under a blizzard or heat wave. For this reason, the most experienced of them are prudent enough to pack an undershirt to strip down to in the summer, or various types of thermal wear to get them through the winter cold.



*Illustration 52. Writing on toilet stall reads: "Maintain cleanliness. Civilize yourselves!"*

Unlike clerks and drivers from CFR Călători, maintenance technicians have little shelter from the elements. Temperatures in the spring and fall are tolerable, but workers are always too cold in the winter and hot in the summer. They constantly complain about being burnt by the sun and rained or snowed upon when they work on locomotives parked in the yard. They also dread the drafts circulating between the always-open big doors of the sheds and the broken windows that haven't been replaced in years. Workers are hot or freezing even when they work on locomotives parked in the sheds: the ventilation and heating systems influence only the temperature in the driver's cabin, not in the machine room where repairmen work. In the summer,

temperatures in the machine rooms, especially on those locomotives that had just returned from the road, reach unbearable levels that leave workers sweating profusely and sometimes gasping for air. On one occasion on an average hot August day I witnessed Marcel, whose portly body made him more vulnerable to heat, faint and collapse on his way out of the machine room. In the winter, the cold crawls up from the metal floors of locomotives, envelops the feet and legs, and once it gets into the bones, makes the body shiver uncontrollably. On a day in early March, I distinctively recall assisting Nicu on a job that involved spending hours on end fine-tuning a complicated piece of equipment in the narrow corridor of a locomotive's machine room. I wore winter gear, but after three hours, my teeth were chattering uncontrollably, and my hands were shivering to the extent that I could barely pass tools to the technician. While I could move constantly to bolster the blood flow, Nicu's lips had turned blue after two hours of immobility: he had been sitting on a tiny wobbly stool, knees tucked under and back uncomfortably hunched into a position that I could only assume cut off blood circulation to his limbs.

The subtle dynamic of cold and heat superimposed on the chilly draft that circulates incessantly through all the sheds and repair halls often confuse as to how to dress at work to best shield their bodies. In the winter, they fight frigid temperatures by donning multiple layers of sweaters and long johns or tracksuit bottoms under their overalls, but this layering often makes them sweat profusely, and hampers their movements when they need to reach tight spaces. In the summer, they get rid of the top of overalls and work in tank tops, t-shirts or short-sleeved shirts open on their chests and bellies, which leaves their skin unprotected and thus exposed to dust, soot, oil, and grease. Furthermore, while dressing lightly makes the heat inside the machine bearable, it becomes a threat once technicians step out into the drafty repair hall and sweaty shirts turn immediately into cold poultices on their backs.

Drafts assail workers in the square shed disproportionately more than technicians in the roundhouse or in the overhaul plant, due to the particular spatial layout of this facility. Some of the doors in other facilities can be shut, but not the gates in the square shed: locomotives pass through the shed constantly during peak working hours, and even when work is slow, their faulty hinges make them impossible to close. With large gates always open at both sides, the square shed feels like a wind tunnel. For these reasons, the most common strategy to avoid the effects of hot or cold weather is to take breaks, either by spending a few minutes in their heated break rooms in the winter, or by sitting in the shade by the designated smoking places in front of the halls in summer. This strategy comes with its side effects as well, but of a different kind. When their superiors take notice of these breaks, they grumble audibly about workers' idleness, and sometimes even accuse them of truancy. But from the point of view of workers' health, this sort of long lasting exposure to alternating temperatures and to drafts (the latter of which is the a nemesis of Central Europeans who blame air currents for a wide range of ailments), are understood to cause rheumatism, acute and chronic backaches, muscle spasms, otalgia, and kidney disease.

It is not only distinct temperatures and drafts that maintenance and repair workers experience differently than others at the depot. Noise, light, and the quality of air also vary with jobs and workspaces. Thanks to their double-glazed windows that keep industrial noise out, offices are relatively quiet apart from the occasional music that clerks play on their computers, and the constant hum of voices and footsteps in the main corridor in the administrative building.<sup>85</sup> Repair halls, on the other hand, are anything but quiet. Depending on the time of the

---

85. It is worth mentioning that male bureaucrats blame their female colleagues for noise pollution in the building. They are too chatty and loud, some claimed. On March 8, 2015, when women had the day off in celebration of International Women's Day, I overheard three young clerks talking about how the offices were finally pleasantly quiet due to the absence of female chit-chat. Nonetheless, this is more of a gendered stereotype than an actual reality. Not only were women fewer than men in the offices, but all the women clerks that I have met were particularly meek. Noise levels went up when the boisterous depot manager went on

day and the volume and type of work undertaken, one may only overhear the occasional hammer blows against locomotives' axles, the metallic chime of a tool dropped on the concrete floor, or the buzzing of faulty neon lights. At other times the repair halls, whose wide spaces and tall ceilings create veritable echo chambers, fill up with the booming and intense noise of traction engines fired up inside, or with the low vibrating whir of compressors. When engines are on, workers cannot make themselves understood without yelling at the top of their lungs and banging on the locomotive body to draw the attention of their work partners. In a locomotive machine room, the inescapable proximity of the industrial subassemblies makes the experience of their noise all the more powerful. When the locomotive is under testing, the machine rooms reproduce the entire sound ecology of a power plant. The electrical switch that powers the machine releases a loud electric sound when turned on, akin to the crack of a whip, followed by a progressively louder growl as the engines power on. These noises combine in a deafening industrial symphony with the muffled turbine sound of pneumatic systems that feed air into the braking system, the electrical hum of electrical circuits under tension, the whooshing and revving of traction engines, and the reverberating whirr of compressors and heavy-duty ventilators. Long-term exposure to this irregular and loud industrial soundscape may impair hearing, or, in more extreme situations, may damage the internal ear. For example, two technicians have told me that they suffer, one from occasional dizziness, the other from chronic vertigo, that both blamed on their workplaces. Working in an environment where loud noises abound may also contribute to heightened heart rates and can elevate stress levels.

Light is also distributed unevenly. Offices in both the administration building and above the repair facilities have tall and wide double or triple windows that are oriented either toward

---

one of his yelling sprees, or when drivers argued with clerks about their schedules or about ongoing disciplinary investigations into their conduct.

Grivița Avenue or toward the internal yard of the depot. Conversely, most of the break rooms where blue-collar workers spend their spare time either have no windows or have tiny windows located on the edge of the ceiling, with light seeping in through narrow wells. Repair halls, on the other hand, are designed to maximize lighting through the placement of large windowpanes on the sides and at the back, and of overhead neon lights hanging from the ceiling. Yet, in all the sheds, the windows are tinted with years' worth of grease and dust that have made them opaque. The few overhead neon lamps that are still functioning also cast a dim light in the shop. This combination of deadened windows and poor electrical lighting bathes the interiors of the sheds in a dim light that casts dark shadows on the dirty walls, soiled floors, and equipment painted in dull colors. Semi-obscurity makes the dirt, grease, oil, and soot blend almost naturally in the industrial environment. If obscurity characterizes the sheds, outright darkness envelops locomotive machine rooms. When operating inside, workers carry with them heavy-duty lamps with long cables provided by the depot that they wire directly into electrical sockets in the sheds and use head mounted torches or handheld flashlights to illuminate corners that the lamp cannot cover with precision. Even so, because of the darkness and the convoluted design of subassemblies, technicians often orient themselves around the parts by feeling nuts, bolts, and electrical circuits with their fingers.

If the dirt on the floors, walls, machines, equipment and bodies is camouflaged by darkness, the beams coming out of worker's torches and the rays of light that seep through the windows make the quality of air visible to the naked eye. Particles of dust are clearly distinguishable in their golden reflections both in the light of the sun and under artificial lighting. Those in the administration building have little reason to be preoccupied with dirt, dust, and fumes, but complaining about the toxic air in the shops holds a prominent position in workers'



repertoire of grumbling against their working conditions. One day, Emil pulled me out of the break room to show me that labor safety specialists were taking measurements of air quality within the depot. What outraged him to the point of having me record it was that the engineers sampled the air in the administration building and in the courtyard, but never stepped inside the repair halls, as if the air that technicians like him were breathing did not count.

Diesel locomotives are an additional source of fumes in the already dusty workplace. When technicians turn on these engines inside the repair shed, the exhaust fumes make the air in the Diesel repair halls un-breathable. Because of the faulty doors between the halls, fumes from Diesel engines travel to the neighboring electrical locomotive repair shed and poison the air there as well. Although they work in this toxic environment, and their faces get inches from surfaces covered in dust, I have only seen one of the women electricians wear any sort of mask. Technicians' warned me that I might be at a higher risk since I was unaccustomed to breathing in such an environment, but I decided to follow their example and did not wear such protection either. A few months into my fieldwork, after a whole day spent in the electrical repair shop helping workers paint the body of a locomotive, the paint fumes and the exhaust from the adjacent Diesel hall combined to trigger an acute allergic rhinitis that turned chronic with time. Three years after finalizing field research at the depot, I am still under daily medication for this condition.

Thus, sensuously experienced, the environment of the depot differentiates between types of employees. Hot and cold alternation, drafts, booming noises and the hum of electrical machines, the obscure darkness that engulfs the halls and the machine rooms, and the foul air littered with dust and fumes that coat everything in the sheds, including workers' skin, clothes, and hair, make the repair facilities much more inhospitable than the cushy offices of

management, and take a more severe toll on the bodies and minds of Locomotive Repair workers than on their bosses and on CFR Călători employees.

### **Abjection: Negotiating dirtiness, subverting class**

Workers in degrading environments like these often have a pronounced sense of abjection, as they perceive their stigmatization both on the job and in the outside world. The following example illustrates how workers' stigma emerges from interactions with their superiors. One late morning in 2016, Johnny was rummaging through a cardboard box filled with used graphite electrical brushes, manually sorting the ones that could be reused. As is customary among working-class Romanian men, I put my hand out to shake his as a form of greeting, but he had me shake his forearm instead, shielding away his soot-covered palm in a clenched fist. "You're like that German guy," he said. The "German guy" he was referring to was a high-ranking engineer whom he had met while working for a major Romanian oil company, now owned by a German conglomerate. "He shook my hand, just as dirty as it is now, and he didn't care at all. He carried himself around with a dirty palm all day, he didn't even wash," Johnny recounted in a tone that indicated appreciation for the said German. "That's what I call respect, not the way they [his superiors from the repair shop] act around here, like it's a shame to get dirty and shake a worker's hand." Indeed, at the time of my fieldwork, relations were rather tense between management and workers. There were many instances of bosses scolding the workers and the workers challenging their managers' technical competence in public. Yet, technicians were most aggravated by the comportment of one particular engineer in his late twenties. The said engineer never shook hands with them, nor did he ever salute or respond to the greetings of the workers he supervised or, for that matter, mine. This attitude that technicians and some

engineers considered an undue performance of rank and superiority, earned the engineer the nickname "Zeus."<sup>86</sup>

Besides being cast as inferior in their interactions with managers, depot technicians were also aware that their bodies might be indexed as filthy and subaltern outside of the workplace, as was the case with Copilu's efforts to clean himself before taking a bus home and with fellow travelers moving away from me in the subway. Gică, who commutes home by train at an hour when only the more expensive InterRegio express trains run in that direction, is frequently concerned with dirt that invades the folds between his fingers. "I don't want people on the train to say <look at that filthy guy> ("uite la jegosu' ăla")." Like Gică, Codruța, who travels to her home in a high-rise district of Bucharest by subway, is also embarrassed at the thought that people might judge her negatively because of how her hands look like:

My hands are always dirty and chapped from all this dust, dirt, and alcohol that I use to clean the contacts. I'm embarrassed to hold onto the bars in the train. Even my husband mocks me, he says <look at those hands you've got, they're uglier than mine>. And he's a truck driver, you know..."

Around the world, workers who had been used to or expect better treatment, given the important value that they associate with their work, do not quietly accept a stigmatized class position. Scholarly research has shown, for instance that workers negotiate their forced exposure to dirty and harmful conditions and the polluted status associated with such environments in a variety of ways. These range from mass spirit possession among female workers in Malaysia (Ong 1987) to embracing dirtiness as lending value and meaningfulness to their work (Ashforth

---

86. That none of the engineers have received remotely flattering nicknames from their subordinates is indicative of the chasm between administration and labor. The aliases by which the workers refer to them in their absence range from neutral to downright offensive. The head of the repair enterprise is dubbed Codiță ("Little Ponytail"), a reference to his long, head banger hair, but cast in a depreciative diminutive construction. Another engineer is dubbed Drona ("The Drone"), as workers say he is always spying on them to report to his superiors. The chief-engineer of the electrical locomotives workshop, a tall man who walks with a limp after having survived bone cancer in his leg carries the demeaning nickname Little-Leg-Head-in-the-Shower ("Picioaruș cu capu-n duș") a pun mocking his height and disability.

et al. 2007; Ramirez 2011), joking about their condition (Bolton 2005; Jervis 2011) and to imagining practices of order and cleaning on the job as productive labor (Hayes 2019: 10). Bucharest Depot workers employ their own peculiar mechanisms of negotiating exposure and stigma. These tactics enable them to recuperate some degree of agency over their bodies and their workspaces, to communicate their discontent, and to subvert hierarchical relations on the shop floor as well as their broader class designation in society.



*Illustration 53. Chalk reads: "European Workman."*

Technicians grumble incessantly about working conditions and express such concerns in a variety of ways. They bring up these issues with their branch trade union leaders, whom later materialize their complaints in petitions that they print and paste onto the windows of the main administration building. Many of the walls in the Depot carry jocular inscriptions through which technicians poke fun at their condition and point to their aspirations for better standards and conditions. Posters affixed on the walls of the central administration building speak of

disappointment with the present and of fears for the future. Large letters written in blue marker that read "permanently CANCELED" run prophetically across the train schedule displayed in the train drivers' waiting room. Other posters express frustrated hopes of modernization. On the door of the dispatcher's office, a page cut out from the yearly calendar of Alstom, the multinational company that produces high-speed trains, shows a Virgin train parked in Manchester Central Station. In a corner, someone jokingly wrote in red ink "Titu Station 2016."<sup>87</sup> On another poster that depicts the high-tech trains that serve Singapore's ultramodern subway system, the same hand had scribbled "Bucharest Depot 2029." In the repair sheds, emphasis falls on the poor material conditions of work. On a shed's door that had been stuck open for many years, someone wrote in chalk "Shut the door! Air-conditioning is on!" mocking in a single move both the ruination of the door, and the improper airing of the workspaces. On a supervisor's office door, another worker chalked the words "European master workman ('mastru European')", ridiculing the gap between working conditions and their bosses' demands for high quality work. Technicians from the square shed manifested their discontent for the present and fear for the future in a different register. They keep an advertisement flyer from a funeral home behind the glass door of their medicine cabinet, as if to say that the age of health has passed, and death is on its way.

Dirty work intersects in ambivalent ways with ideologies of masculinity and gender. On the one hand, male workers link their hard and dirty jobs and with masculine pride. "We're dealing here with plants on wheels!" said Mihnea, a former depot director in an interview. "The Depot is not a hospital, nor a clockmaker's workshop. It is not a job for people who wash their hands obsessively, who can't eat without cutlery and require a tablecloth." Their association of dirt with masculinity, ruggedness and rule breaking, leads male workers to take upon themselves

---

87. Titu is a town some 50 miles North of Bucharest, a main feeder of commuting labor for the Bucharest.

the dirtiest of tasks. In ways that recall theorizations of gender in relation to public/private distinctions in state-socialism and after, women are never required to scrub tallow from a locomotive's snowplow or to drain filthy water from a busted pipe. Men always do such public tasks. On the other hand, as I will discuss in more detail below, women are in charge of the more domestic spaces at the depot, such as the break room, tasks in which men participate sparsely and reticently.



*Illustration 54. Undertaker services ad in first aid box.*

By coding their jobs as dirty and masculine, many male technicians embrace dirtiness by refusing to don protective equipment. Certain kinds of dirt are indexed as valuable, unless they become filth, which is always associated with harmfulness and offense. During my stay at the Depot, only Codruța and Mărioara wore latex gloves, and very rarely themselves. Such reticence towards wearing protective gear tends to be a feature of Eastern European workers in general and Romanian electricians in particular. According to a recruiter who works for a major infrastructure company in Romania, older electricians are difficult to convince to wear safety equipment. This

makes them very prone to electrocution (I.P., personal communication), partly because they are used to relying on their tactile senses in their repair work, and partly because they tend to consider protection as effeminate, in contradiction to cultural notions of masculinity in industrial work. In industrial settings, one's willingness to get one's hands dirty and to shun protection may also be part of in the performance of masculinity (see Edelman 1993 on Swedish railroaders; Jderu 2014 on Romanian motorcycle repairmen). Popică, for example, associated clean work with effeminacy:

Adrian: Would you like to work in a clean environment?

Popică: Very clean, no. Like where, a watchmaking shop, of what?

Adrian: I don't know, in a clean place, like in an office.

Popică: I can't stand office work. I was an active man, and I still am. I am not passive. [Laughs loudly]. Talk about speaking implicitly. (Emphasis mine)

One can easily notice here an overlay between gender and class, where working class men valorize their own masculinity vis-a-vis the feminized elite. Nevertheless, the conditions at the depot and the broader social degradation of masculine working-class identities make such perceptions of dirt more ambiguous. Some felt that the decay of working conditions was a direct attack on their manhood. Emil, an electrician in his fifties, confided in me one day that the poisoned air at the depot renders him quasi-impotent. "Only on holidays, after I spend a week away from here, in the countryside, where the air is fresh, I can get it up." In such reflections, workers regularly connected the passing of a system of workplace order with the dissolution of an agentive subject. That is, of a subject who works well, is healthy, strong, socializes, and enjoys sexual prowess (also see Rajković 2017). Copilu's case detailed in the snapshot preceding this chapter offers another illustration of how dirtiness upsets gender and class identities. Copilu' is from Ferentari, a working class neighborhood in the South of Bucharest that has a reputation for crime associated with its working class population, Roma dwellers, and prominent use of

heroin.<sup>88</sup> In neighborhoods such as these, the ideals of masculinity have switched toward a more metrosexual appearance: tough guys, swindlers, pimps, and drug pushers go to the gym, take care of their hair and nails, shave their armpits and wax their legs, frequent tanning salons, and wear expensive branded clothing. I surmise that Copilu's purification was directed to the eyes of this particular audience. One cannot be a *șmecher* ("wise guy") by holding down an industrial job that makes him dirty.

Besides complaining, joking, and boasting about masculinity, Depot workers also mitigate stigma by organizing patterns of inclusion and exclusion around contact with dirt. For instance, my willingness to get my hands and clothes dirty by cleaning parts and tools and sharing with them the same toxic air in the shed, earned me workers' respect and the label "one of us," so coveted by ethnographers. "Look at Adrian, he's down with getting dirty, and he doesn't even have to, he's a visitor, and he doesn't work here," Popicã once told one of his teammates, as I was wiping a cable with a cloth soaked in diluted alcohol. "You're one of us now," he added, turning to me to give a slap on my back. Alongside eating and drinking together, filth and fumes were other types of shared substances that led to the establishment of rapport.

The upkeep of the breakroom is another tactic by which workers create a sense of belonging. Although workers find cleaning the more public workspaces and amenities in the roundhouse and in the locker-rooms demeaning, they do take good care of their quasi-domestic space of their break room, especially when goaded by female workers. Codruța sweeps and mops the floors and the space right outside the break room, wipes the workbenches clean, and replaces the plastic tablecloth. Several times a year, usually in the proximity Easter and Christmas, the holidays that prompt a frenzy of cleaning in Romanian households (see Drazin 2001), Codruța

---

88. This is largely a misperception fueled by racist reports in the media rather than a reality on the field. While poverty is indeed rampant in the neighborhood, crime levels are actually among the lowest of the districts in Bucharest, a city with low levels of criminality compared to the majority of European capitals.



goes up to clean the bosses' office (voluntarily she claims). Due to her involvement in the management of the break room, Codruța often operates as an enforcer of physical and moral cleanliness. She scolds her male colleagues for entering the break room with dirty shoes, for not taking out the trash, leaving food to decay in the fridge, or for disposing improperly of cigarette butts.<sup>89</sup> On occasion, she also cajoled the male rookies to scrub their hands properly and to put their overalls in the wash. In her presence, male technicians are also careful to police their talk. When Codruța is present in the workshop or in the machine room of a locomotive they will refrain from cursing or using smutty language, or if they accidentally let one slip, they apologize immediately to her. It was the case one summer morning, when workers from several sectors had gathered for coffee and chat in front of the electrical workshop. Unfortunately for him, Simion, a Diesel technician, had yelled his trademark phrase "eat my cunt, lick my asshole," exactly when Codruța was coming out of the room. She shortly ordered the men to go "back to their workshops and stop talking like that here," and they quickly conformed.

Whereas workers are invested in taking care of their domestic spaces, they manifest the exact opposite attitude toward the derelict spaces outside of their break room. In many ways, when forced into abjection, it seems that they assume agency themselves over the very production of said abjection. For example, workers are partially responsible for the bad state of the lavatories at the Depot. People piss and shit all over the floor of the toilet stalls and in the trash baskets. On several occasions, I was struck by realizing that shit was smeared on the walls. For this reason, a handwritten sign on the door of one of the toilet stalls read, "mind your cleanliness. Civilize yourselves," while the door of the neighboring stall read "be human!" Only those deemed uncivilized, indeed sub-human would use such wretched facilities, the sign

---

89. One day, Codruța gave me a serious scolding for having flicked cigarette butts on the pavement in front of the shop, instead of using the ashtray she had improvised. Although several technicians had told her that it couldn't have been me, because I am cultured and polite, unlike them, she insisted it was me because the cigarettes were Dunhill, an overtly middle-class brand.

implies, and when they do, they behave like animals. Under these circumstances, many male workers prefer to relieve themselves in the open, between two retired locomotives, a place they refer descriptively rather than jokingly to as their "restroom." Workers sometimes counter their own pollution and stigma by acting themselves as polluting agents, harnessing the dangerous qualities of dirt as a kind of power. Johnny recalls having squeezed the hand of the "German guy" with particular strength to make sure that the filth from his hands transferred onto the boss's palm (see Rhodes 2004 for similar findings regarding prisoners' use of bodily fluids to pollute the prison and to contaminate guards).

If shared exposure to polluting and harmful substances and the sharing of cleaning chores in the break room can build relations of solidarity, discourses surrounding dirt can also produce distinctions and subvert hierarchies. For example, when faced with the results of CFR Călători driver polluting the machine room with bodily fluids, repairmen complain that drivers look down upon them and treat them like janitors. They counter their subaltern position by criticizing the drivers' immorality: they are the dirty ones for littering not the technicians who clean after them. "The drivers are filthy," Mihai, the rookie said one day, while he was carrying a heaping dustpan after having swept the inside of a locomotive. "They should maintain their machines, for they spend more time on them than at home, instead of letting others scrape and wash after them."

Likewise, they critique their bosses for the predisposition to avoid getting dirty at all and being overdressed for the job. Viorel, the eldest worker in the crew, once scoffed at one of his supervisors:

Look at that inspector right there, the one in the starched shirt. How do you think that guy is going to get under the locomotive to verify the repairs if he's dressed like that? Back in the day, we had career dispatchers and revisers, not like now, the kind [of professionals] that are made on a conveyor belt.

While they criticize contemporary management behind their backs, workers like Viorel speak fondly of engineers and foremen that had been trained under state-socialism. Unlike their current superiors, most of whom had occupied a leadership position immediately after graduating from the Polytechnic University, under socialism foremen and engineers used to be promoted from the rank and file, which meant they had learnt all aspects of the trade by climbing the ladder, and they were habituated to manual labor. The difference between current engineers and the old school ones, as well as between engineers and technicians is thus often marked by the willingness to do dirty work, a haptic form of distinction between those who touch soiling materials and those who do not need to. This points to a subversion of the entrenched seniority system of the railways (see Gamst 2003 on craft seniority among American and Canadian railroaders).

Finally, a note on the ways that workers negotiate their appearance in public by attenuating exposure and by cleaning themselves is in order. Dirt avoidance appears in the literature as a chief strategy of practical and symbolical self-protection among dirty workers (Ashforth and Kreiner 1999; Tracy and Scott 2006). Such dirt avoidance is made possible by protective gear and tools that put distance between a worker's body and sources of pollution. This is rarely the case at the Bucharest Depot. The enterprise does not arrange for overalls to be cleaned on site. Because of this, the workers from the electrical repair shop have passed around the hat to collect money to buy a used washing machine, which they keep in the workshop and use periodically to wash their overalls and hand towels. The workplace provides technicians very rarely with overalls, heavy-duty gloves, towels, personal nailbrushes, de-greasing paste, and hand cream. Many of the workers often wear second-hand overalls that they bought themselves

at flea markets.<sup>90</sup> Even when such protective or personal care items are available, they often cause discontent and friction between workers and management. In 2018, for instance, the national media reported widely that the state-owned locomotive repair enterprise had bought new protective gear for their workers, but it turned out that the contracted firm had delivered used overalls, some of them bearing the Mercedes-Benz logo. In another instance, Emil insisted that I take photos of the heavy-duty gloves they had recently received, and that I write in my notebook that workers were given gloves without insulation, while the foremen and engineers got warm, fur-insulated gloves:

Do you think this is right? What are they doing with them? Have you seen any of the bosses put their hands to work ever? Nooo! But look at the gear we got. And then they say we're not doing our work right. But what to work with? With these?

Recently, the rules of de-greasing paste and skin care product distribution had also changed, much to the discontent of technicians. These products were distributed monthly on an individual basis, but since 2015, the enterprise has provided one vat of paste and one tube of cream to be shared by two workers. This change prompted many to not accept them, as they considered sharing them a breach of personal hygiene.

Under such circumstances, Depot technicians place great emphasis on cleaning their bodies and changing their clothes after work to erase some of the most visible markers of class. On one level, the removal of dirt from workers bodies is indeed guided by practical rationalities. The toxic materials technicians encounter may pose risk of injuries (if one slips on an oily mat or drops a greasy tool) or long-term health hazards, as they may cause dermatitis, skin cancer, respiratory problems etc. However, such mundane practices are not only directed towards health concerns, but often concern the public presentation of workers, their social skin, as it were, as

---

90. The fact that flea markets and second-hand clothing shops in Bucharest often have dedicated sections for working gear is indicative of a generalized trend of labor undersupply.

they may index them as filthy workers in public places. Mihai, the rookie who sneaks out every day to play the slot machines, place football bets, and buy lottery tickets, performs a ritual every time he goes to the betting arena across the street. First, he washes his hands thoroughly, then he wipes his shoes and trousers with a damp cloth. Also, he sheds the top of his overalls, and goes out in his shirt or, if the weather is too cold, he puts on his street jacket.

Getting changed is part of all Locomotive Repair workers daily routine. While CFR Călători clerks and drivers wear their street clothes at work, and Locomotive Repair engineers and foremen sometimes throw a work overcoat over their regular clothes, workers first change their city clothes ("haine de oraş") for work clothes in the lockers. The same ritual marks the end of a workday, when workers discard their soiled clothing, take a shower and scrub their faces, necks, arms, hands, and fingernails vigorously to get the dirt out, and put on their city apparel. Only after going through all these motions do they finally leave the depot premises. Given this need to go through the locker rooms twice a day, technicians' workday can be, on average, between 30 and 60 minutes longer than that of other depot employees. For some of the female technicians, the cleaning ritual continues at home, and may involve quite a bit of suffering:

Adrian: How do you take care of your hands?

Codruța: Creams, and stuff like that...Oooh, lemon zest, I rub them with lemon zest before bed. It really stings, but it cleans well.

Adrian: What about manicure?

Codruța: Manicure, no. Maybe rarely, for special occasions, but it won't hold here. I can't use gloves like Mărioara does, because I can't sense the contacts.

## **Conclusion**

In a Central and Eastern European context, such feelings, informed by decaying material conditions, are illustrative of "the sentiments of disenchantment and desires for state care and belonging," that Cristina Schwenkel terms "postsocialist affect" (2013: 257). On the one hand,

workers' nostalgia for a less precarious existence (Muehlebach and Shoshan 2012: 325) serves them to critique the postsocialist socioeconomic matrix that circumscribes their material and symbolic dispossession (Carbonella and Kasmir 2014). Such forms of nostalgia loom in the workshops and repair sheds of DB-C. A portrait of Romania's last communist leader, Nicolae Ceaușescu, salvaged by a worker from the rubbles of a shuttered ticketing agency in Bucharest, lies affixed on a wall in the overhaul plant, above a pile of scrap metal. Facing Ceaușescu on the opposite wall, hangs the portrait of a smiling Ion Iliescu, Romania's postsocialist president between 1990 and 19906, the last one to call for the protection of industrial jobs.

Nostalgia, however, is not only directed toward the past, but can also be instrumentalized in the present for future effects. By juxtaposing a perceived golden age of the past with their contemporary debasement, the railroader workers fashion themselves virtuous victims of neoliberalization who adapt and make do with present conditions (Petrovic 2010; Kojanic 2015). At the same time, it also underpins workers' demands for a better future. Pleas for the restoration of lost privileges and access to clean work conditions color Romanian railroaders' public political protests alongside their demands for than higher wages. On February 16, 2017, I attended a demonstration staged by railroaders from all the branches and occupations of the splintered national railroad system in front of the Ministry of Transportation. There should be little wonder that the protest took place on that particular day. February 16 marked the 84<sup>th</sup> anniversary of the 1933 strike at Grivița Workshops (discussed in Chapter 2), when impoverished rail workers rose against crippling policies of austerity and were mowed down by the gendarmerie. This was not only a turning point for the livelihood of proletarians in interwar Romania but had also become a chief symbolic instrument by which communist propaganda hailed and recognized railroaders' class consciousness and hard-earned rights. "The current situation of employees in the rail

system doesn't differ much from those of 1933: miserable wages, benefit cuts, miserable work conditions, and humiliation," one of the protest's informal leaders bellowed into a loudspeaker. It was as if all that railroaders had gained in the past eight decades had been erased, and their struggles were back to square one. "We used to be respected," said Ilie, a shunter who makes minimum wage, frustration in his voice. "We're nothing but rags now."



*Illustration 55. Nostalgia. Portrait of Nicolae Ceaușescu in a work shed.*



*Illustration 56. Nostalgia. Picture of Ion Iliescu in a work shed.*

Their placards painted a disconcerting state of debasement, injury and humiliation. One held up a cardboard reading "what I wear reflects what you are paying me." A woman clutched a sheet of paper bearing the message "you have turned all railroaders into janitors," while another man's sign lamented that "Railroader = unskilled worker." But none encapsulated the kernel of the protest better than the man who held up a caricatured depiction of a railroader with his empty pockets turned inside out superimposed with the following message: "We want respect!" Railroaders' struggle for respect stood for a mix of demands for redistribution and recognition, inseparable dimensions of working-class movements. On the one hand, railroaders asked for more state investment in railroad transportation, better salaries and the restoration of lost benefits, the improvement of their decaying work conditions, and the hiring of more workers to overcome the staggering deficit of personnel. On the other hand, they also demanded the legal recognition of the special character of transportation labor. Chief among their requests was the passing of a bill that recognizes the changed character of railroad work, similar to those that had



consecrated in the past two decades the rights and duties of other categories of public servants like teachers, police forces, the military, and public healthcare workers. Among others, the legislative project, that had been stuck in the Parliament for more than five years by now, would recognize that the decrepit material conditions of their workplaces and the high responsibility that comes with the job can lead to mental stress and physical suffering, and allow them to retire earlier without having their pension docked.



*Illustration 57. Protest sign: "You have turned all railroaders into cleaning women"*

## CONCLUSIONS

I began writing the conclusions on board of an Amtrak train traveling from Chicago to Colorado. As I write this, I type frantically before the battery of my laptop drains completely, and I sweat profusely because of the suffocating heat in the California Zephyr's restaurant car. After months of Covid-19 lockdown, I took a train heading to California that crossed the Midwestern plains and the Rocky Mountains. To my mind, this transcontinental route carried the idyllic promise of freedom from the suburban confines of the small university town where I live, study, and teach. At the same time, I was also aware of that American railroads stood not only for a sense of freedom and cultural transformation, but also has a dark past that spills onto their present. In his 2002 monumental historical study of the expansion of transcontinental railroads during the Gilded Age, Richard White cautions that powerful railroad corporations captured the state, and the two worked together to bolster the capitalist exploitation of the West by uprooting Native settlements and pacifying immigrant labor through sheer force. Keeping these complex histories in mind, I was hoping to reflect on the variegated and often conflicting meanings that a large-scale infrastructure has in different parts of the world, for various people, and in different historical eras and political-economic contexts. A pretext to think about why many Americans, including members of my dissertation committee, are less inclined to be nostalgic about the benefits of an industrial epoch of state paternalism for which the Romanian railroaders alongside whom I worked were nostalgic. I was afraid, and I still am, that I might have reproduced the latter's affective discourse perhaps too uncritically in many pages of this dissertation. Historically, the laying of infrastructure has often been a process fraught with conflict and rife

with exploitation and patronage, and public ownership of railroads and other such amenities around the has not always meant that the promises of development were delivered or that they were as universally accessible as even the most socialist of governments claimed them to be.

A few hours into the trip to Denver, the meditation kindled by the train's gentle slithering through the plains of Illinois dissipated, and familiar elements from my long-term fieldwork among train passengers and rail workers in Romania invaded the Western reverie. Both of the Diesel locomotives broke down while the train waited for a draw bridge to go down and allow it to cross the Mississippi River into Iowa. This one technological failure impaired all the other technologies linked to it. Without the power generated by the engines, there was no electricity in the train, no illumination, no air-conditioning, and no way to buy drinks or food (Amtrak only accepted card payments during the pandemic, and the POS system would not work without electricity). Being stranded on tracks in the middle of nowhere, in a train lacking internal lighting and ventilation was a familiar experience to me. It was much like the infuriating situations in which Romanian rail passengers often find themselves in when trains get delayed that I describe in Chapter 3. It was another testimony that regardless of the kind of infrastructures, technical objects are always vulnerable to failure, and their breakdown does things to people's bodies and emotions.

The prolonged stoppage and the impending tardiness of the California Zephyr displeased American passengers spending time in the restaurant car – a fashionable Black American couple, a white Chicago family with five kids visiting relatives in Idaho, a numerous Mennonite family, and a young Black woman headed to a job interview on the West Coast. There was some angry mumbling, outraged phone calling, and even the occasional polite interpellation of uniformed Amtrak staff. Yet, if the first order embodied and affective experience was strikingly similar to

that produced by late trains in Romania, the secondary order of interpretation seemed to be vastly different. My American co-travelers grumbled about Amtrak-the-company, but none called the U.S. a “backward shithole” because the train was not on time, nor did they blame the federal or state governments of being “too dumb to do shit”. Had this happened on a train run by *CFR Călători*, I would have braced myself for hearing long histories of how the national industry was dismantled and robbed after Communism, for animated talk about how the state is useless, politicians are corrupt, and citizens are accomplices because of their apathy, and for the ubiquitous self-Orientalizing discourses about how nothing works well in Romania because of people’s “mentality.” While also publicly owned, albeit in a different scheme of ownership and institutional organization, Amtrak is far from being the metonymic stand-in for the state and the polity in the way CFR Călători is for Romanians. Also, trains are incomparably less salient in the U.S. than in Romania. These differences point to how what I call “infrastructure regimes” influence embodied experience and orient interpretation among users. Put differently, looking at the institutional structure and the links of the human and non-human elements that participate in their configuration is not enough to understand the workings of infrastructures. One also needs to consider the diverse experiences that they engender, and the ways these material structures are inflected ideologically.

Taking stock of the people, the knowledge, and the material practices that underpin the functionality of machine ensembles should also be an integral part of studying infrastructures. The same pattern of similarities and differences between my fieldwork in Romania and the Amtrak trip to Colorado continued when it came to the mending of the two broken engines. It took the engineers on board nearly three hours to improvise a temporary fix that partially powered one locomotive enough to pull us into the nearest station across the Mississippi for

more in-depth repairs. I expected that someone in charge would have phoned by then for replacement locomotives that should have been waiting parked. If not, I was sure that a technical team ready to work wonders on the two busted engines was waiting in Burlington, Iowa. However, no replacement machines made an appearance, and the station was completely deserted, much to the dismay of the hungry passengers in search of food supplies. Rail staff did their best to placate the disgruntled passengers who grew impatient while onboard engineers worked with whatever they had on them, much like the locomotive repair crews at the Bucharest Depot whose *bricolage* work and struggles with the degradation of their workplaces, social status, and job satisfaction I documented in Chapters 4 and 5. After five excruciatingly long hours of growing uncertainty and irritation among passengers, the struggles of the engineers finally paid off, and the wheels of the California Zephyr eventually began rolling. We reached Denver the following day, seven hours later than scheduled. From there, the train continued without me on its way to Northern California maybe accruing more delays, or, who knows, making up for the lost time. One thing was sure: The Zephyr's staggering tardiness did not make the news. I checked every day for a week for any reporting on the issue. In Romania, such an incident would have garnered acrimonious live broadcasting from national TV stations.

This dissertation is an ethnographic exploration of how infrastructures are managed and organized, and of the degenerative and generative powers of material brokenness and repair. In so doing, it employs an interdisciplinary mixture of political economy, STS, semiotics, and labor studies, and uses the Romanian rail industry as in-depth case study. Theoretically, it builds in the space opened up by STS attention to the works of institutions and to the relations between loosely connected elements of infrastructural networks, while also retaining a phenomenological sensibility to embodiment, and a semiotic focus on materially inspired political narratives, labor

practices, and social differentiation. This is consistent with a view of infrastructures as more than mere objects of engineering: they articulate loosely and often conflictingly a wide array of policies, institutions, material objects, bodies, and forms of knowledge.

In the past four decades, the massive infrastructural assemblages that have underpinned modern states and have enabled large-scale political formations and a certain sense of collective living have undergone momentous transformations globally. This dissertation looked specifically at how the postsocialist unmaking and remaking of a tightly integrated socialist-era infrastructural system that was imbued with modernist ideologies of centralization and welfare have begotten messy *sui generis* organizational forms and functional disharmonies. The reorganization of the Romanian Railways, a monolithic state-run enterprise, into smaller state-owned firms that are still dependent on one another in various ways and continue relying on public funding can be compared to a shoddy repair job on something like a bicycle. In an attempt to repair some of its faults, the original assemblage was taken apart. Some subassemblies were discarded, others kept in place but made to relate differently to one another, and some extra parts were added. The resulting thing is a different kind of bike that is able to roll, but is very clunky, moves very slowly, and breaks down often. In so doing, it angers the rider, and troubles other mechanics called to mend it who don't really have the supplies to fix it, nor do they understand fully the new contraption that is opaquer than before. At the end of the day, all parts involved blame the original owner of the bike rather than those who botched the retrofit for all its present ills. In the Romanian case, the original owner that is blamed is the state, an otherwise abstract entity that gains flesh when objectified in public amenities such as railroads. Throughout this manuscript, the state appears both as that which is gradually being evacuated from social life, and that which is smuggled back in through pragmatic politicking and through new welfare

policies, and reified by ordinary citizens and railroad workers through political narratives spurred by often revolting encounters with the materiality of public trains.

I thus dwelled on a vast array of antinomies that are simultaneously at play in the sketchily reformed Romanian rail industry: state withdrawal alongside state encompassment, institutional separation but lingering interdependence, infrastructural survival amidst chronic disrepair, heightened need of maintenance services but the devaluation of manual repair labor. These contradictions, I argue, are mediated by and materialized in the material qualities of public infrastructures: tracks in disrepair making trains go slow and be late, the decrepit machines and second-rate supplies forcing technicians to improvise fixes, and the sedimented layers of filth that pollute unkempt rail repair shops making workers feel abject and anxious about their status and about the value of their work. These materialities, the dissertation argues, bear upon the embodied experience and political narratives of train passengers, as well as on the practical work, social relations, and mostly masculine identities of the railroaders tasked with taking care of the tracks and the locomotives and train cars running on them. Exploring the affective and semiotic generative power of railroads in disrepair, I contend, is key to understanding the politics and poetics of infrastructure in a postsocialist context simultaneously marked by enduring politicization of the built environment and by a widening infrastructural gap.

While specifically focused on the context of postsocialist Romania, the findings presented in this dissertation speak to wider problems of infrastructural design, management, use, and maintenance that form the hard currency of politics in many parts of the world. The exploits of the California Zephyr on that day in June 2020 provided a telling comparative framework of train services, as it offered an illustration of how different infrastructural regimes are laid out, how they function, how they are experienced and how they respond to the material

vulnerability of technology. The processes of institutional splintering, privatization of assets, financialization of functional relationships, and marketization of services that I describe in this dissertation are not a Romanian or East European invention. Rather they have been going on globally for decades and have largely become the *lingua franca* of corporate organization and state reform, often leading to contradictory effects that push infrastructural systems into financial crisis and material disrepair or even to the brink of disappearance.

The notion of infrastructural regimes that I propose in this dissertation groups these three dimensions of infrastructure - organization, semiotic-affective representation, and practical labor - under a single heading. Treating infrastructures as “regimes” should enable close comparisons of how the nexus of state, citizenship, and experience mediated by material systems is configured across cultures and socio-economic systems. Drawing empirical evidence from Romania’s dysfunctional railways, I aimed to contour in this dissertation a theory of infrastructure from the East that can help address the role that the built environment has in the political enactment of the state, and the specific affective and symbolic effects of the contemporary condition of public infrastructures that is characterized by permanent disrepair and provisionality.

During these past months, as I was frantically reading world news while struggling to finish this draft of the manuscript, it dawned on me forcefully that the plight of public infrastructures defined *lato sensu* is not just an Eastern European affair. The ongoing pandemic has made it painfully clear that predatory neoliberal policies have rendered vital systems excessively vulnerable to failure in ways that threaten the wellbeing and the very life of those underprivileged social categories that depend on these public amenities and of the workers who staff and maintain them. At the same time, it has spawned some promising forms of alternative collective organization meant to correct the failures of traditional systems of care, and has



bestowed some symbolic recognition (not pecuniary, though!) onto essential workers like the locomotive technicians who toil at the Bucharest Depot. As this dissertation has demonstrated, workers' lives, their identities, social relations, and sense of value are deeply linked with the state of their industry and of the machines that they service.

An Eastern European perspective can thus be of particular help in understanding the state of increasing disrepair of infrastructures in the West and the plight of the manual workers on whose workmanship hinges the ultimate survival of such amenities of collective life. Post-Communist countries in Eastern Europe might not have reached the infrastructural standards of an imagined Western hypermodernity, but Western infrastructures are now catching up with Eastern ruination. Differences in how governments and citizens have responded to the Covid-19 crisis are also revelatory for the forms of resilience and breakthrough that this dissertation discusses in relation to another critical system. As the international media reports, Eastern European countries have been initially more successful in managing the pandemic than their Western counterparts. I would attribute this partially to the residual power that postsocialist states have retained despite decades of anti-state policies, but also to Romanians and Bulgarians being viscerally fearful of the vulnerability of public systems. Many derive such an awareness from direct embodied experiences with the degraded and degrading healthcare systems or, for that matter, with the railroads, and from an understanding that the resources employed in making infrastructures operational and safe are dwindling.

## BIBLIOGRAPHY

- Allerton, C. 2007. "The Secret Life of Sarongs: Manggarai Textiles as Super-Skins." *Journal of Material Culture*. 12(1): 22-46;
- Altshuler, D. 2001. "Tunneling Towards Capitalism in the Czech Republic." *Ethnography* 2(1): 115-138;
- Anand, N. 2011. 2011 "Municipal Disconnect: On Abject Water and its Urban Infrastructures". *Ethnography*. 13(4): 487-509;
- 2012. 2012 "PRESSURE: The PoliTechnics of Water Supply in Mumbai". *Cultural Anthropology*. 26(4): 542-564;
- Anand, N., H. Appel, and A. Gupta (eds). 2018. *The Promise of Infrastructure*. Durham: Duke University Press.
- Appel, H. 2012. "Walls and White Elephants: Oil Extraction, Responsibility, and Infrastructural Violence in Equatorial Guinea". *Ethnography*. 13(4): 439-465;
- Archer, R. 2018. "'It Was Better When It Was Worse': Blue-Collar Narratives of the Recent Past in Belgrade." *Social History* 43 (1): 3-55;
- Ashforth, B, and G. Kreiner. 1999. "'How Can You Do It?': Dirty Work and the Challenge of Constructing a Positive Identity." *The Academy of Management Review* 24 (July): 413;
- Bakhtin, M. 1981. *The Dialogic Imagination*. (Edited by Michael Holquist). Austin: University of Texas Press;
- Ban, C. 2012. "Sovereign Debt, Austerity, and Regime Change: The Case of Nicolae Ceausescu's Romania". *East European Politics and Societies*. 26(4). pp. 743-776;
- 2014. *Dependență și dezvoltare. Economia politică a capitalismului românesc*. [Dependence and Development: The Political Economy of Romanian Capitalism]. Cluj: Tact;
- Barker, J. 2005. "Engineers and Political Dreams: Indonesia in the Satellite Age". *Current Anthropology*. 46(5): 703-727;
- Bauman, Z. 1991. "Living without an alternative." *The Political Quarterly*. 62(1): 35-44;

- Bean, S.1981. "Toward a Semiotics of 'purity' and 'pollution' in India." *American Ethnologist*. 8(3): 575-595;
- Bear, L. 2012. "Sympathy and its boundaries: necropolitics, labour, and waste on the Hooghly river," in C. Alexander and J. Reno (eds). *Economies of Recycling: The Global Transformation of Materials, Values and Social Relations*. London and New York: Zed Books, 185-207;
- 2015. *Navigating Austerity: Currents of Debt Along a South Asian River*. Stanford: Stanford University Press;
- Benjamin, W. 1999. *The Arcades Project*. Cambridge, Mass.: Harvard University Press;
- Bennett, J. 2005. "The Agency of Assemblages and the North American Blackout". *Public Culture*. 17(3): 445- 465;
- Berdahl, D. 1999 *Where the World Ended: Re-Unification and Identity in the German Borderland*. Berkeley: University of California Press;
- Berlant, L. 2007. "Slow death (Sovereignty, Obesity, Lateral Agency)," *Critical Inquiry*. 33(4): 754-780;
- Bissell, D. 2009a "Moving with others: The sociality of the rail journey" In Philip Vannini (ed.) *The Cultures of Alternative Mobilities: Routes Less Travelled*. Surrey, Burlington: Ashgate. pp. 55-71;
- 2009b. "Visualising everyday geographies: practices of vision through travel-time". *Transactions of the Institute of British Geographers*. 34: 42-60;--- 2010. "Passenger mobilities: affective atmospheres and the sociality of public transport". *Environment and Planning D: Society and Space*. Vol. 28. pp. 270-289;
- 2010 "Passenger mobilities: affective atmospheres and the sociality of public transport". *Environment and Planning D: Society and Space*. Vol. 28: 270-289;
- Bodnar, J. 1998. "Assembling the Square: Social Transformation in Public Space and the Broken Mirage of the Second Economy in Postsocialist Budapest." *Slavic Review*. 57(3): 489-515;
- Bolton, S. 2005. "Women's Work, Dirty Work: The Gynaecology Nurse as 'Other'." *Gender, Work, and Organization*. 12(2): 169-186;
- Botez, C. et al. 1977. *Epopoea Feroviară Românească*. [Romanian Railways Saga]. Bucharest: Editura Sport-Turism;
- Bourdieu, P. 1986. *Distinction: A Social Critique of the Judgment of Taste*. London: Routledge;
- Bowker, G and S. Star. 2000. *Sorting Things Out: Classification and Its Consequences*. Cambridge, Mass.: MIT Press;

- Brown, B. 1995. "Thing Theory". *Critical Inquiry*. Vol. 28. No. 1, Things (Autumn). pp. 1-22;
- Buciuman, I. 2002. *Elemente Manageriale in Sistemul de Transport Feroviar*. Bucuresti: Artemis;
- Burawoy, M. 1979. "The Anthropology of Industrial Work." *Annual Review of Anthropology*. 8: 231-66;
- Burawoy, M, and J. Lukács. 1992. *The Radiant Past: Ideology and Reality in Hungary's Road to Capitalism*. Chicago and London: The University of Chicago Press.
- Callon, M. 1986. "Some elements of a sociology of translation: domestication of the scallops and the fishermen" In John Law (ed.) *Power, Action And Belief: A New Sociology of Knowledge*. London: Routledge and Kegan Paul. pp. 67-83;
- Carrier, J., and D. Kalb. (eds) 2015. *Anthropologies of Class: Power, Practice, and Inequality*. Cambridge, UK: Cambridge University Press.
- Carroll et al. (eds.) 2017. *The Material Culture of Failure: When Things Go Wrong*. London: Bloomsbury;
- Carson, R. 1975. "Property Rights" In C. Mesa-Lago and C. Beck (eds.) *Comparative Socialist Systems: Essays on Politics and Economics*. Pittsburgh: University Center for International Studies. 317-47;
- Chandler, A. 1965. "The Railroads: Pioneers in Modern Corporate Management." *The Business History Review* 39 (1, Special Transportation Issue): 16-40.
- 1977. *The Visible Hand: The Managerial Revolution in American Business*. Cambridge: Harvard University Press;
- Chelcea, L. 2002. "The Culture of Shortage During State-Socialism: Consumption Practices in a Romanian Village in the 1980s." *Cultural Studies*. 16(1): 16-43;
- Chelcea, L, and O. Druță. 2016. "Zombie Socialism and the Rise of Neoliberalism in Post-Socialist Central and Eastern Europe." *Eurasian Geography and Economics*. <https://doi.org/10.1080/15387216.2016.1266273>.
- Chu, J. 2014. "When Infrastructures attack: The workings of disrepair in China." *American Ethnologist*. 41(2): 351-367;
- Coleman, L. 2014. "Infrastructure and Interpretation: Meters, Dams, and State Imagination in Scotland and India." *American Ethnologist* 41 (3): 457-72.
- Collier, S. 2011. *Post-Soviet Social: Neoliberalism, Social Modernity, Biopolitics*. Princeton, NJ: Princeton University Press;

- Collier, S and A. Lakoff. 2014. "Vital Systems Security: Reflexive Biopolitics and the Government of Emergency." *Theory, Culture & Society*. 32(2): 19-51;
- Cordes, C. 2005. "Veblen's Instinct of Workmanship: Its Cognitive Foundations, and Some Implications for Economic Theory." *Journal of Economic Issues*. 39(1): 1-20;
- Crawford, M. 2010. *Shop Class as Soulcraft: An Inquiry into the Value of Work*. London: Penguin;
- Cronon, W. 1992. *Nature's Metropolis: Chicago and the Great West*. New York: W.W. Norton;
- Curteanu, C. 2013. "Living the Middle-Class Dream: The Case of SUV Consumption in Romania." MA Thesis, Budapest, Hungary: Central European University.
- Dalakoglou, D. 2012. "'The Road from Capitalism to Capitalism: Infrastructures of (Post)Socialism in Albania.'" *Mobilities* 7 (4): 571–86.
- 2017. "Infrastructural Gap: Commons, State and Anthropology." *City: Analysis of Urban Trends, Culture, Theory, Policy, Action*. <https://doi.org/10.1080/13604813.2016.1241524>.
- Dant, T. 2008. "The 'Pragmatics' of Material Interaction." *Journal of Consumer Culture* 8 (1): 11–33.
- 2010a. "The Work of Repair: Gesture, Emotion and Sensual Knowledge." *Sociological Research Online* 15 (3) (7). <https://doi.org/10.5153/sro.2158>.
- 2010b. *Materiality and Society*. Maidenhead, UK: Open University Press;
- Dant, T, and D. Bowles. 2003. "Dealing with Dirt: Servicing and Repairing Cars." *Sociological Research Online* 8 (2).
- Denis, J., and D. Pontille. 2014. "Maintenance Work and the Performativity of Urban Inscriptions: The Case of Paris Subway Signs." *Environment and Planning D: Society and Space* 32: 404–16.
- 2017. "Beyond Breakdown: Exploring Regimes of Maintenance." *Continent*. 13 (6.1): 56–61
- Dorobanțu, M. 2010. *Locomotiva 060-EA: 40 de ani de la fabricarea primei locomotive electrice în România*. [The Locomotive 060-EA: 40 years since the manufacturing of the first electrical locomotive in Romania]. Milano: ACME Edizioni;
- Douglas 1966. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London and New York: Routledge.
- Drazin 2002. "Chasing Moths: Cleanliness, Intimacy and Progress in Romania" In R. Mandel and C. Humphrey (eds.) *Markets and Moralities: Ethnographies of Postsocialism*. Oxford: Berg, 101-125;
- 2019. "Brokenness and Normality in Design Culture" In F. Martinez and P. Laviolette (eds). *Repair, Brokenness, Breakthrough: Ethnographic Responses*. New York, Oxford: Berghahn;

- Duguleană, C. 2011. "Effects of the economic crisis in Romania," *SEER*. 14(1): 17-25;
- Dumont, L. 1981. *Homo Hierarchicus: The Caste System and its Implications*. Chicago: University of Chicago Press;
- Dunn, E. 2004a. *Privatizing Poland: Baby Food, Big Business, and the Remaking of Labor*. Ithaca, NY and London: Cornell University Press.
- Dunn, E., and K. Verdery. 2015. "Postsocialism." In *Emerging Trends in the Social and Behavioral Sciences*, edited by Robert Scott and Stephen Kosslyn. John Wiley & Sons, Inc.
- Edelmann, B. 1993. "'Acting Cool and Being Safe:' The Definition of Skill in a Swedish Railway Yard." In *Beyond Boundaries: Understanding, Translation, and Anthropological Discourse*, edited by Gisli Palsson, 140–62. Oxford: Berg.
- Edwards, P. 2003. "Infrastructure and Modernity: Force, Time, and Social Organization in the History of Sociotechnological Systems." In *Modernity and Technology*, edited by Thomas Misa, Philip Brey, and Andrew Feenberg, 185–224. Cambridge, MA and London, UK: The MIT Press.
- Thomas Hylland. 2001. *Tyranny of the Moment: Fast and Slow Time in the Information Age*. London, UK and Sterling, Virginia: Pluto Press.
- Evans-Pritchard, E.E. 1976. *Witchcraft, Oracles, and Magic Among the Azande*. Oxford: Oxford University Press;
- Farquhar, J. 2002. *Appetites: Food and Sex in Postsocialist China*. Durham and London: Duke University Press.
- Fehér et al. 1983. *Dictatorship over Needs: An Analysis of Soviet Societies*. New York: Blackwell;
- Fehérváry 2009. "Goods and States: The Political Logic of State-Socialist Material Culture". *Comparative Studies in Society and History*. 51(2): 426-459;
- 2013. *Politics in Color and Concrete: Socialist Materialities and the Middle Class in Hungary*. Bloomington: Indiana University Press;
- Fein, M. 2013. "States of Disrepair: Authority, Conflict and Connectivity in the Age of Infrastructure." *Journal of Urban History*. 39(6): 1168-1174;
- Ferguson, James. 1999. *Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt*. Berkeley: University of California Press.
- Frederiksen, M. and I. Knudsen (eds). 2015. *Ethnographies of Grey Zones in Eastern Europe: Relations, Borders and Invisibilities*. London: Anthem Press;

- Friedman, J. 2007. "Shame and the Experience of Ambivalence on the Margins of the Global: Pathologizing the Past and Present in Romania's Industrial Wastelands." *Ethos* 35 (2): 235–64.
- Friedmann, G. 1961. *The Anatomy of Work: The Implications of Specialization*. London: Heinemann;
- Gaggio, D. 2006. "Pyramids of Trust: Social Embeddedness and Political Culture in Two Italian Gold Jewelry Districts." *Enterprise and Society* 7: 19-58;
- Gamst, F. 1980. *The Hoghead: An Industrial Ethnology of the Locomotive Engineer*. New York: Holt, Rinehart and Winston;
- "Railroad Craft Seniority: The Essence of Railroad Society and Culture (and its "State")." *Kroeber Anthropological Society Papers*;
- Garfinkel, H. 1967. *Studies in Ethnomethodology*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Gatejel, L. 2011. "The Common Heritage of the Socialist Car Culture." In *The Socialist Car: Automobility in the Eastern Bloc*, 143–57. Ithaca, NY and London: Cornell University Press.
- Gibson, J. 1977. 1979. *The Ecological Approach to Visual Perception*. Boston: Houghton Mifflin;
- Geertz, C. 1973. *The Interpretation of Cultures*. New York: Basic Books;
- Gell, A. 1993. *Wrapping in Images: Tattooing in Polynesia*. Oxford: Clarendon;
- 1998. *Art and Agency: An Anthropological Theory*. Oxford: Clarendon.
- Gerasimova, E., and S. Chuikina. 2009. "The Repair Society." *Russian Studies in History* 48 (1): 58–74.
- Gille, Z. 2007. *From the Cult of Waste to the Trash Heap of History: The Politics of Waste in Socialist and Postsocialist Hungary*. Bloomington: Indiana University Press;
- Goffman, E. 1986. *Stigma: Notes on the Management of Spoiled Identity*. New York: Touchstone;
- Goțiu, M. 2012. "Nașul. O poveste" [The Conductor: A Tale]. *VoxPublica*. (Nov. 5). <http://voxpública.realitatea.net/politica-societate/nasul-o-poveste-86599.html>;
- Graham, S, and S. Marvin. 2001. *Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition*. London and New York: Routledge.
- Graham, S., and N. Thrift. 2007. "Out of Order: Understanding Repair and Maintenance."

*Theory, Culture and Society* 24 (3): 1–25.

- Graeber, D. 2018. *Bullshit Jobs: A Theory*. New York: Simon and Schuster;
- Greimas, Algirdas. 1976. “Actants, Actors, and Figures.” In *On Meaning: Selected Writings in Semiotic Theory*. London: Frances Pinter.
- Gordillo, G. 2014. *Rubble: The Afterlife of Destruction*. Durham and London: Duke University Press;
- Gupta, Akhil. 2015. “Suspension — Cultural Anthropology.” Accessed January 26, 2016. <http://www.culanth.org/fieldsights/722-suspension>.
- Haney, Lynne. 2002. *Inventing the Needy: Gender and the Politics of Welfare in Hungary*. Berkeley, Los Angeles, London: University of California Press.
- Hankins, J. 2014. *Working Skin: Making Leather, Making a Multicultural Japan*. Berkeley, Los Angeles, London: University of California Press.
- Hardt, M. 1999. “Affective Labor.” *boundary 2*. 26(2): 89-100;
- Harkness, N. 2015. “The Pragmatics of Qualia in Practice.” *Annual Review of Anthropology*. 44: 573-89;
- Harper, D. 1987. *Working Knowledge: Skill and Community in a Small Shop*. Chicago: Chicago University Press;
- Harvey, P. and H. Knox. 2012. “The Enchantment of Infrastructure.” *Mobilities*. 7: 521-536;
- Hayes, L. 2019. “Managing Dirt: Disciplines of Cleanliness and Contamination at a Kentucky Auto Parts Factory.” *Ethnos: Journal of Anthropology*. <https://doi.org/10.1080/00141844.2019.1614642>.
- Heinze, W. and H. Kill. 1988. “The Development of the German Railroad System” In R. Mayntz and T. Hughes (eds.). *The Development of Large Technological Systems*. Frankfurt: Campus Verlag;
- Henke, C. 2000. “The Mechanics of Workplace Order: Toward a Sociology of Repair.” *Berkeley Journal of Sociology* 44: 55–81.
- Henning, P. 1998. “Ways of Learning – An Ethnographic Study of the Work and Situated Learning of a Group of Refrigeration Service Technicians.” *Journal of Contemporary Ethnography*. 27: 85-136;
- Hitchings, R. and S. Lee. 2008. “Air Conditioning and the Material Culture of Routine Human



- Encasement: The Case of Young People in Contemporary Singapore.” *Journal of Material Culture*. 13(3): 251-265;
- Holvad, T. 2009. “Review of Railway Policy Reforms in Europe.” *Built Environment (1978-)* 35 (1): 24–42.
- Honneth, A. 2001. “Recognition of Redistribution? Changing Perspectives on the Moral Order of Society.” *Theory, Culture & Society*. 18(2-3): 43-55;
- Houston, L et al. 2016. “Values in Repair.” Proceedings of the 2016 CHI conference on human factors in computing systems. 1403-1414
- Howe C., J. Lockrem et al. 2015. “Paradoxical Infrastructures: Ruins, Retrofit and Risk.” *Science, Technology, & Human Values*. 41(3): 547-565;
- Hughes, E. 1981. *Men and Their Work*. Westport, Conn: Greenwood Press.
- Hull, M. 2003. “The file: agency, authority, and autography in an Islamabad bureaucracy.” *Language and Communication*. 23: 287-314;
- 2012a. *Government of Paper: The Materiality of Bureaucracy in Urban Pakistan*. Oakland: University of California Press;
- 2012b. “Documents and Bureaucracy.” *Annual Review of Anthropology*. 41: 251-67;
- Humphrey, Caroline. 2003. “Rethinking Infrastructure: Siberian Cities and the Great Freeze of January 2001.” In *Wounded Cities: Destruction and Reconstruction in a Globalized World*, edited by Ida Susser and Jane Schneider, 91–111. Oxford and New York: Berg.
- 2005. “Ideology in Infrastructure: Architecture and Soviet Imagination.” *The Journal of the Royal Anthropological Institute* 11 (1): 39–58.
- Ibrahim, G, and V. Galt. 2002. “Bye-Bye Central Planning, Hello Market Hiccups: Institutional Transition in Romania.” *Cambridge Journal of Economics* 26: 105–18.
- Ingold, T. 1997. “Eight Themes in the Anthropology of Technology.” *Social Analysis* 41 (1): 106–38.
- 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. New York and London: Routledge;
- Iordănescu, D. and D. Georgescu. 1986. *Construcții pentru Transporturi în România*. Bucharest: Centrala de Construcții Căi Ferate;
- Jackson, S. 2014. “Rethinking Repair.” In *Media Technologies: Essays on Communication, Materiality, and Society*, edited by Tarleton Gillespie, Pablo Boczkowski, and Kirsten Foot, 221–40. Cambridge, MA: The MIT Press.
- Jansen, S. 2014. “Hope For/Against the State: Gridding in a Besieged Sarajevo Suburb.” *Ethnos* 79 (2): 238–60.

- Jderu, Gabriel. 2014. *Cultura Motocicletelor: Studii de Sociologia Moto-Mobilității [The Culture of Motorcycles: Sociological Studies of Moto-Mobility]*. Bucuresti: Tritonic;
- Jervis, L. 2011. "The Pollution of Incontinence and the Dirty Work of Caregiving in a U.S. Nursing Home." *Medical Anthropology Quarterly*. 15(1): 84-99;
- Jovanović, D. 2019. "The Thermodynamics of the Social Contract: Making Infrastructures Visible in the Case of District Heating in Two Towns in Serbia and Croatia." In T. Tuvikene et al. (eds). *Postsocialist Urban Infrastructures*. London: Routledge;
- Judt, T. 2010. "The Glory of the Rails." *New York Review of Books*. (December 23);
- Kalb, D. 2015. "Theory from the East? Double Polarizations Versus Democratic Transitions." *Baltic Worlds*. 3-4: 17-29;
- Kaminer, n.d. "Vaseline: Polymorphously perverse;" *Unpublished manuscript*;
- Kaplan, Martha, and John Kelly. 1991. "On Discourse and Power: 'Cults' and 'Orientals' in Fiji." *American Ethnologist* 26 (4): 843–63.
- Kasmir, S., and A. Carbonella. 2008. "Dispossession and the Anthropology of Labor." *Critique of Anthropology* 28 (1): 5–25.  
 --- (eds.) 2014. *Blood and Fire: Toward a Global Anthropology of Labor*. Vol. 13. Dislocations. Oxford and New York: Berghahn.
- Keane, W. 1997. *Signs of Recognition: Powers and Hazards of Representation in an Indonesian Society*. Berkeley and LA: University of California Press;  
 --- 2003. "Self-Interpretation, Agency, and the Objects of Anthropology: Reflections on a Genealogy." *Comparative Study of Society and History* 45 (2): 222–48.  
 --- 2006. "Signs are not the garb of meaning: On the Social Analysis of Material Things" in D. Miller (ed.). *Materiality*. Durham: Duke University Press, 182-205;  
 --- 2014. "Affordances and Reflexivity in Ethical Life: An Ethnographic Stance." *Anthropological Theory* 14 (1): 3–26.
- Kesküla, Eeva. 2012. "Mining Postsocialism: Work, Class and Ethnicity in an Estonian Mine,"
- Khalvashi, T. 2019. "A Ride on the Elevator: Infrastructures of Brokenness and Repair in Georgia." In F. Martinez and P. Laviolette (eds). *Repair, Brokenness, Breakthrough: Ethnographic Responses*. New York, Oxford: Berghahn. 92-115;
- Kideckel, D. 2002. "The Unmaking of an East-European Working Class." In *Postsocialism: Ideals, Ideologies and Practices in Eurasia*, 114–33. London and New York: Routledge.  
 --- 2008. *Getting By in Postsocialist Romania: Labor, the Body, and Working-Class Culture*. Bloomington and Indianapolis: Indiana University Press.
- Kideckel et al. 2000. "A New 'Cult of Labor': Stress and Crisis Among Romanian Workers."

*Sociologie Românească* 1: 142–61.

- Kirsch, S. 2006. *Reverse Anthropology: Indigenous Analysis of Social and Environmental Relations in New Guinea*. Stanford: Stanford University Press;
- 2014. *Mining Capitalism: The Relationship between Corporations and their Critics*. Berkeley: University of California Press;
- Kockelman, P. 2010. “Enemies, Parasites, and Noise: How to Take Up Residence in a System Without Becoming a Term in It.” *Journal of Linguistic Anthropology*. 40(2): 406-421;
- 2013 *Agent, Person, Subject, Self: A Theory of Ontology, Interaction, and Infrastructure*. Foundations of Human Interaction. Oxford and New York: Oxford University Press.
- Kojanic, Ognjen. 2014. “A Lacuna of Normalcy: Exploring the Contingencies of Neoliberalization in the Case of Railway Workers in Zajecar.” MA Thesis, Budapest, Hungary: Central European University.
- 2015 “Nostalgia as a Practice of the Self in Post-Socialist Serbia.” *Canadian Slavonic Papers* 57 (4–5): 195–212.
- Laidlaw, James. 2010. “Agency and Responsibility: Perhaps You Can Have Too Much of a Good Thing.” In *Ordinary Ethics: Anthropology, Language, and Action*, edited by Michael Lambek, 143–64. New York: Fordham University Press.
- Lampe, J. and M. Jackson. 1982. *Balkan Economic History, 1550-1950: From Imperial Borderlands to Developing Nations*. Bloomington: Indiana University Press;
- Larkin, Brian. 2008. *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria*. Durham and London: Duke University Press.
- 2013. “LARKIN, Brian 2013. ‘The Politics and Poetics of Infrastructure’. Annual Review of Anthropology. 42: 327-343;” *Annual Review of Anthropology* 42: 327–43.
- Laszczkowski, Mateusz, and Madeleine Reeves. 2015. “Introduction: Affective States—Entanglements, Suspensions, Suspicions.” *Social Analysis* 59 (4): 1–14.  
<https://doi.org/10.3167/sa.2015.590401>.
- Latour 1996a. *Aramis, or the Love of Technology*. Cambridge, MA and London, UK: Harvard University Press.
- 1996b. “Trains of Thought: Piaget, Formalism and the Fifth Dimension.” *Common Knowledge* 6 (3): 170–91.
- 2005a. *Reassembling the Social: An Introduction To Actor-Network Theory*. Oxford: Oxford University Press;
- Lemon, A. 1998. “‘Your Eyes Are Like Green Dollars’: Counterfeit Cash, National Substance, and Currency Apartheid in 1990s Russia.” *Cultural Anthropology* 13 (1): 22–55.
- 2000 Lemon, Alaina. 2000. “Talking Transit and Spectating Transition: The Moscow Metro.”

- In *Altering States: Ethnographies of Transition in Eastern Europe and the Former Soviet Union*, edited by Daphne Berdahl, Matti Bunzl, and Martha Lampland, 14–40. Ann Arbor: University of Michigan Press.
- 2009. “Sympathy for the Weary State? Cold War Chronotopes and Moscow Others.” *Comparative Study of Society and History* 51 (4): 832–64.
- 2015 “MetroDogs: The Heart in the Machine.” *Journal of the Royal Anthropological Institute* 21(3): 660-679;
- 2018. *Technologies for intuition: Cold war circles and telepathic rays*. Berkeley: University of California Press;
- Levi-Strauss, C. 1962. “The Science of the Concrete.” In *The Savage Mind*. Chicago: University of Chicago Press.
- Leys, R. 2011. “The Turn to Affect: A Critique.” *Critical Inquiry* 37: 434-472;
- Mains, D. 2012. “Blackouts and Progress: Privatization, infrastructure, and a developmental state in Jimma, Ethiopia.” *Cultural Anthropology*. 27(1): 3-27;
- Manning, P. 2012. *Semiotic of Drinks and Drinking*. London: Bloomsbury;
- Martinez, F. and P. Laviolette (eds.). 2019. *Repair, Brokenness, Breakthrough: Ethnographic Responses*. New York, Oxford: Berghahn;
- Massumi, B. 1995. “The Autonomy of Affect.” *Cultural Critique*. 31: 83-109;
- Mașala, G. and S. Raicu. 1981. *Transport Feroviar: Funcționare, Dezvoltare, Eficiență*. Bucharest: Știință și Tehnică;
- Mellström, U. 2002. “Patriarchal Machines and Masculine Embodiment.” *Science, Technology, & Human Values*. 27(4): 460-478;
- Mitchell, T. 1991. “The Limits of the State: Beyond Statist Approaches and Their Critics.” *American Political Science Review* 85 (1): 77–96.
- Mollona, M. 2005. “Gifts of Labour: Steel Production and Technological Imagination in an Area of Urban Deprivation, Sheffield, UK.” *Critique of Anthropology* 25 (2): 177–98.
- 2009 *Made in Sheffield: An Ethnography of Industrial Work and Politics*. New York, US and Oxford, UK: Berghahn Books.
- Mrázek R. 2002. *Engineers of Happy Land: Technology and Nationalism in a Colony*. Princeton, NJ and Oxford: Princeton University Press.
- Muehleback and Shoshan 2012 Muehlebach, Andrea, and Nitzan Shoshan. 2012. “Introduction: Post-Fordist Affect.” *Anthropological Quarterly* 85 (2): 317–43.
- Munn 1977 Munn, Nancy. 1977. “The Spatiotemporal Transformations of Gawa Canoes.”

- Journal de La Societe Des Oceanistes* 33 (54–55): 39–53.
- 1992. *The Fame of Gawa: A Symbolic Study of Value Transformation in a Massim (Papua New Guinea) Society*. Durham and London: Duke University Press.
- Murgescu, Bogdan. 2010. *România Și Europa: Acumularea Decalajelor Economice (1500-2010) [Romania and Europe: The Accumulation of Economic Disparities (1500-2010)]*. Iași and București: Polirom.
- Nagle, R. 2014. *Picking Up: On the Streets and Behind the Trucks with the Sanitation Workers of New York City*. Farrar, Straus and Giroux;
- Navaro-Yashin, Yael. 2009. “Affective Spaces, Melancholic Objects: Ruination and the Production of Anthropological Knowledge.” *Journal of the Royal Anthropological Institute* 15 (1): 1–18. <https://doi.org/10.1111/j.1467-9655.2008.01527.x>.
- Newell, S. 2018. “The Affectiveness of Symbols: Materiality, Magicality, and the Limits of the Antisemiotic turn.” *Current Anthropology*. 69(1): 1-22;
- Ong, A. and S. Collier. 2004. *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*. Malden, MA: Blackwell;
- Orr, J. 1996. *Talking about machines: An ethnography of a modern job*. Ithaca, NY: ILR Press;
- Oushakine, S. 2014. “‘Against the Cult of Things:’ On Soviet Productivism, Storage Economy, and Commodities with No Destination.” *The Russian Review*. 73(2): 198-236;
- Pasti, V. 2006. *Noul Capitalism Romanesc*. [The New Romanian Capitalism] Iași: Polirom;
- Patino, J. 2008. “To be happy in a Mercedes: Tropes of value and ambivalent visions of marketization.” *American Ethnologist*. 32(3): 479-496;
- Pedersen, M. A. 2011. *Not Quite Shamans: Spirit Worlds and Political Lives in Northern Mongolia*. Ithaca, NY: Cornell University Press.
- Peirce, C. S. 1955. *Philosophical Writings of Peirce*. Justus Buchler (ed.). Routledge and Kegan Paul;
- Petrovic, T. 2010. “‘When we were Europe:’ Socialist workers in Serbia and their nostalgic narratives.” *Remembering Communism: Genres of Representation*.
- Pittmann, R. 2001. “Railway competition: options for the Russian Federation.” *Industrial Organization* 0111003. University Library of Munich, Germany;
- Poenaru, F. 2017. *Locuri comune: clasa, anticomunism, stânga*. [Commonplaces: class, anti-communism, and the left] Cluj: Tact;

- Polanyi, K. 1977. "The Two Meanings of Economic." In *The Livelihood of Man: Studies in Social Discontinuity*. New York: Academic Press;
- 2001[1944]. *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press;
- Popescu, T. 2014. *Proiectul Feroviar Românesc (1842-1916)*. [The Romanian Railway Project (1842-1916)]. Bucharest: Simetria,
- Putnam, H. 1975. "The meaning of 'meaning'" In *Mind, Language and Reality*. Cambridge: Cambridge University Press. pp. 215-271;
- Rajković, I. 2017. "For an Anthropology of the Demoralized: State Pay, Mock-Labour, and Unfreedom in a Serbian Firm." *Journal of the Royal Anthropological Institute* 24: 47–70.
- Ramirez, Hernan. 2007. "Masculinity in the Workplace: The Case of Mexican Immigrant Gardners." *Men and Masculinities* 14 (1): 97–116.
- Reis, N. 2009. "Potato Ontology: Surviving Postsocialism in Russia." *Cultural Anthropology*. 24(2): 181-212;
- Reno, J. 2015. "Waste and Waste Management." *Annual Review of Anthropology*, 557–72.
- Resnick, E. 2016. "Nothing Ever Perishes: Waste, Race, and Transformation in an Expanding European Union." PhD Dissertation, University of Michigan, Ann Arbor.
- Rhodes, L. 2004. *Total Confinement: Madness and Reason in the Maximum Security Prison*. Berkeley: University of California Press;
- Robbins, B. 2007. "The Smell of Infrastructure: Notes toward an Archive." *boundary 2*. 34(1): 25-33;
- Rogers, Douglas. 2010. "Moonshine, Money, and the Politics of Liquidity in Rural Russia." *American Ethnologist* 32 (1): 63–81.
- 2012. "The Materiality of the Corporation: Oil, Gas, and Corporate Social Technologies in the Remaking of a Russian Region." *American Ethnologist* 39 (2): 284–96.
- Sanne, J. 2010. "Making Matters Speak in Railway Maintenance" In Buscher et al. (eds.) *Ethnographies of Diagnostic Work: Dimensions of Transformative Practice*. London: Palgrave;
- Schivelbusch, W. 1979. *The Railway Journey. Trains and Travel in the 19th Century*. New York: Urizen Books;
- 1978. "Railroad Space and Railroad Time." *New German Critique* 14 (Spring): 31–40.
- Schweitzer, I. 1980. "On the economic nature of a shortage phenomenon: The spare parts

- problem in Hungary.” *Acta Oeconomica*. 25(3/4): 247-258;
- Schwenkel, Christina. 2013. “POST/SOCIALIST AFFECT: Ruination and Reconstruction of the Nation in Urban Vietnam.” *Cultural Anthropology* 28 (2): 252–77.
- 2015. “Spectacular Infrastructure and Its Breakdown in Socialist Vietnam.” *American Ethnologist* 42 (3): 520–34.
- Sennett, R. 2008. *The Craftsman*. New Haven: Yale University Press.
- Sheller, M. and J. Urry. 2006. “The New Mobilities Paradigm.” *Environment and Planning A*. 38(2): 207-226;
- Siegelbaum, Lewis. 2009. “On the Side: Car Culture in the USSR, 1960s-1980s.” *Technology and Culture* 50 (1): 1–23.
- Silvestru, O. 2011. “Gauging the National History: The odyssey of Romanian Railway Museum from 1939 to the Present”. *Unpublished paper*;
- 2010. “‘Capital Politics’ through Railways: The Opening Ceremonies of Railway Stations in 19<sup>th</sup> Century Bucharest”. Paper delivered at the 4<sup>th</sup> *International Conference on Railway History: “Cities, Users and their Railways” of the International Railway History Association*. Mechelen, Belgium. 27-29 May;
- Simuț, V. 2000. *Managementul Transportului Feroviar*. Bucharest: Via;
- Sharma, Aradhana and Akhil Gupta. 2006. “Introduction: Rethinking Theories of the State in an Age of Globalization” in Sharma and Gupta (eds.). *The Anthropology of the State: A Reader*. Malden and Oxford: Blackwell. pp. 1-43;
- Slutskaya, N, R. Simpson, J. Hughes, A. Simpson, and S Uygur. 2016. “Masculinity and Class in the Context of Dirty Work.” *Gender, Work and Organization* 23 (2): 165–82.
- Soni-Sinha, U, and C. Yates. 2013. “‘Dirty Work?’ Gender, race and the union in industrial cleaning.” *Gender, Work and Organization*. 20(6): 737-751;
- Sormani et al. 2019 “Introduction: When Things Break Down.” In Strebel et al. (eds.) *Repair Work Ethnographies: Revisiting Breakdown, Relocating Materiality*. London: Palgrave;
- Sneath, D. 2009. “Reading the Signs by Lenin’s Light: Development, Divination and Metonymic Fields in Mongolia.” *Ethnos: Journal of Anthropology* 74 (1): 72–90.
- Ssorin-Chaikov, N. 2003. *A Social Life of the State in the Siberian Subarctic*. Stanford: Stanford University Press;
- Stanizskis, J. 1991. *The Dynamics of Breakthrough in Eastern Europe: The Polish Experience*. Berkeley: University of California Press;

- Star, S. L. 1999. "The Ethnography of Infrastructure." *American Behavioral Scientist* 43 (3): 377–91.
- Stark, D. 1996. "Recombinant Property in East European Capitalism". *American Journal of Sociology*. Vol. 101. No. 4 (January). pp. 993-1027;
- 1992. "Path Dependence and Privatization Strategies in East Central Europe". *East European Politics and Societies*. Vol. 6. No. 1 (Winter). pp. 17-54;
- Stenning, A. et al. 2010. *Domesticating Neoliberalism: Spaces of Economic Practice and Social Reproduction in Post-Socialist Cities*. Oxford: Wiley-Blackwell;
- Stewart, K. 2007. *Ordinary Affects*. Durham: Duke University Press;
- Stoica, C. 2018. *România Continuă: Schimbare Și Adaptare În Comunism Și Postcomunism*. Bucharest: Humanitas.
- Stoler, Ann, (ed.) 2018. *Imperial Debris: On Ruins and Ruination*. Durham and London: Duke University Press.
- Strangleman, Tim. 2014. *Work Identity at the End of the Line? Privatization and Culture Change in the UK Rail Industry*. Houndmills, UK and New York: Palgrave Macmillan.
- Strathern, M. 1996. "Cutting the Network." *The Journal of the Royal Anthropological Institute*. 2(3): 517-535;
- Ștefan, A. 2007. "The Socialist State and the Workers' Leisure in Communist Romania of the 1950s." *Interstitio: East European Review of Historical Anthropology* 1 (1): 119–30.
- 2013. "Passengers' Railway Identity in Socialist Romania during the 1950s and 1960s." In *Eastern European Railways in Transition 19th to 21st Centuries*, 215–33. Aldershot: Ashgate Publishing.
- Tanczos, K., and G. Bessenyei. 2009. "East European Rail: The State of the Network." *Built Environment (1978-)* 35 (1): 44–56.
- Thiranagama, S. 2012. "'A Railway to the Moon:' The Post-histories of a Sri Lankan railway line." *Modern Asian Studies*. 46(1): 221-248;
- Thrift, G. 2008. "Intensities of Feeling: Towards a Spatial Politics of Affect." *Geografiska Annaler*. 86B: 57-75;
- Tracy, S. and C. Scott. 2006. "Sexuality, Masculinity, and Taint Management among Firefighters and Correctional Officers: Getting Down and Dirty with 'America's heroes,' and the 'Scum of Law Enforcement.'" *Management Communication Quarterly*. 20(1): 6-38;
- Tudor, P et al. 1972. *Protecția Muncii pentru Specialitățile Locomotive și Vagoane*. [Labor Protection for Locomotives and Coaches]. Bucharest: Editura Didactică și Pedagogică;



- Turnock, D. 2005. "Romania's Railway Development 1950-1989: Changing Priorities for Socialist Construction." *Geographica Pannonica* 9.
- 2006. 2006. *The Economy of East Central Europe. 1815-1989: Stages of Transformation in a Peripheral Region*. New York: Routledge.
- 2011. "Passenger Services on the Romanian Railway Network in the Post-Communist Era." *Analele Universitatii Din Oradea - Seria Geografie*, no. 1: 84–104.
- Tuvikene, T. et al. 2019. "Post-socialist infrastructuring." *Area* 1-8;
- Veblen, T. 1924. *The Theory of the Leisure Class*. London: Allen and Unwin;
- Verdery, Katherine.1992. "The 'Etatization' of Time in Ceaușescu's Romania" in Henry J. Rutz (ed.). *The Politics of Time*. American Ethnological Society Monograph Series. No. 4;
- 1996. *What Was Socialism, and What Comes Next?* Princeton, NJ: Princeton University Press.
- Verrips, Jolanda. 2001. "Kwaku's Car: The Struggles and Stories of a Ghanaian Long-Distance Taxi Driver" In Daniel Miller (ed.) *Car Cultures*. Oxford: Berg;
- Westwood, J. 2002. *Soviet Railways to Russian Railways*. Basingstoke: Palgrave;
- Williams, R. 1977. *Marxism and Literature*. Oxford: Oxford University Press;
- Winegar, J. 2016. "A Civilized Revolution: Aesthetics and Political Action in Egypt." *American Ethnologist* 43 (4): 609–22
- Whyte, R. 2011. *Railroaded: The Transcontinentals and the Making of Modern America*. New York and London: WW Norton and Company;
- Zamfir, C. 2004. *O Analiză Critică a Tranziției: Ce va Fi "După."* Iași and București: Polirom.
- Zhang, J. 2016. "Taxis, Traffic, and Thoroughfares: The Politics of Transportation Infrastructure in China's Rapid Urbanization in the Reform Era." *City&Society* 28 (3): 411–36.

## APPENDIX

### *Rail-related Legislation, Newspapers and Magazines*

Official Bulletin of Romania, No. 98, August 8, 1990, Law no. 15 from August 7, 1990 regarding the reorganizing of state economic entities into autonomous monopolies and commercial companies (Monitorul Oficial al României, nr. 98 din 8 august 1990, Lege nr. 15 din 7 august 1990 privind reorganizarea unităților economice de stat ca regii autonome și societăți comerciale). Available at: <http://legislatie.just.ro/Public/DetaliiDocument/755>

Official Bulletin of Romania, No. 834, September 9, 2004, Emergency Ordinance no. 12 from July 7, 1998 (republished) regarding transportation on Romanian railways and the reorganization of the National Company Romanian Railways. (Monitorul Oficial al României nr 834 din 9 septembrie 2004, Ordonanță de Urgență nr. 12 din 7 iulie 1998 (republicată) privind transportul pe căile ferate române și reorganizarea Societății Naționale a Căilor Ferate Române). Available at: <http://legislatie.just.ro/Public/DetaliiDocument/15140>

Official Bulletin of Romania, No. 579, September 17, 2001, Decision no. 863/2001 regarding the establishment of branches of the National Company of Passenger Rail Transport C.F.R. Călători Ltd. (Monitorul Oficial al României, nr 579 din 17 septembrie 2001, Hotărârea nr. 863/2001 privind înființarea unor filiale ale Societății Naționale de Transport Feroviar de Călători C.F.R. Călători – S.A.). Available at: <https://lege5.ro/Gratuit/gi4tmnrv/hotararea-nr-863-2001-privind-infiintarea-unor-filiale-ale-societatii-nationale-de-transport-feroviar-de-calatori-cfr-calatori-sa>

The Daily Event, May 1, 1998 (Evenimentul Zilei, 1 mai 1998)

The Daily Event, July 7, 1998 (Evenimentul Zilei, 7 iulie 1998)

The Daily Event, July 23, 1998 (Evenimentul Zilei, 23 iulie 1998)

The Daily Event, July 30, 1998 (Evenimentul Zilei, 30 iulie 1998)

The Daily Event, October 15, 1998 (Evenimentul Zilei, 15 octombrie 1998)

Free Romania, July 6, 1998 (România Liberă, 6 iulie 1998)

Free Romania, July 21, 1998 (România Liberă, 21 iulie 1998)

Free Romania, July 25, 1998 (România Liberă, 25 iulie 1998)

Railroaders' Struggle, March 24, 1955 (Lupta CFR, 24 martie 1955)

Railroaders' Struggle, May 4, 1966 (Lupta CFR, 4 Mai 1966)

Railroaders' Struggle, May 10, 1984 (Lupta CFR, 10 mai 1984)