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Infrastructure as Archive: Memory and materiality in Argentina's railroad network

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The aftertaste of Mechita lingers long after you have left the dirt roads behind. Kicked up by wind, motorcycles, and the occasional car, dust swirls up, envelopes the town, seeps into houses, settles on your tongue. Mechita lies 200km away from the city of Buenos Aires and is nestled alongside the tracks of the Once-Bragado branch of the Sarmiento line, three kilometers away from the *Ruta Nacional 5*. The small town (population under 2,000) was founded in 1906 and only a few of its blocks are paved. Mechita comes up frequently in railroad blogs and stories about the railroad crisis and ghost towns, for this was a formerly important railroad node that boasted of a train repair workshop founded by the British to cater to the *Ferrocarril del Oeste's* rolling stock, a train station, and one of the largest shunting areas in South America.¹ The town is said to epitomize railroad decay. I was drawn to Mechita by a different story, however, one of a scrap-metal artist.

Giommi, as he is known, is tall, with wavy white hair and white stubble. His warehouse, built with wood salvaged from old railroad cars, sits on a quiet corner of town, at the intersection of two dirt roads. The small front yard is crowded with scrap-metal sculptures, presided by a towering crucified Christ. As he gives me a tour of the workshop, Giommi unveils different ingenious sculptures made with *chapa* and *fierros* (two generic names for scrap metal): pistons, railroad brake shoes, railroad axle caps, and large nails, scraps of Mechita's railroad history assembled to form a Virgin Mary, a large insect, a Sacred Heart Christ. "All made with railway material," the artist assures me, "All old *chatarra* (scrap), all restored." Of blacksmith heritage, Giommi trained as an art teacher. Following in his father's footsteps—a formidable, athletic man, locally famous for having once pulled seven railroad cars with his sheer strength—, Giommi joined the railroad in Mechita, eventually becoming a turnery foreman until he too became a victim of privatization.

Although trains have mostly ceased to run here, the flow of railroad matter continues to forge connections between people and places. Some mornings, Giommi will find a *ferro* strewn in the yard, a gift from an anonymous neighbor. Other *chatarra* Giommi retrieves from the railroad workshop in Mechita, which he visits often, or purchases over the internet or obtains through barter. His is another version of *desguace* (gutting out or stripping bare): "When the railroads were

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deactivated, cut, I said, ‘I am going to go and fetch things,’” he recounts. When he learns of railroad museums closing down (“They are closing down, it is hard to maintain everything,” he laments), he travels to buy their remaining stock, refashioning his finds into sculptures.

Two months prior, and two hundred kilometers east, in the semi-rural hinterlands of Greater Buenos Aires, I accompanied Elda and other members of the commuter-activist group *Autoconvocados X los Trenes* [Self-Rallied for Trains] on a “diagnostic trip” to survey a railroad branch, the Merlo-Lobos branch of the Sarmiento line (heir to the *Ferrocarril del Oeste* that used to travel to Mechita). If the mainline was notorious for its poor service, frequently making the headlines for derailments, crashes, cancellations, and protests, this particular branch was deemed even more decrepit. It connected the mainly working-class district of Merlo, in the western suburbs of Gran Buenos Aires, to the city of Lobos, an agrarian and touristic hub located 90km (56 miles) west. The branch was served by older diesel, rather than electric, trains. Services were infrequent at best, and had been cancelled for the three days prior to our trip.

Our aim was to document the state of infrastructure and rolling stock, and gauge quality of service. During our long and bumpy journey (it took the train over two and a half hours to cover 56 miles), we took copious notes and photographs of the train’s state and its varying speed. Our goal was to write a detailed report to present the following Tuesday at a meeting with the national Ombudsman. Partway through our journey we were joined by Leandro, a station master, who acted as unofficial guide. As we jolted our way through the semi-rural hinterlands of Gran Buenos Aires, Leandro pointed out the near-absence of barriers and proper railway crossings, a cause for many local fatalities (a hazard compounded by the train’s erratic schedule and unexpected appearances).

Towns gradually gave way to vast expanses of flat farmland, dotted by cattle, horses, and occasional building clusters, and punctuated with “flag stops” in lieu of stations, bare-bones metal or wooden structures with no railway personnel. In Speratti, one of the last of such stops, we were joined by Cecilia and Julio, the caretakers of the rural elementary school, and their two youngest children. The former railway workshops in Empalme Lobos, the station preceding Lobos, had become an informal settlement (*asentamiento*), laundry swaying in the breeze, logs piled up next to an old camper van. Two steam locomotives, overtaken by rust, were visible through the trees.

Upon arriving to Lobos, Leonardo showed us around the station, pointing out the old track switch levers and the wood signs indicating the ladies’ waiting room and the parcel office. Elda

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proposed we walk towards Las Heras, inspecting the tracks. Over the course of a couple of kilometers, we took notes and photographed the wooden crossties (most of them were buried, and those that were visible between the weeds were usually rotten and broken), disjointed rails, missing bolts, and the traces left by the locomotives' undercarriage on the soil.

What stories does infrastructure tell? What does ethnographic attention to railroad materiality open up theoretically? In this article, I propose that the histories of railway infrastructure—both history writ-large, as in the political and economic histories of railroad privatization and renationalization processes, and an everyday history of railway work and commuting practices—are registered in the materials that comprise railroad infrastructure, contributing to shape its form and particular affordances. Taking my cue from *Autoconvocados*' diagnostic trips and from railroad workers, who, as I describe below, claim that metals have memory, I propose that infrastructure can be viewed as an archive, a material repository of history and memory.ⁱⁱ

Argentina's railway network is the largest in Latin America in terms of extension, encompassing around 45,000km of tracks at its peak (Salerno 2014). Trains have played a central role in imaginaries of national unity, and have sometimes been described as “the veins of the nation.” Early proponents envisioned the railway as a project of progress, a technology that would precipitate modernity and stitch the nascent nation together with tracks and trains. Railroads were a central infrastructure of the settler nation; with the shifting shape and scope of the network, railroads charted cartographies of inclusion *and* exclusion, connecting certain places and bypassing others (Gordillo 2014, Martínez Estrada 2011 [1933]). British, French, and state railway companies competed in their quest for connectivity, and the network grew somewhat haphazardly, gauges proliferating, branches overlapping (López and Waddell 2007). Investments in infrastructure froze after the 1929 economic crisis, and when the network was nationalized in 1948, it was already deemed by some contemporary observers as aging and backward (Scalabrini Ortíz 2009 [1946]). Yet in many places, the railroad was the *materialization* of the state's presence, delivering drinking water and other services, and stations served as a central node of social life. Railroads, to some extent, constituted the infrastructural backbone of the nation-state.

By the early 1990s, railroads were portrayed by state officials as “the cancer of Argentina,”ⁱⁱⁱ an obsolete system that was leeching the country's financial resources – a depiction invoked to

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justify its privatization. In a process sometimes referred to as “ferricide” (*ferricidio*), the killing of the national railroad system, most branches and workshops in the interior of the country were closed down, workers laid off, and freight and passenger lines concessioned to newly-formed private companies. In urban and suburban Buenos Aires, commuter trains continued to offer an affordable, if increasingly precarious, means of daily mobility.

In recent years, anthropologists have paid ethnographic attention to infrastructure as “the undergirding of modern society” (Larkin 2013:328; see also Hetherington 2019 and Anand, Gupta and Appel 2018). They have underscored how infrastructures can have political effects that far exceed those envisioned by their planners: from water pipes to roads, prepaid meters, landmines, and bricks, scholars have shown how infrastructures enchant (Harvey and Knox 2012), attack (Chu 2014), and go rogue (Kim 2016). They have illustrated how infrastructures can serve as the terrain for the negotiation of political claims (von Schnitzler 2013) and as gathering points for political communities through the engineering of affect (Schwenkel 2013). My research builds upon this scholarship, bringing it into conversation with scholarship on ruins (Hell and Schönle 2010; Edensor 2005; DeSilvey 2017; Gordillo 2014) and mobilities (Urry 2007; Cresswell 2010).

Infrastructural histories, I find, are *folded* into the material, laying claims on the future, and on the past. Ethnographic attention to the materiality of transport infrastructure and to the sedimented traces of movement, I argue, can reveal the ways that the histories etched into material surfaces and structures shape the experience and very possibility of mobility. Ethnographically tracking the life of matter, its affordances and entanglements (Hodder 2012), its decomposition and recalcitrance (DeSilvey 2006), its complex temporalities (Bowker 2015), I propose, can shed light on how matter underpins and undermines human projects such as mobility. My attention to materiality is much inspired by Caitlin DeSilvey’s (2006: 318) project of “telling stories with mutable things.” An ethnographic approach to infrastructure demands that we engage with concrete materials, rather than with abstract materiality (Ingold 2011). Beyond focusing on materials (their properties, agencies, and peculiar interactions), ethnographic engagements with infrastructure need to attend to the particular politico-social worlds in which materials are enmeshed and reworked, and to the way in which materials in turn enmesh and rework particular politico-social worlds. In a context of *desidia* (neglect), material decay has stark effects, shaping travel experiences and claiming human lives (McCallum 2021).

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Railroad infrastructure-as-archive not only offers traces of railroad pasts, but also charts probable futures. *Autoconvocados*' handful of members, largely middle-class professionals and university students from the northern suburbs of Buenos Aires, had come together after a derailment in the Mitre railway line, a few months after the *Tragedia de Once*, a 2012 train crash that claimed 51 lives in Buenos Aires and brought to the fore decades of mismanagement and neglect. Elda, the group's unofficial leader, had a history of championing municipal causes. With *Autoconvocados X los Trenes*, Elda's aim was to demand "safe and dignified public transport" by monitoring and publicizing railroad decay, raising awareness among commuters, and pressuring state officials for improvements via reports and petitions.

In order to gain a better understanding of the railroad network and why it was failing, and thus be able to lodge better-informed complaints with different state agencies, Elda had begun organizing a series of outings to audit railway infrastructure and quality of service. She referred to these as *relevamientos* (surveys) and *viajes diagnósticos* (diagnostic trips). On these outings, group members would travel the length of a railway branch, and survey the state of trains, stations, and tracks, in addition to chatting with passengers about their commuting conditions (Figure 1).



Figure 1: "Diagnostic trip" to the B. Mitre branch. October 2013. Photo by author.

Infrastructures, the work carried out by *Autoconvocados* suggests, are evidentiary (Weizman 2014), shedding light on processes past and possible futures to come. As Elda later penned in the

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group's report to the Ombudsman (based on our collective observation of the Merlo-Lobos branch), "Walking along the rails, deterioration and lack of maintenance become evident." On diagnostic trips, deformed rails, missing bolts, and rotting cross-ties took on heightened significance, and were often invoked as omens of impending tragedy and as signs of the state's neglect.

It was on these trips that, together with members of *Autoconvocados X los Trenes* and the railroad workers who occasionally accompanied us, I learned to "read" railroad infrastructure. Inspired by these survey efforts, this article constitutes an experiment in engaging ethnographically with infrastructure and memory. Focusing on the materiality of railway infrastructure, rolling stock, and the traces etched on these, I attend to the histories of abrasion and friction and the sociomaterial engagements that shape the vicissitudes of mobility. Yet ruins, unstable signifiers, are often reclaimed for different purposes and sometimes enrolled in attempts to retell the past and craft alternative futures (DeSilvey and Edensor 2012; Gordillo 2014). Old railroad stations, I will show, have become one terrain in which the value and meaning of railroad (and national) history is contested.

The Memory of Metals

On one of my visits to the small library at the *Museo Ferroviario Nacional* in the *barrio* of Retiro in downtown Buenos Aires, I stopped to say hello to Carlos, who liked to call himself "the last railway clock smith". His office, tucked away near the landing, was a space kept off-limits to most museum visitors. To my surprise, Carlos, who was usually alone, busily restoring one railroad object or another for display in the exhibit downstairs, was accompanied by a man I had never seen before: tall, with an angular face, graying brown hair, and glasses. This man, whom I will call Jorge, turned out to be a railroad engineer, an old friend of Carlos' who was overseeing the renovation of a railroad line in the interior and was currently in Buenos Aires on leave. Barely unable to contain my excitement at finally encountering a rail expert, I began to ask Jorge about the renovation process and the concrete cross-ties that were being used to replace the old *quebracho* wood ties. We were soon immersed in an hour-long conversation around the properties of different kinds of cross-ties, the dynamics dictating the relationship between train wheels and rails (Jorge's particular area of expertise), and the fate of different branches and stations. Drills and hammers, the soundscape of a different renovation project, one that was overhauling the museum's second floor in order to display images of the Minister of the Interior and Transport's infrastructural works, occasionally drowned

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our voices. Our conversation was also periodically punctuated by train horns wafting through the window facing the three railroad terminals of Retiro.

Of blacksmith heritage, like Giommi, Jorge had grown up among *fierros*, learning to work with metal at a young age. In his stories, metals became alive. Jorge described the lasso movements (*movimientos de lazo*) made by train wheels as the flange (*pestaña*) grazes the rail.^{iv} Because train wheels are conical in shape and rails are inclined at an angle, the wheel touches the rail at only a given point while rolling. Jorge described how, when walking alongside railway tracks, one could see a sinusoid (a line shaped like a curve) inscribed on the rail, traces left by the train wheel burnishing (*bruñendo*) the railhead. The train's movements are thus recorded, etched, on the surface of the rail. "I have been told that it leaves a kind of fingerprint", Carlos interjected. "It leaves a fingerprint of the state [of the train and the tracks]," Jorge replied, laughing, "And once you are savvy [*canchero*], you can measure it. I can measure the fingerprint and know its details."

Traces left by trains on the rail's metallic surface accrete over time. In the northern hinterlands of Buenos Aires, in the Victoria - Capilla del Señor branch of the Mitre line, I encountered rails that were tattered and frayed, like old cloth. When I described their rough edges to Jorge, he referred to them as burrs (*rebarbas*), explaining, "This is generated because by percussion, the metal is tempered. So, when the wheel passes many times, many times, when the material is very worn out, a kind of natural lamination is produced and you can see it, it has like little fish scales."

A train's "fingerprint" is thus recorded on the rails in the form of sinusoidal markings, "fish scales," and burrs. Insofar as experts such as Jorge can learn to read a train's movements and a rail's deterioration in these traces, track infrastructure comprises an archive of sorts, an accretion of inscriptions that sheds light on the state of trains and tracks.

Jorge's descriptions of the etchings on rails and of the fingerprints left by trains echo a railway saying I learned from Claudio, supervisor at a locomotive repair workshop: "*Los fierros tienen memoria*", metals have memory. Commenting on the deferral of proper maintenance checks of the aging locomotives in service (locomotives and cars that should have checks every 200,000 kilometers, yet some had surpassed 1.8 or 2 million kilometers without "profound interventions") Claudio complained that the safety his team could offer was "very relative", as "metals had memory." His stories suggested that railway history—not only in terms of a train's movements, but also in terms of maintenance practices, or lack thereof—is *inscribed* in tracks and rolling stock.

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On Rust

If fishscales, burrs and sinusoids are part of a train's "fingerprint", another form in which processes and histories are registered in metallic surfaces and rendered visible, I suggest, is rust. Rust is ubiquitous in railway landscapes in urban and suburban Buenos Aires, where fungal-like constellations of burnt orange, speckled greyish-white and ochre, wrap rails and discarded train carcasses, and even surface on new rolling stock. Rust corrodes the layers of paint aimed at modernizing trains, and spreads over signaling equipment and track infrastructure like a bad case of metallic eczema.

Rust expresses a particular relationship between iron (or its alloys), oxygen, and moisture — the ferruginous hue and texture of metallic decay. As such, it points to the intimate enmeshing of infrastructures and environments, to the coupling of metal and air. If metals, as Andrew Barry (2010:93) defines them, are "sites of transformation," then rust indexes the dynamism of metal and infrastructure more generally, pointing to the manner in which surfaces and structures shift over time (Figure 2).



Figure 2: Rusted rolling stock in Liniers (left) and Retiro (right). Photos by author.

Metals as Barry (2010:93) has shown, are "extraordinarily fluid." "Internally, they contain features, such as grain boundaries, regular lattice structures, impurities, dislocations, and catalytic sites, that provide the basis for both stability and rigidity and movement, elasticity and flow, and changes in intensive and extensive properties," Barry (2010:93) writes, "They are spaces within which minute changes occur routinely." It is these malleable qualities of metals, I suggest, that enable rail infrastructure to be read as a repository of memory – an archive, even.

This approach to infrastructure takes inspiration from forensic architecture, which analyzes architectural evidence in investigations around human rights violations. Eyal Weizman (2014:15)

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sees architecture as a “documentary form,” insofar as “it registers the effect of force fields, [and] it contains or stores these forces in material deformations” (emphasis in the original).^v They draw inspiration from building surveyors, who “see buildings as matter in formation, that is, as information” (Weizman 2014:14), coining the term “material aesthetics” to designate the sensorial capacity of matter, that is, the manner in which matter is aestheticized to its environment. Matter, Weizman argues, can detect, register, and respond to contact and impact, and to influences in its environment.

Rust underscores that metals are not only malleable, but also sensorial. Rusting occurs at different rhythms in different environments, revealing that particular environments render material infrastructures lively and precarious in specific ways. In coastal areas and in the proximities of lime quarries, for instance, rail corrosion is compounded by salinity and lime – what Daniel, a rail fan who specializes in amateur track repair, calls “chemical attack” (*ataque químico*). The particular geographies of decay of railroad infrastructure force us to reckon with what Caitlin DeSilvey (2006) calls the “ecology of memory,” and with the ways in which non-human agents, be these insects, chemicals, or other, partake in the decomposition of matter. In her archaeology of the recent past in a derelict homestead in Montana, DeSilvey (2006) describes how the history of the place is written as much by humans as by mold, mice, and maggots: “shifty materialities” (2006:321) comprise an archive co-edited by insects, rodents, chemicals, and other nonhuman agencies. Attending to railroad infrastructure as an archive, I propose, requires that we become similarly attuned to the multiple forces that shape railroad matter and to the different scales at which these interactions occur.^{vi}

Far from being perceived as a “natural” phenomenon, rust has become a matter of political concern: for members of *Autoconvocados* and other *agrupaciones de usuarios* (groups of train users), and for some rail fans, rust is a sign of ferricide and bears witness to neglect. Images of rolling stock abandoned to rust, often partially concealed by weeds, abound on railway enthusiasts’ Facebook pages and blogs, and have come to symbolize processes of deindustrialization and rural-to-urban flight.^{vii}

Rust has also been invoked as a major factor explaining the scale, if not the cause, of the *Tragedia de Once*. Juan, an architect and the sole remaining member of the commuter group *Pasajeros del Roca* (Roca Passengers) and frequent collaborator of *Autoconvocados X los Trenes*, asserts that on that day the deteriorated state of the train’s body prevented it from properly withstanding the force of the impact, as car walls contorted, floors rose, and hand-rails and luggage racks sprung loose. In

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YouTube video images of the crash, a reddish dust can be seen suspended in the air; this, he assured me, is rust from the train's decaying body. Juan described the role that railroad material decay purportedly played in the *Tragedia de Once* and in the subsequent crash known as the *Tragedia de Castelar*^{viii} thus:

Notice that in Once, the most deteriorated car—the bike car, which was lighter because they had taken out the seats—rises up completely. Why? It rises due to the lack of weight, because as the seats were taken out, it is lighter. It rises. And when it rises, the floor from the car in front becomes detached. The cars' bodies (*carrocerías*) become like an accordion, squashing the people inside. So, the people there died not because of the brakes, they die because the car's very body squashed them, it did not resist. In the Castelar crash, if you look, the three dead are in the train that is in front, which was deteriorated, without maintenance. The [train] behind collides, and the wagons batter against each other, but they remain whole. No one died. The dead are in the train in the front. Why? Because, again, the bike car rose and penetrated the car in front. And the car in front was detached, was cut, and the dead were there. That is, to speak of the brakes in the Sarmiento is a stupidity, because the problem in the Sarmiento was not death due to the brakes, but due to the car's body (*la carrocería*). That is why the State cannot say that it did not *know*. Because what happened is that you have 50-year-old [train] cars that were chipped (*picados*) and that did not resist the impact.

Juan was not alone in this view on the decay of the train's body and the role it might have played in the crash: in the ensuing trial, the prosecutor, Dr. Fernando Arrigo, referred to “material fatigue” as an aggravating factor.

Infrastructure as Archive

As a result of the uneven workings of decay, subsequent partial renovation projects, and the recycling of surviving pieces, railroad infrastructure is a patchy assemblage whose varying materials index different moments in railroad history.^{ix} Railroad landscapes, I learned on *Autoconvocados*[?] diagnostic trips, are complex, layered, and *historical*, a patchwork condensation of different periods in railroad history. The so-called “time of the English” (*la época de los ingleses*) persists in the electrified third rails and the signal systems, mostly installed in the first decades of the 20th century and still in use in many lines. Many stations, especially the formerly grand train terminals of the Mitre line in Retiro and of the Roca line in Constitución, maintain a distinctly British architectural style (Tartarini 2005), built as they were with wrought iron imported from Scotland and bricks from England.

Surviving wooden crossties, laid nearly 100 years ago, index the violent history of deforestation of *quebracho* forests in northern Argentina and the large-scale movement of materials and labor needed to build the railroad system. Rails, largely imported, attest to the nation's long-standing reliance on foreign imports for industrial products.^x Some old rails and crossties have been

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repurposed, and can now be seen supporting a station's foundation, or in fences. The logo of the state company *Ferrocarriles Argentinos*, Argentine Railroads, dismembered in the 1990s privatization reforms, in turn, survives on posters in stations and workshops, and on machinery used for track maintenance.^{xi}

Successive renovation projects have meant that multiple sign boards—of varying color and different design—bearing the stations' name coexist, side by side. Stations, in this regard, are palimpsest-like, evincing layers of superimposed or parallel inscriptions. Station walls and the fences lining railway tracks serve as a canvas for proselytizing by national political parties and railway unions, and for graffiti: posters depicting the faces and promises of railway union candidates from elections past lie alongside graffiti aphorisms coined by urban artists, and are sometimes partially or completely covered by newer propaganda.^{xiii}

Stations, nodal points of mobility, also display stratigraphic layers of a history of a more quotidian sort. During my visits to Victoria station, located in the northern suburbs of Buenos Aires, I often conversed with Manuel, a long-time newspaper vendor. On one such visit, Manuel pointed out the debris lining the tracks and station. The muddy tracks exhibited a strange assortment of detritus: next to the ubiquitous plastic bottle and scraps of paper lay a muddied purse and the singed metal springs of a mattress that had been ignited on the tracks.^{xiii} A tunnel connecting this station platform to another had been closed off to pedestrians, its floor flooded in muddy water and litter, its walls stained with human feces and urine. The ticket vending machines and turnstiles (*molinetes*), in turn, were covered in graffiti. Manuel read these remnants and inscriptions as signs of abandonment – by the railroad company, by the national government, and also by the *gerentes* (managers) of Victoria station, who seemed to care little about station hygiene. Station personnel, he claimed, only removed the top layer of litter from the platform's garbage can, leaving the rest to rot. Manuel himself removes the trash when he can no longer stand the stench.

Beyond the mere juxtaposition of elements of different times, the palimpsest of inscriptions, and the tapestry of debris in tracks and stations, matter itself contains cumulative traces of the everyday. Although *quebracho* wood is celebrated for its durability (some crossties survive on the tracks for over 100 years), wooden crossties age with time. Daniel, a lawyer in his mid-50s and a self-proclaimed *ferroaficionado* (railroad enthusiast) who, in his spare time, restores rails at a subsidiary of the *Ferroclub Central Argentino* (the Central Argentine Railway Club), explained crosstie deterioration as follows: “A crosstie becomes lighter over the years. A new crosstie weighs 90kgs, and an old one

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weighs 60, 65 [kgs]. The difference is very noticeable. They go losing mass...due to the wood's natural ageing process. Then they break when their carrying capacity (*capacidad portante*) is exceeded.”

Crossties also break during derailments, when the wheels of trains “walk” over them, splitting them in the process. Rail *breakage* (rather than deterioration) can also be produced by the overall poor state of the track, by metallurgical flaws (air bubbles in the metallurgical process, the accumulation of phosphorus or sulfur) in weak sectors of the rail, and by overloading rails with vehicles that are too heavy for it.

On their underside, wooden crossties reveal markings caused by the many years of friction with the ballast (the bed of multi-faceted rocks that sustains crossties and rails) below. Concrete crossties, which are gradually replacing wooden crossties in railway branches undergoing “renovation,” in turn, evince a different engagement with the surrounding environment. For one, they are not affected by corrosion, bugs (*bichos*), nor by humidity. Daniel portrayed them as more “ecological” than wooden crossties, as their fabrication does not imply the depletion of a natural resource, as railroad ties did with *quebracho* forests in northern Argentina. “The problem with the concrete crosstie,” he conceded, “is that it requires a mechanized process for its placement and its removal,” as it weights 300kgs. Specific materials, hence, require specific corporeal practices and knowledges: while wooden crossties can be removed manually by workers, concrete ones require machinery, and are thus harder to move in the event of a derailment.

Track decay is compounded by the mismatch between rolling stock and rail infrastructure's carrying capacity: after the nationalization of the railway system in 1948, diesel locomotives were purchased to replace steam locomotives (which weigh less tons per axle than diesel ones). Yet many railway branches were not adapted to withstand the heavier rolling stock, leading to the destruction of rails and crossties, the loosening of joints between rails, and the loss of leveling. According to Daniel, “Many branches had to be shut down, because the infrastructure of the tracks, and sometimes of the bridges, could not withstand the weight of the new machines.”

The cumulative effects of movement, of friction between the train's wheel and the rail, further contribute to rail deterioration. Railroad vehicle traffic produces a kind of lamination on the protruding top of the rail known as the railhead. Excessive wear (that is, excessive and uneven lamination), as described above, produces burrs (*rebarbas*) on the sides of the rail. Over time, the railhead is flattened or crushed (a phenomenon known as *aplastamiento* in Spanish). Wear is particularly apparent in railroad bends, where centrifugal force causes the train to lean on the outer

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rail, which, as a result, deteriorates more quickly than the inner rail. Railroad workers have devised a low-cost way of combatting this uneven deterioration: flipping rails around. Daniel explained that rails have an inscription with the technical details of their construction on one of their sides. He described a “universal” system by which foremen place rails with the inscribed side facing inwards. When a rail becomes deteriorated, workers turn it around. If workers encounter a rail whose inscribed side is facing outwards, they know that it has already been flipped. “This way of knowing never fails,” Daniel chuckled.



Figure 3: Undulated rails in Caballito station. Photo by author.

Rail inscriptions, and even their location, thus help render infrastructure-as-archive legible to railroad workers. Another section of the tracks where rails deteriorate more quickly is the area near stations, where trains routinely slow down. Daniel described the “little hollows” that can be seen on rails (he gestured with his hands, drawing concavities in the air) when standing at the end of a station platform and walking in the direction that the train has come from. These hollows, he claimed, are “generally produced by the train braking.” “In the braking area,” he continued, “rails deteriorate *much* more quickly.” I had noticed that near Caballito, the station preceding the Sarmiento’s terminal, Once, rails appeared to be undulated, rather than straight (Figure 3). When I mentioned this track section to Daniel, he explained that, “The rail acquires the shape of the ground. The rail is very flexible... That is, when you see those undulations in the tracks, it means that the base of the tracks

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is defective, that is, that the track is sinking in the places where you see it dip.” The concavities on the rail thus points to the *malleability* of metal, which enables railroad memory to be recorded on metal surfaces.

Because of the malleability of metal, particular train trajectories and events can be “read” from the traces left on track infrastructure. Expert examinations (*peritajes*) conducted after the *Tragedia de Once* sought to determine from the rails themselves whether the train conductor had attempted to brake. When the train’s emergency brake is applied, the effect is one of skidding (*patinamiento*): the train continues to move forward for a few feet. “That produces an effect on the rail and on the wheel,” Daniel explained, “You can see the drag of the material [on the rail] and on the wheel as well.” “Don’t you feel it sometimes?” he continued, describing the rattle, the *tacatán, tacatán, tacatán*, experienced on trains and subways even where there are no joints. “The emergency braking causes the wheel to lose its circumference, its roundness,” he added.

Experiencing infrastructure

The layered histories manifest in railroad landscapes and recorded on railroad tracks are not merely contained *within* railroad materials, but rather also *translate* into particular travel experiences, as reflected in Daniel’s allusion to the *tacatán tacatán* of train journeys. Worn rails, that is, translate into uncomfortable, sometimes violent, lateral train movements, movements that are experienced as jolts by passengers. Jorge, the railroad engineer I encountered at the National Railroad Museum, has conducted a few studies on corporeal vibrations and the experience of comfort. “The train car on the rail is not something static,” he explained, “It has a lot of dynamic. There are lateral accelerations, vertical [accelerations]. Well, all of that is transmitted it to the body.” He continued:

For instance, your stomach has 5Hz of, eh, natural vibration. The movement generated inside one’s body is known as natural vibration. If I surpass that index of 5Hz, if I increase it to 15, 20, I will provoke a discomfort in your stomach. And that discomfort in your stomach will provoke, eh, the urge to vomit, your discomfort on the seat...The greater the comfortability I can provide you on your trip, the greater the number of hours you can remain on the train.

Violent or excessive lateral movements can ultimately result in derailments. In urban Buenos Aires, decayed rails have forced train conductors to lower their circulation speed, lengthening already tedious commutes further. In the Victoria - Capilla del Señor branch in the semirural outskirts of Buenos Aires, where track ruination was rampant at the time of my fieldwork, frayed rails translated

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into constant jerks and jolts aboard the light trains colloquially known as *Pitufos*, Smurfs, and nicknamed “The Cocktail Shaker” by Elda because of the pronounced vibrations (see Figure 4).^{xiv}



Figure 4: The light train colloquially known as Pitufo, “Smurf,” by railroad workers, serving Victoria - Capilla del Señor. It has been nicknamed “The Cocktail Shaker” by activists due to the jerks and jolts caused by poorly maintained tracks. Notice that the tracks are barely visible due to weeds. Photo by author.

But the experience of train travel itself is of course historical, wrapped up as it is in peculiar infrastructural associations. In earlier decades, when railroad tracks had yet to reach their current state of deterioration, train travel had a different texture. Daniel claimed that when he traveled by train to the coastal town of Mar del Plata in the 1980s, he was able to rest his coffee cup on the Pullman car’s windowsill, even though the train was going over 80km/h (i.e. much faster than current long-distance trains); jerks and jolts were a thing of the future. Vibration thus is a proxy for material fatigue and points to the embodied experience of railway decay.

The historicity of particular travel experiences (in the form of jerks and jolts rather than smooth rolling) points to the historicity of infrastructural decay. That is, what is recorded on railroad surfaces and materials is not merely the passage of *time* and the “natural” *friction* of the materials—a friction that, we must recall, enables the functioning of the system, as the train’s wheel must be able to grip the rail in order to move forward, but that must also be cared for, lest it upends it in the form of derailments. Rather, and as commuter-activists and many railroad workers are quick to point out, the accretion (Anand 2015) of infrastructural deterioration and its traces is embedded in particular historical (which is to say political) contexts—particular forms of engaging with the material. An oft-

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repeated term used by commuters, activists, and railroad workers alike to describe infrastructural decay is *desidia*, neglect. *Desidia* points to particular work practices and the political connivances that foster or enable them. *Desidia* infers a *letting* decay, a passivity that is agential in its purposeful neglect.^{xv}

Desidia produces particular ecologies of memory. Weeds, for instance, are an important component of track infrastructure. According to Daniel, “The *maleza*, the common *maleza*, let us say, grass, weeds, has effects on the track. The main negative effect is that it retains humidity. When the track is on earth ballast and is in a poor state, the *maleza* helps to support it. It seems untrue (*parece mentira*), but it gives it greater stability.” Weeds, by forming a meshwork (*entretrejido*), uphold tracks, securing them in place. Weeds thus point to the multispecies collaborations that go into maintaining railroad infrastructure. But weeds can also upend this infrastructure, particularly when let to grow amok.^{xvi} “When a track has been abandoned for a long time,” Daniel explained, “Trees grow! Sometimes there are trees in the *middle* of the track!” Not long before we met, a freight conductor had died on account of an unwieldy branch piercing his head through the locomotive cabin’s open window, as the train made its way through a tunnel of trees.

In the face of dwindling maintenance of infrastructure by railroad companies, rail enthusiasts like Daniel had undertaken their own restoration projects. Members of *ferroclubes* (railway clubs) gather on weekends to restore steam locomotives and other railway vehicles, working to erase the signs of corrosion and neglect. Groups of *amigos de las vías*, “friends of the rails,” in turn, embark on weekend weeding campaigns to rural Buenos Aires, seeking to render abandoned railway tracks visible and usable. Yet efforts at salvage maintenance did not only seek to combat railroad decay: as the national government launched its own infrastructural renovation projects in the name of “modernization” (McCallum 2019), railroad infrastructure became a terrain in which the very value and meanings of the archive were contested.

Affective Heritage

Patricio grabs a megaphone, but it does little to amplify his voice. “It must be Chinese,” he grumbles. Patricio is a member of ABTE (*Agrupación Boletos Tipo Edmondson*), a group of artists and collectors of Edmondson-type train tickets. We are standing on one of the platforms in Coghlan train station, in a leafy, middle-class neighborhood near the northern edges of the Autonomous City of Buenos Aires. On this quiet Sunday afternoon, ABTE has summoned its network of supporters

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to a “precautionary Spring,” as they are calling it. Two members are carefully stenciling the phrase “*No se va*” (“Not leaving”) by a fire hydrant (Figure 5). Giving up on the megaphone, Patricio raises his voice to announce that he will shortly offer a tour of the station and narrate its history. He hands out yellow flyers that outline the cause of ABTE’s outrage: ADIF (the state’s railway infrastructure administration company) is planning to modernize, or, in ABTE’s words, “destroy,” Coghlan station. ADIF’s project proposes to “demolish” the original wood shelter, “amputate” a ticket-vending office, “erase” from the landscape the hydrants that used to feed steam locomotives, reinstall turnstiles in the station hall, and “cage” the platforms. The flyer adds, “Coghlan station is affective and cultural railway heritage. Coghlan station is part of our history. They shall not pass, nor shall they succeed!”



Figure 5: “*No se va*” (“Not leaving”): Two ABTE members stencil the phrase on the platform floor in Coghlan station. September 2014. Photo by author.

ABTE was born out of a fortuitous encounter in the early 1990s, at the height of the dismantling of *Ferrocarriles Argentinos* and the concessioning of the metropolitan railway network. By then Patricio was in his twenties and a budding artist. Since his teenage years, when he rode the train to school, he harbored a fascination for railway architecture and the transfer of technology, knowledge, and materials evident in railway infrastructure. One day he came across a train ticket tucked away in a vase in his mother’s house, one he had used twelve years earlier and discarded. At

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the time he was working on a series of paintings that portrayed the brands and logotypes of national industry products, ubiquitous objects of everyday life that were either disappearing or mutating with the wave of privatizations sweeping through Argentina. The ticket he found in the vase was an Edmondson ticket, he would later learn, a type introduced in the British railway system in the 1840s that made its way to Argentina sometime between 1865 and 1875. Rectangular in shape, Edmondson tickets were pre-printed, serial-numbered, and color-coded for different types of fares, a vital cog in railway accounting practices that had survived different railway administrations and was still in use at that time. It occurred to Patricio that this ticket was now in danger of disappearing too, linked as it was to a printing technology that would surely be rendered obsolete by the new concession companies.

Patricio thus embarked on what he calls “fieldwork,” contacting train ticket collectors and railway enthusiasts and befriending railway station personnel in his quest to recover a piece of furniture used to store Edmondson tickets. In the process, he began collecting other railway materials (signs, bronze window fixtures), rescuing them from being pillaged or disposed of in this transition period.

In 1998 he and a colleague formed ABTE, ostensibly a group of collectors of Edmondson train tickets. Some of its members are ticket collectors in earnest, mainly participating in the group’s ticket-exchange meet-ups and convinced of the group’s existence as a serious ticket-collecting entity. Yet ABTE was, from the start, an artistic project, a mimicry of railway enthusiasts’ “obsession” with railway minutiae, fascinations that Patricio saw as “absolutely hyper-specific of any old thing,” as he puts it. ABTE thus became an exercise in occupying a space that straddled the real and the fictional.

When concession companies finally did faze out Edmondson tickets, ABTE artists contacted former workers from the last railway printing workshop to restore an old printing press. They continued printing Edmondson tickets for special occasions, such as the anniversary of the first railway strike and a march in commemoration of railway workers who were “disappeared” during the last military dictatorship.^{xvii}

ABTE’s main activity, however, is the maintenance of station name boards (*nomencladores*). Patricio and other artists see these signs as comprising the “identity of a place,” insofar as these boards often name not only the station, but also the surrounding locality. These signs have varied in construction and design over time, and their materiality (be it pine wood, metal, or concrete) and their color schemes index particular moments in railway history. ABTE artists first began repairing

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name boards in urban Buenos Aires, and slowly fanned out from the city, traveling on weekends to stations in the interior of the province, to places where trains seldom run, or have ceased to run altogether. For these interventions or “actions,” as they call them, they don a worker’s uniform assembled from fellow member Ezequiel’s “textile archive,” a collection of uniforms, particularly from national companies that have disappeared. The artists begin by scratching the surface of a name board, studying the layers of paint that evince the succession of color schemes of different railway companies. They then repair the sign, fixing its posts, adding fresh layers of paint, sometimes respecting the palette of a particular period in railway history, other times mixing different periods. They often repair and repaint other station fixtures as well: antique water fountains, roof trimmings. But they always purposefully leave a section of the station untouched, in *dis*repair, for the sake of contrast. For their efforts, a quasi-archaeological engagement with the stratigraphic layers of railway history, are a commentary on “what is left behind,” as they put it, and on *desidia*, neglect.

ABTE members see their work as fundamentally different from the preservation projects undertaken by railway enthusiasts at weekend railway clubs or *ferroclubes*. As custodians of state property, members of railway clubs—always male, and usually middle-class—restore steam locomotives and other rolling stock (e.g. dining cars), modeling their labors after British preservation societies. ABTE members are critical of these clubs’ Anglophilia: their insistence on referring to different railway lines by the names of the British companies that preceded nationalization, their alleged disdain for railway workers and for everything related to nationalization and Perón. One ABTE member complained that for these railway clubs, the railway appears to be “an English mummy kept in formalin.” ABTE members, in contrast, are interested in engaging with a railway heritage they see as multiple. “We are artists, not restorers,” Ezequiel quipped. As Patricio explained, “We are interested in showing this question of the passage of time. It is not a restoration that denies the historicity of the material. It also has to do with the hybridity of different temporalities.”

ABTE artists seek to embody not the British engineer or mechanic who tends to rolling stock brought to his workshop, but rather the railway artisan, a nomadic figure who traveled in his railway wagon with his pots and tools and set up camp at a railway station for months at a time to do maintenance and repair work. As they undertake maintenance work, ABTE artists immerse themselves in railway history and lore, learning from current and former workers turns of phrase and manners of engaging with the material. “We are railroad memory,” one of their stickers declares (Figure 5). While ABTE works against disappearance—against the erasure, pillaging, and amputation

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of railway infrastructure—, their efforts are not born out of nostalgia, they are quick to point out. Against the grain of narratives of ferricide that traffic in railway decay, that “relish in sadness and loss,” as Patricio puts it, ABTE artists engage with what remains and with what is emerging from the debris. In their travels, they have encountered formerly abandoned stations repurposed as public libraries, soup kitchens, and day cares.

ABTE artists are interested in reclaiming railway stations as *public* spaces—a commons made as such by the affective histories that bind people to the railway. Where concession companies acted as “occupation troops,” as the artists call them, swooping in, replacing long-standing station personnel, and severing ties with surrounding communities, ABTE’s maintenance expeditions always attract curious spectators, reinstating stations as nodal points of sociality. ABTE artists recognize that the railroad once constituted the infrastructural backbone of the nation-state, a “foundational and fundamental part of the country,” as defined by Patricio, transporting water and providing services and otherwise making the state palpable and present (not everywhere, of course, but in a particular cartographic configuration of the nation-state).

If infrastructure can be understood as an archive, as I propose here, then it is as much an archive of the frictions and histories of mobility and maintenance as an archive of affective histories, insofar as the railroad is seen by many as constituting the “intimate fibers of identity and memory,” in Patricio’s words. ABTE’s notion of “affective heritage” thus underscores how railroad infrastructure also functions as a repository of quotidian histories of travel and encounter.^{xviii}

Conclusion: Engaging Material Memory

In this article, I have ethnographically traced how histories of abrasion, friction, mobility, and encounter are inscribed in railroad infrastructure, shaping the rhythm and texture of mobility, and how commuters, railroad workers, and train enthusiasts engage with this infrastructural archive. Trains, I have shown, leave a “fingerprint” on rails, in the form of “fish scales,” burrs, and sinusoid lines. The nature of the supporting ballast or rail bed, and the type and weight of rolling stock used, in turn, leave traces on tracks, as crossties become pocked and sometimes break, and as rails become undulated over time, acquiring the shape of the ground beneath. Railroad workers have developed techniques for reading these traces. The geographies of rail decay (the rusting of rails, the rotting of crossties), in turn, point to the ecology of memory, to the enmeshing of infrastructures and environments, and the “co-editorial” work of nonhuman agents. Train stations and their environs

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are thus palimpsest-like, with stratigraphic layers of trash, posters, and graffiti and coexisting name boards indexing particular moments in railroad history.

Surveying efforts by commuter groups such as *Autoconvocados X los Trenes* reveal how rust and other forms of material etchings render railway infrastructure evidentiary, a sensor of current precarity and future potential tragedy. My interlocutors thus appear to agree with Weizman (2014:14) that it is in the “material deformations and structural failures that micro and macro forces, political and historical processes might reveal themselves.” As the *Tragedia de Once* has tragically shown, the “memory” inscribed in railroad materials is not merely a “natural” history of railroad wear and use, the inevitable passage of time, but, rather, or also, a history of *disrepair* (or *misrepair*) and *disregard*. The memory of metals reveals the way that history and decay accrete; this material memory can haunt and subvert infrastructural projects of progress (McCallum 2019).

Yet stories and images of rust and railway decay are themselves risky, threatening with an unraveling of their own. During a railway party at the crumbling station of Empalme Lobos, parts of which had been taken over by squatter families, I met a middle-aged couple who occasionally traveled throughout the province of Buenos Aires on track-maintenance cars (*zorras de vía*). The towns they visited had mostly dwindled in population size to a mere few families. When posting pictures of their travels on Facebook, they omitted photographs that depicted these places as ghost towns or ruins. The message they wanted to transmit, they explained, was one of hope and opportunity. Patricio, from ABTE, in turn, spoke disparagingly of documentaries that traffic in railway decay: “There is this thing that is very much a downer (*bajoneante*), no? A relishing in sadness (*garrón*) and loss.” He chose to highlight the forms of liveliness and creativity emerging in the debris.

For railway matter is also ripe with what Patricio refers to as “affective heritage,” the “intimate fibers of identity and memory.” Thus, alongside and against state-led modernization efforts, commuter-activists, railway workers, and railway enthusiasts work to monitor, restore, and reimagine railways. In times of *desidia* and of a modernizing revolution that appears to disavow infrastructural and affective legacies, maintenance thus becomes a form of critique, an embodied safeguarding of railway memory. Giommi’s repurposing of *chatarra*, scrap metal, into sculptures points to another form of safeguarding railway memory. *Chatarra*, the afterlife of metal as scrap, of that which is left behind, speaks not only of lives and materials rendered obsolete and disposable by micro and macro histories, but also of recombinant possibilities and emergence.

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ⁱ A shunting area is an area used to maneuver trains and change tracks.

ⁱⁱ See Mueggler (2011) for a view of landscapes as archives, and Sabatella and Stella (2022) for ethnographic explorations of tangible memories, or “memories of the tangible.”

ⁱⁱⁱ A phrase uttered by former Minister of Economy Domingo Cavallo, as remembered by many of my interlocutors.

^{iv} The flange is a protruding rim on one side of the wheel that keeps the train running on the rails.

^v For a view on ecologies as evidentiary, see Lyons (2018), and for a discussion of indigenous ruins and landscapes as evidence of histories of dispossession, see Cañuqueo (2016) and Gordillo (2014).

^{vi} Multispecies co-editing is of course also present in “traditional” archives, that is, in collections of documents, maps, and photographs. The documents I consulted at the National Railroad Museum’s library, for instance, were often covered in soot, remnants of a fire that had ravaged the museum years earlier; flames and mice had contributed to their unwieldy shape and helped account for some of the gaps or absences in the archive.

^{vii} See Faccio and Noel (2019) on railway nostalgia and its role in the construction of a “hiperreal rurality.”

^{viii} The *Tragedia de Castelar*, a collision between two passenger trains on the Sarmiento line, occurred in June 2013 and claimed 3 lives.

^{ix} Daniel, the lawyer and rail fan who specializes in amateur track repair, described the railroad’s recycling practices as follows: “The railroad always recycled itself. There are hundreds of kilometers of telegraph posts that are in fact old rails. And you can see fences made with metal crossties. *Everything* is like that. *Everything* is like that. The railroad recycled itself... With its own trash it made other things.” Daniel spoke highly of the frugal railroad economy during the time of the English, praising the manner in which bolts, rails, and crossties were re-used. Recycling practices under the concession companies, and cosmetic attempts to patch up trains after the *Tragedia de Once*, however, are often described in a different light (McCallum 2021).

^x Except during a 20-year period, between the late 1960s and late 1980s/early 1990s, when SOMISA (*Sociedad Mixta Siderúrgica Argentina*) produced them (until the company was privatized and its rail rolling mill sold). Nowadays, rails are imported from Spain, Poland and South Africa.

^{xi} Other transport infrastructures are also an amalgamation of heterogeneous elements from different epochs: in New York’s subway system, for instance, signaling equipment from different eras coexist—much of it obsolete and prone to breakdown—, rendering the system vulnerable to delays (Somers 2015). It is not uncommon for technological artifacts more generally (Edgerton 2007, 2010) and transport vehicles in particular (McCallum and Piglia 2023) to undergo successive transformations and “creolizations”, rendering them heterogeneous assemblages.

^{xii} As assemblages of spare parts that underwent diverse paint jobs, passenger trains (sometimes dubbed *formaciones engendro*, monster trains, in Buenos Aires) also evince a palimpsest-like layering of railroad material history (see McCallum 2021).

^{xiii} Katy Stewart (1996:72, 95) shows how discarded quotidian objects can serve to arrest master narratives and linear understandings of time-as-progress: “wrecked material becomes a sign, at once, of the power of a history on a place and of the transitoriness of history itself.” Ruined and decayed objects, such as remnants of buildings, weedy yards strewn with tractor skeletons, plastic chairs and the “trash that collects around people’s places” (1996:96), are imprinted with a

life history, and they haunt. Ruins, she proposes, are thus chronotopes, “signs of a past, like the present, where things fall apart” (1996:96).

^{xiv} The trains used on this branch are light precisely because the worn rails cannot tolerate heavier rolling stock.

^{xv} The temporal contours of decay and of the duration of the “railroad crisis” are hard to delineate, as the very act of defining them is political, anchored in different readings of railway, and Argentine, history.

^{xvi} Tim Edensor (2005) shows that ruins, particularly railway sidings, are fecund spaces for nonhuman life (from mice to foxes to feral cats, to an assortment of plants that are usually coded generically as “weeds” but that include species that were once desirable and home-worthy, he says). Railway sidings thus comprise nature reserves and wildlife corridors in the city. In this manner, ruins trouble the purported binary divides between urban-rural and human-‘nature’ and are a prime example of “recombinant ecology” (Whatmore and Hinchcliffe 2003, cited in Edensor 2005). On nature as infrastructure, see Carse (2012), and on human infrastructures enabling more-than-human projects, see Ficek (2021).

^{xvii} ABTE also began printing stickers, which were concession companies’ new visual medium of choice for communicating with passengers. ABTE’s stickers utilize a Johnston typeface (the first typeface designed for public transportation, created for the London Underground) and also utilize the color schemes of different railway companies. ABTE artists and their friends place these stickers in stations and on board of trains, establishing a dialogue of sorts with railway management’s instructions and with particular political moments. Where a company sticker forbade passengers from propping train doors open, an ABTE sticker declared holding doors open to be an act of solidarity towards other passengers. When ADIF grandiosely proclaimed in its institutional brochures that “A country without trains is a nation without a future,” ABTE stickers responded, “A country without trains is boring.” I, in fact, first learned of ABTE when I encountered one of these stickers on a ticket vending machine at a train station.

^{xviii} In her study of affective responses to contexts of violence in Mexico’s wholesale food market, Tiana Bakic Hayden (2022) shows how people’s everyday affects come to shape food infrastructure. Affects are thus shown to be materially productive.

Works Cited

- Anand, Nikhil. 2015. "Accretion." *Fieldsights Theorizing the Contemporary*, *Cultural Anthropology* Online, September 24. <http://culanth.org/fieldsights/715accretion>
- Anand, Nikhil, Akhil Gupta and Hannah Appel. 2018. *The Promise of Infrastructure*. Durham: Duke University Press.
- Bakic Hayden, Tiana. 2022. Insecure infrastructures: The affects and effects of violence in Mexico’s food system. *American Anthropologist* 125: 89-99.
- Barry, Andrew. 2010. Materialist Politics: Metallurgy. In Braun, Bruce and Sarah J. Whatmore (eds.), *Political Matter: Technoscience, Democracy, and Public Life*. Minneapolis: University of Minnesota Press. Pp. 89-117.
- Bowker, Geoffrey. 2015. "Temporality." *Fieldsights Theorizing the Contemporary*, *Cultural Anthropology* Online, September 24. <https://culanth.org/fieldsights/temporality>
- Cañuqueo, Lorena. 2016. Capítulo 8. «Las poblaciones que dejó la gente»: taperas, memorias y pertenencias en la Línea Sur de Río Negro. In Ramos, A., Crespo, C., & Tozzini, M. A. (Eds.), *Memorias en lucha: Recuerdos y silencios en el contexto de subordinación y alteridad*. Viedma: Editorial UNRN. doi:10.4000/books.eunrn.236

BORRADOR

No circular fuera del SP y no citar.

- Carse, Ashley. 2012. Nature as Infrastructure: Making and managing the Panama Canal watershed. *Social Studies of Science* 42 (4): 539-563.
- Cresswell, Tim. 2010. Towards a politics of mobility. *Environment and Planning D: Society and Space*. Vol. 28: 17-31.
- DeSilvey, Caitlin. 2006. Observed Decay: Telling Stories with Mutable Things. *Journal of Material Culture*, 11 (3), 318-338.
- DeSilvey, Caitlin. 2017. *Curated Decay: Heritage Beyond Saving*. Minneapolis: University of Minnesota Press.
- DeSilvey, Caitlin and Tim Edensor. 2012. Reckoning with Ruins. *Progress in Human Geography* 1-21.
- Gordillo, Gastón. 2014. *Rubble: The Afterlife of Destruction*. Durham: Duke University Press.
- Edensor, Tim. 2005. *Industrial ruins: space, aesthetics, and materiality*. Oxford: Berg.
- Edgerton, D. (2007b), Creole technologies and global histories: rethinking how things travel in space and time. *History of Science and Technology Journal*, 1(1), 75-112.
- Edgerton, D. (2010), Innovation, Technology, or History: What Is the Historiography of Technology. *Technology and Culture*, 51 (3), 680-697
- Faccio, Yanina and Noel, Gabriel D. 2019. 'Nostalgia is a Weapon': Utopías Metropolitanas y Ruralidad Hiperreal. *Quid* 16 N° 11: 109-136.
- Ficek, Rosa. 2021. La carretera de Darién, el Estado panameño y los pastos sin historia (1971-1977). In Zunino Singh, D., Gruschetsky, V. y Piglia, M. (eds.). *Pensar las infraestructuras en Latinoamérica*. Buenos Aires: TeseoPress.
- Harvey, Penny and Hannah Knox. 2012. The Enchantments of Infrastructure. *Mobilities* 7 (4): 521-536.
- Hell, Julia and Andreas Schönle. 2010. "Introduction." In Hell, Julia and Andreas Schönle (eds.). *Ruins of modernity*. Durham, NC: Duke University Press.
- Hetherington, Gregg. (ed.) (2019). *Infrastructure, Environment, and Life in the Anthropocene*. Durham and London: Duke University Press.
- Hodder, Ian. 2012. "Entanglement." *Entangled: An Archaeology of the Relationships between Humans and Things*. Malden and Oxford: Wiley-Blackwell.
- Ingold, Tim. 2011. *Being Alive: Essays on Movement, Knowledge and Description*. London: Routledge.
- Kim, Eleana J. 2016. Toward an Anthropology of Landmines: Rogue Infrastructure and Military Waste in the Korean DMZ. *Cultural Anthropology* 31 (2): 162-187.

BORRADOR

No circular fuera del SP y no citar.

-
- Larkin, Brian. 2013. The Politics and Poetics of Infrastructure. *Annual Review of Anthropology* 42: 327-43.
- López, Mario Justo and Jorge Waddell (eds.). 2007. *Nueva historia del ferrocarril en la Argentina. 150 años de política ferroviaria*. Buenos Aires: Lumiere.
- Lyons, Kristina. 2018. Chemical warfare in Colombia, evidentiary ecologies and *sentí-actuando* practices of justice. *Social Studies of Science* 1-24.
- Martínez Estrada, Ezequiel. 2011 [1933]. *Radiografía de la Pampa*. Buenos Aires: Losada.
- McCallum, Stephanie. (2019). Railroad Revolution: Infrastructural decay and modernization in Argentina. *Tapuyá: Latin American Science, Technology and Society*, 2(1), 540-559.
- McCallum, Stephanie. 2021. Formaciones engendro: Mantenimiento diferido y movilidad precaria en los ferrocarriles del AMBA. In Zunino Singh, D., Gruschetsky, V. y Piglia, M. (eds.). *Pensar las infraestructuras en Latinoamérica*. Buenos Aires: TeseoPress.
- McCallum, Stephanie and Melina Piglia. 2023. Transporte criollo. In Zunino Singh, D., Jirón, P. and Giucci, G. (Eds.), *Nuevos términos clave para los estudios de movilidad en América Latina*. Buenos Aires: TeseoPress.
- Mueggler, Erik. 2011. *The Paper Road. Archive and Experience in the Botanical Exploration of West China and Tibet*. Berkeley and Los Angeles: University of California Press.
- Sabatella, María Emilia, and Stella, Valentina. (Eds.) 2022. *Memorias de lo tangible: Lugares, naturalezas y materialidades en contexto de subordinación y alteridad*. Viedma: Editorial UNRN.
doi:10.4000/books.eunrn.7462
- Salerno, Elena. 2014. The Historiography of Railways in Argentina. Between Foreign Investment, Nationalism, and Liberalism. *Mobility in History* Vol. 5: 105-120.
- Scalabrini Ortíz, Raúl. 2009 [1946]. *Los ferrocarriles deben ser argentinos*. Buenos Aires: Lancelot.
- Schwenkel, Christina. 2013. Post/Socialist Affect: Ruination and Reconstruction of the Nation in Urban Vietnam. *Cultural Anthropology* 28 (2): 252-277.
- Somers, James. 2015. Why New York Subway Lines are Missing Countdown Clocks. *The Atlantic* Nov. 13, 2015. Accessed from <https://www.theatlantic.com/technology/archive/2015/11/why-dont-we-know-where-all-the-trains-are/415152/> on 11/28/2015
- Stewart, Kathleen. 1996. *A Space on the Side of the Road: Cultural Poetics in an "Other" America*. Princeton: Princeton University Press.

BORRADOR

No circular fuera del SP y no citar.

Stoler, Ann (ed.). 2013. *Imperial Debris: Reflections on Ruins and Ruination*. Durham: Duke University Press.

Tartarini, Jorge D. 2005. *Arquitectura Ferroviaria*. Buenos Aires: Ediciones Colihue.

Urry, John. 2007. *Mobilities*. Malden: Polity.

Von Schnitzler, Antina. 2013. Traveling Technologies: Infrastructure, Ethical Regimes, and the Materiality of Politics in South Africa. *Cultural Anthropology* 28 (4): 670-693.

Weizman, Eyal. 2014. Introduction: Forensis. Forensic Architecture (ed.), *Forensis: The Architecture of Public Truth*. Berlin: Sternberg Press.