

Infrastructural care: Repairing railway trains, maintaining Mumbai's lifeline

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Abstract

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Mumbai's suburban railway trains are one of the oldest, most densely-packed, and widely-used public transport networks in the world. These trains—colloquially known as *local trains* or *Mumbai locals*, and technically as electric multiple unit (EMU) rakes—carry around 8 million commuters and operate more than 3,000 services every day. Mumbai's local trains provide vital connectivity between the Island City, its populated inner suburbs, and the distant peripheries of the Mumbai Metropolitan Region. For this reason, local trains are known as Mumbai's lifeline. However, these trains face banal and spectacular forms of failure and breakdown and, therefore, require constant repair and maintenance—activities that span workshops, car sheds, railway lines, and even moving trains. This thesis looks at how the repair and maintenance of local trains not only involves fixing broken objects or technical systems, but also entails caring for the wider suburban network at large, including how millions of commuters continue to access cheap and reliable means of transport. Between 2021 and 2022, I conducted ethnographic fieldwork with engineers and workers at one of the oldest car sheds in the city's railway network, where I followed what they called *preventive maintenance* and *corrective maintenance*. Drawing on the anthropology of infrastructure, STS, feminist technoscience, repair studies, and more-than-human perspectives, I use *infrastructural care* as the central analytic framework to explore engineers and workers' reparative interventions and maintenance practices. The analytic framework of infrastructural care opens up ways to uncover causal mechanisms and pathways that link diverse forms of sociotechnical engagements and more-than-human relations, which seek to restore form and function, with the production and sustenance of urban spatiotemporal rhythms generated by public transport networks. In doing so, this thesis productively engages with scholarship on repair and maintenance, as well as ethnographies of urban infrastructure.

Keywords: Care; infrastructure; maintenance; Mumbai; railway trains; repair.