MIT Seminar on Environmental and Agricultural History

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"The Mystery of the Missing Watt: Electricity in the Making of Modern Tokyo"



There is no way that Fujimura Seijirō could have predicted what would happen when he rewired the lighting on the front of his small appliance shop in 1901. Fujimura cut into the lines carrying alternating current into the building. He was eager to attract customers with a new string of carbon-filament bulbs, so he did what many people did at the time: he spliced the lines himself rather than paying the local electrical company to do it. It was an ethically questionable decision, he knew, since customers paid for electricity by the line, but in 1901 nobody had ever been taken to court over such things.

In 1902, Fujimura became the first person to be taken to trial for electricity theft in Japan. The case eventually reached the country's highest court, where physicists from Tokyo Imperial University played a key role in deciding Fujimura's fate. The question was: is electricity matter or ether? If the former, Fujimura had committed a crime: to steal matter was to steal "an object" under the criminal code. If electricity was ether, however, Fujimura could not be convicted: ether was little different from air, and so could not be claimed as property. This presentation uses Fujimura's seminal case to explore the boundaries of physical knowledge in Japan at the turn of the century, asking how electricity was understood by physicists and how that understanding informed the creation of the nation's first ordinances on electricity itself was in flux. Fujimura's case became not only the first prosecution of a new kind of crime; it also motivated the normalization of electrical measurement, billing, and infrastructure in the nation's capital.

By the time of Fujimura's death a decade or so later, Japan was arguably the single most electrified nation on the planet.

Friday, March 6, 2015 2:30 - 4:30 PM E51-095, cnr of Amherst and Wadsworth Sts.

This talk is sponsored by the MIT History Faculty and the Program in Science, Technology and Society. For more information contact mcollett@mit.edu.