

Jennifer Lieberman and Ronald Klein address a historically specific fantasy of wireless electrical technology in their recent essay “Dream of an Unfettered Electrical Future: Nikola Tesla, the Electrical Utopian Novel, and an Alternative American Sociotechnical Imaginary”. They illuminate the connections between literary and technological innovation at the turn of the nineteenth century, specifically connections between Tesla’s research in wireless electrical transmission and contemporary utopian fiction. After a methodological introduction that situates the terms of their argument in relation to earlier work on the social history of electricity, the authors begin their analysis with the figure of Nikola Tesla, standing in a lecture hall at Columbia University, awing an audience of assembled engineers with a wirelessly illuminated globe in each hand.

Lieberman and Klein argue that Tesla’s work on wireless electricity took part in a specific sociotechnical imaginary that used an ethos of naturalness to propose political changes through infrastructural innovation. If electricity was a natural phenomenon, the theory goes, it could be harnessed without coal fired generators, transmitted without wires, and used for the public good without the large corporate entities that owned the existing electrical infrastructure. The fantasy of wirelessness offered a way to circumvent the capitalist economics of early electrification – a technological solution for the social ills of the industrial revolution. There is an environmental argument here as well, that seems more familiar to our modern ears, the image of electricity as clean energy, reinforced by a rhetoric of freedom and naturalness. This utopian discourse follows a sticky linkage of technological and social progress as common to the historical moment Klein and Lieberman examine as our own.

Tesla’s public writing provides support for these claims, along with the work of several novelists: Edward Bellamy, John Bachelder, Arthur Bird, William Alexander Taylor, and Charlotte Perkins Gillman, with Gillman being the most canonical literary figure, and Bellamy being the most popular, in his own historical moment. Within the article Bellamy comes to stand for a vision of the utopian future in which moral progress is a precondition of technological progress, while Tesla, Bachelder, Bird present technological innovation as a mechanism of social progress; a means to a socio-political end, and Taylor synthesizes the two. Gillman appears at the end of the article with an alternate social aim for the alternative technology, equating the project of liberating electricity from the constraints of infrastructure with the project of liberating women from the constraints of the patriarchy.

Wireless electricity offers an imaginative alternative to the “large private corporations and state-regulated ‘natural’ monopolies” that dominated the landscape, if not always the narrative, of American electrification (3). Yet Americans did occasionally implement electricity as a public good from the get-go, for example, in the case of rural electric cooperatives, developed under the Tennessee Valley Authority, in the 1930s. Conceptually, these cooperatives remind us that the heavily polluting infrastructure of the
developing electrical grid, the “gigantic power plants and electrical lines” (3) we have inherited today, was not necessarily tied to the capitalist model of electric development to which it subsequently became wedded. This suggests in turn that the utopian fantasy of technology without wires is not necessarily divorced from the dominant model of electric commodification, as current wireless communication technologies aptly demonstrate.

Lieberman and Kline caution against conflating the distinct sociotechnical imaginaries of wireless electricity transmission and wireless communication, but comparisons between their essay and recent work on computing might nonetheless be useful, particularly the work of Fred Turner on digital utopianism. Similar rhetorical patterns, emphasizing naturalness and unfettered access, emerge in the utopian technological fantasies of the early internet. The democracy of chat rooms, the paperless office, or more recently, linked open-access data, all promise to remedy contemporary social ills by erasing the structural impediments of an older form. The “dream of an unfettered electrical future” (7) might well be a description of the psychedelic cybernetic potential of computing from the Last Whole Earth Catalog in 1971.

Lieberman and Klein position their argument to intervene in both literary criticism and the history of science. They challenge the prevailing interpretive paradigm of the utopian novel as a form of economic and political critique by pursuing a technological approach, and present the distinct sociotechnical imaginary of wireless electricity as an explanation for the puzzling persistence of Americans’ trust in the liberatory powers of electricity. While the science studies side of their argument seems the stronger of the two, they make a compelling case for reading utopian fiction and technological innovation together, as mutually reinforcing forms, which is their primary contribution to the field of Literature and Science.

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