T/S BOOK REVIEWS

## La Servitude électrique: Du rêve de liberté à la prison numérique [The Electric Servitude: From the Dream of Liberty to the Digital Prison]

by Gérard Dubey and Alain Gras (2021) Paris, Éditions du Seuil, pp. 370.

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During my participant observation with Ohio's' now-defunct Industrial Pollution Control in 1979, I visited the Conemaugh power plant in western Pennsylvania. There, I saw the generation of electricity destined for New York City over 300 miles to the east, whilst fuel waste and air pollution haunted Pennsylvania's rivers and residents. Earlier I visited as a non-participant to observe Ohio Edison's Edgewater power plant in the northern Ohio city of Lorain. With a dedicated turbine for the generation of electricity solely for Chicago over 300 miles to the west, fuel waste and air pollution impacted Lake Erie's south shore and Ohio residents. Over several decades, residents of Pennsylvania and Ohio suffered the polluting effects of fossil fuels in Conemaugh and Lorain to generate electric power for two major cities over 300 miles away.

The challenge posed by sociologist Gérard Dubey and anthropologist Alain Gras is to view cities as metaphorical parasitic entities siphoning fossil resources for electric power. This visualization of "cables on catenaries" (p. 186) sparked my recall of the above-mentioned cases. I remember my immediate reaction then was that fuel waste and pollution were not innocent by-products of resource extraction and electricity generation, but were driven by economic forces beyond the control of locals. As such, these by-products were an expression of capitalism's structural violence that were too long ignored by regulators.

These 20<sup>th</sup> century cases are exemplary of the propensity for general populations in industrialised societies to overlook electric power's dependency on these sources. Seeking to understand this persistent social phenomenon, Dubey and Gras offer a unique enquiry into the general public's perception of fossil fuel-generated electricity power.

Criticism of fossil fuel-generated electric power is not new to Science and Technology Studies (STS). Querying the generation of electricity and asking to what extent this production affects our society and planet lies at the core of a realization that technology is seldom neutral, especially in the digital age (see Ekhardt et al. 2017; Gerrie 2018; Timcke 2021). Dubey and Gras nevertheless aver that critical histories of electric power consumption and its attendant environmental and social impacts are not common in sociology, "even less in philosophy" (p. 9). The biggest reason the authors give for this alleged paucity is a general bias for electricity to be seen as green whilst ignoring the massive exploitation of fossil fuels (coal, gas, petroleum)

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to generate it, which discourages a view not wider than partial. Employing the metaphor of magic as an "Electricity Fairy" provides a window to challenge assumptions and allow readers to grasp these technocultural dynamics. Yet, British cultural studies theorist Debra Benita Shaw (2008) already noted that technology often appears to be magical in its operation and application because the development of new technologies increasingly overtakes the ability of lay persons to understand the principles of their functioning. Seeking to unmask the under-theorised "Electricity Fairy" therefore is no easy feat, especially where the race for renewable energy places trust in electricity to save the world.

Consequently, *La Servitude électrique* is an ambitious book in two parts – the first part is a sociocultural survey on electricity and its context of rapid transformations, which is followed by a second part, describing the transformation "from an electric cage to a digital enclosure" (p. 209). The 13 chapters of Part 1 are nearly double the size of Part 2 and are Dubey and Gras's strongest as they set the table for the authors' thesis that the origin of electric energy remains very mysterious and "thus leaves a hint of the supernatural" (p. 10). Hoodwinked observers not only treat electricity as a wonderful means of distributing power, but also as "a self-creating power" (p. 10). Ignoring the attendant "ever-ascending march of the fossil" (p. 16) to generate electric power, green-washing hucksters call it sustainable development.

The seven chapters in the second part explore the electricity fairy's digital progeny and the human problems that result from it. Itself a junior fairy arising from the creation and maintenance of these environments that brutally deplete our planet's resources and gradually renders the Earth effectively uninhabitable, the digital fairy seeks to hoodwink us into self-confinement and the dwindling of direct human interaction. Although the consequences are more tangible in the junior fairy's takeover, the electricity fairy's increasing appetite for fossil fuels nevertheless negatively impacts life on our planet, accompanied by the digital fairy's erosion of individual liberty in societies suffering increasing algorithmic interference. The authors caution the fairies' advances are already leading to putting life and social arrangements under a glass in a kind of "lasting and anxiety-provoking semi-confinement" (p. 209). Invoking Marcus Rafelsberger's 2012 disaster thriller novel "Black-out: Tomorrow will be too late", written under his pen name of Marc Elsberg, the authors illustrate "the extraordinary fragility of a society that not only put all its eggs in one basket' of electric grids, but whose basket is itself only 'a mirage'" (p. 302).

This book is ideal for undergraduate introductory courses in STS. The authors' decision to include illustrations is remarkable, and they complement their well-researched history of electric power and its concealed unsustainability under the guise of a "Green New Deal". Furthermore, the book presents a three-fold "phenomenological" approach, incorporating Tocqueville's law, Bentham's panopticon, and electricity's elusive ability to evade capture, offering readers creative metaphors to engage with the text. The authors explain that French social philosopher Alexis de Tocqueville had affirmed that societies are always affected by the conditions which saw them born. Subsequently, the industrial revolution's choice of fire (fossil fuels) as the preferred means of industrial development ensured the electrical phenomenon does not escape Tocqueville's law. Changes and shifts in certain socioeconomic patterns resulted from this ever-spreading reliance.

Bentham's panopticon is useful to understanding the form of existence dominated by electricity today in terms of a technical macro-system governed by a centralized view of ex-

changes. The authors' last point is that electric current does not allow itself to be imprisoned. Hence the never-ending search for a battery than can do just that. Commendably, the authors proffer no simplistic solutions. Rather, they explain how the sustainability of human life and the planet requires the unmasking of capitalist myths that perpetuate "concealment of the materiality of [electricity's] origin and fuel waste" (p. 14). South African social philosopher Scott Timcke (2021) noted this unmasking project compels us to ask how the purposeful construction of a subject might hide as much as it "might illuminate" (p. 22).

The authors' metaphorical window of electricity as a *magical fairy* is provocative, yet it echoes the materiality concerns of previous critical contributions. For example, Canadian philosopher James Gerrie (2018) noted that it might actually be less polluting to simply burn the original fuel, such as oil in the form of gasoline, in a vehicle itself, "rather than in a power plant" (p. 164). Gerrie explained that if electric cars replaced cars powered by internal combustion across the board, peak loads would significantly increase and this, in turn, would prompt electricity plants to generate much higher levels of electricity simply to cover possible peak loads even when people are not intensively consuming. In short, a substantial amount of electricity generated by fossil fuel dependent power plants would be wasted.

Despite the Epilogue's strong claim that "green electricity will not become a reality" (p. 333), this book offers much more than can be covered in this review. For instance, Max Weber (1978[1921]) introduced a famous and controversial idea about two types of rationality: one based on values (*Gemeinschaft*) and the other on achieving specific ends (*Gesellschaft*). However, in our modern society, we often prioritize a peculiar form of utilitarianism, centred on the freedom to consume. In their collaborative work, social philosopher Felix Ekhardt, social anthropologist Christine Fassert, and sociologist Luigi Pellizzoni pointed out how our economic system continually attracts consumers who buy more and new products, often without considering the production process or societal level (2017, 108). The transformation of formerly magical mysteries into a technological electric servitude ultimately serve *Gesellschaft* aims.

Further, we are reconfiguring our machines to be reproductive rather than productive. Rather than investing in personal solar panels to begin an adventure of home solar energy-generated electricity, many are more interested in whether a touchscreen phone that folds like flip phones did twenty years ago is the next fad; or how many cameras the next iPhone will offer. The authors aver the internet is the epitome of this hyperreality of reproducibility. As a result, an incessant call for growth the GDP arbiter, baptized as progress, defines liberty in economic terms, and "therefore mixes values and ends" (p. 179). As the authors conclude their exploration of the digital electronic condition, "electric magic" (p. 338) takes a very unexpected turn, when the vision of an object-world, reduced to the state of "inert scenery", no longer talks to us (p. 339).

## References

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