any of the critical capacity with the bosses whom they beguiled for so long. Perhaps not. I look forward to Weiner's sequel, and hope that he will have access to archival evidence in an age of continuing glasnost.

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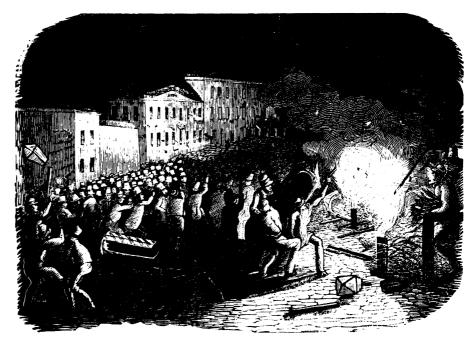
Lighting and Its Uses

Disenchanted Night. The Industrialization of Light in the Nineteenth Century. WOLFGANG SCHIVELBUSCH. University of California Press, Berkeley, 1988. x, 227 pp., illus. \$22.50. Translated from the German edition (Munich, 1983) by Angela Davies.

Few achievements have emblemized modern progress more powerfully than the spread of artificial light. The capacity to control and then conquer darkness has, for 150 years now, been central to the world's urbanization and industrialization. But pervasive and influential as the quest for more light has been, few historians have examined its implications as a larger movement.

In this fascinating brief book Wolfgang Schivelbusch reviews the attitudes and perceptions first epitomized and then transformed by industrialized light. The opening portion of the well-illustrated text considers, in fewer than 75 pages, landmark events in the modern history of the lamp: the development of candles, the innovations of Argand, the coming of gaslight, and, as a technological and cultural climax, the appearance of the electric light. The remaining sections, most of the book in fact, are taken up with areas of life—the street, the drawing room, and the stage-where increased and changing forms of illumination made for enormous differences. Throughout Schivelbusch is concerned with human reactions and social uses, the often unpredictable impact of novel lighting and its expressive and symbolic as well as utilitarian and instrumental applications.

This is not a continuous narrative or a rigorously analytical reconstruction of technological experiments. Instead the book is studded with *aperçus*, anecdotes, quotations, and descriptions, most of them designed to challenge popular assumptions about the character of innovation. Thus Schivelbusch spends a good deal of time explaining how gas and electrical lighting mimicked one another. Instead of seeing artificial illumination as a "simple straight line" of improvement, Schivelbusch demonstrates how old technologies infiltrated new ones, how Edison's incandescent lamp was "nothing but a



Lantern smashing in Vienna, 1848. Street lanterns, seen as symbols of the ancient régime, had been used as gallows in the French Revolution of 1789. In the Paris revolution of 1830, "this activity was replaced by lantern smashing." Not merely a symbolic gesture, lantern smashing was a practical strategy in that it "erected a wall of darkness... protecting an area from incursion by government forces." By 1848, however, oil lanterns had been replaced by gaslights, and "a new way of putting out the light, appropriate to the new technology, had to aim at shutting down the gas-works." Little lantern smashing occurred in Paris in 1848; that which occurred elsewhere, with disastrous results for the rebels owing to the fact that breaking gas lanterns freed the flame to create more illumination, can be attributed to "relative lack of revolutionary experience." [From Disenchanted Night]

methodical imitation of gaslight in a new medium," how the light switch's origins in the gas-tap were clearly visible in its turning mechanism used for many years before the quick-break switch appeared. Schivelbusch also develops analogies between the growth of corporate monopoly capitalism and the centralization of energy, proposing that widespread resistance to both faded along with individualistic enterprise.

Perhaps the most arresting elements of the book have to do with its catalogue of ambivalencies. As Schivelbusch reviews the multiple uses of illumination he conjures up a lighting of liberation and a lighting of surveillance, a lighting of revolution and a lighting of repression, a lighting of diversity and a lighting of standardization, often indeed in the very same technologies. The metaphor of the light is traced through a series of heroic, monumental, and utopian schemes, ranging from the great arc light towers constructed in American cities to the Tower of the Sun proposed for Paris, a competitor to the Eiffel Tower that was meant to illuminate the entire city and to contain, in its great trunk, a museum of electricity. The history of street lighting, store lighting, advertising, and theater are also tapped for instructive and evocative

This is not to say that all insights are equally persuasive. Like his subject, the au-

thor sometimes dazzles rather than brightens. Although electricity depended on central power stations, its applications, in the areas of traction for example, were not marketed as monuments to the concentration that Schivelbusch finds its most significant characteristic but as avenues to decentralization, the cleaner, cheaper, more efficient transport promising to bring to towns and villages the advantages of urban life. And electricity was not greeted entirely with the wondering unanimity that Schivelbusch posits. Its many advantages over evil-smelling gas notwithstanding, fears of shock and electrocution, of explosion and collective disaster, permeate whole areas of popular culture in the late 19th century.

But the point of this book is not to develop any single argument. Rather it is a readable, highly personal, often original, and deliberately provocative attempt to integrate the story of artificial light with the history of modern life. Its audacious if occasionally wrongheaded hypotheses about these relationships should provoke amusement, disagreement, surprise, and ultimately gratitude to the author for wrapping his charms in so modest, unassuming, and concise a literary package.

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