

LET THERE BE DARK

Dieter Roelstraete

The invention of photography, in the first half of the nineteenth century, belongs to that century's long history of *illumination*—of the increased shedding of increasingly bright light on the darkness of the world. Following hot on the heels of the Age of Enlightenment, this period in history sought to switch on the light in every recess of the known universe, both materially and spiritually. (It is the era, more or less, of Francisco Goya's celebrated etching *The Sleep of Reason Produces Monsters*. A hundred years later, stoically awaiting Europe's inevitable descent into the barbarous maelstrom of the First World War, the British statesman Sir Edward Grey famously remarked that "the lamps are going out all over Europe; we shall not see them lit again in our lifetime.")

As is well enough known, the world's first permanent photograph was taken from nature by the French inventor Joseph Nicéphore Niépce in 1826 or 1827; it depicts the view from an upstairs window at Niépce's estate Le Gras in Saint-Loup-de-Vareennes in the Burgundy region of France. The photograph—of a jumble of buildings, a field perhaps, the sky—was made on a bright, sunny summer day; it took an exposure time of eight hours, after which Niépce called it a *heliograph* rather than a *photograph*—his modest tribute to the power of the sun ("helios"). The term "photography" or "writing with light" was only coined in 1839 by Sir John Herschel, six years after Niépce's death—born in 1765, the latter's life coincided significantly with an era of revolutionary transformations in lighting technology that are unthinkable without the larger cultural changes wrought by the Enlightenment.

As Wolfgang Schivelbusch notes in his entertaining, insightful *Disenchanted Night: The Industrialization of Light in the Nineteenth Century*, "at the end of the eighteenth century the technology of lighting, which had hardly changed for thousands of years"—logs, torches, candles—"was in a state of flux. The incentive for change was the increased need for light." [*Need? Or desire? Much of Schivelbusch's story takes place in Paris, city of light, ville lumière: "Paris gained this popular epithet thanks first to the eighteenth century Enlightenment, of which it was the center, and then to its brightly lit amusement boulevards, a product of the nineteenth century. On closer inspection, this city of light proves to have been an active center in the history of artificial lighting. Time and again, it sent out important scientific, technical and psychological impulses." Needs and desires, in short.*] One aspect of such a need was doubtless economic—the revolutionary step towards *gas* lighting, taken sometime around 1800, was primarily driven by the necessity to light the early citadels of the industrial era so as to increase production by artificially extending working hours in the factories sprouting up all around the English countryside in particular: "the first gas lighting systems were installed in the very stronghold of British industry, Watt & Boulton of Soho near Birmingham." (The firm of Boulton and Watt manufactured stationary steam engines. As Carl Gustav Carus remarked, gas and steam are the "two main driving forces of history.") Lights, camera, *work*.

Two revolutions taking hold in the 1820s, 1830s, then: photography on the one hand, and gas lighting on the other (later to be replaced by electrical lighting). One particularly

important development in the application of the latter concerned the invention and establishment of centralized gas supplies: “expanding a thermolamp into a gas-works was not a technical innovation, but it did have far-reaching consequences. Once a house was connected to a central gas supply, its autonomy was over. The thermolamp had merely centralized heating and lighting within one house; now these systems were relocated outside the house, at a distance beyond the control of the paterfamilias. (...) No longer self-sufficiently producing its own heat and light, each house was inextricably tied to an industrial energy producer”—a loss of domestic autonomy that sped up the dissolution of the all-encompassing household of yore. [We are still some distance removed from the introduction of electrical lighting, which only really took hold in the 1870s, but Schivelbusch’ mention of the paterfamilias reminds me of early popular imaginations of electricity as an essentially *feminine*, and therefore potentially destructive, force—“la fée électricité” as immortalized by French painter Raoul Dufy for the Electric Pavilion at the Paris World Fair of 1937.] Gas lighting establishes a *networked* society—and, by way of photography, helps to illuminate these newly complicated states of interdependency in turn.

The conquest of darkness by the forces of industrialization inevitably led to the conquest of the night. Its end, rather than its mere “disenchantment”, is at the heart of a more recent book about a related subject, namely Jonathan Crary’s *24/7: Late Capitalism and the Ends of Sleep*. In this diatribe, Crary excoriates the capitalist logic of frenetic around-the-clock consumption and production along with “late” capitalism’s invasion of formerly consumption-and-production-resistant islands of everyday life such as sleep and other nocturnal anti-activities (lovemaking being one of them)—a tactic in which the specter of perennial, inextinguishable lighting plays a predictably prominent role (literally and symbolically so): “an illuminated 24/7 world without shadows is the final capitalist mirage of post-history, of an exorcism of the otherness that is the motor of historical change. 24/7 is a time of indifference, against which the fragility of human life is increasingly inadequate and within which sleep has no necessity or inevitability. In relation to labor, it renders plausible, even normal, the idea of working without pause, without limits. It is aligned with what is inanimate, inert, or unageing. As an advertising exhortation it decrees the absoluteness of availability, and hence the ceaselessness of needs and their incitement, but also their perpetual non-fulfillment.” What is endlessly, absolutely available must also be *visible* around the clock—total visibility is contemporary capitalism’s dominant optic (a state which demands constant confirmation, demonstration). This regime of all-encompassing and unending visibility is held in place by a wide-ranging arsenal of tools and technologies, but photography, itself ever-evolving and sleepless, occupies a pivotal position among them—much more so today now that all of us go about our lives carrying and using smartphones around the clock (“24/7”) mostly to photographically document and record everything we see and everything we do. It is no exaggeration to say that today’s world is lit up primarily by the anemic glow of the iPhone screen (or the screen of the computer I’m using to write these very observations down on), all day and all night—its camera-eye truly never sleeps. [Schivelbusch: “the newer a culture is, the more it fears nightfall.” Our novelty-obsessed techno-culture fears the dark more than the night—it dreads *invisibility*.]

There is some irony to be gleaned from the fact that the ever-accelerating development of communication, imaging and information technologies—the vanguard, along with biotechnology, of 21st- and 22nd-century science—has forced the reopening, around the world, of certain mines that were first exploited in the 19th century, yet whose mineral riches lost economic significance as the 20th century wore on. Susanne Kriemann has addressed this ironic turn of events in her own re-opening (so to speak) of the Barringer Hill Mine in Texas, which was closed down in 1906 and subsequently submerged in the manmade Lake Buchanan following the damming of the Colorado River. Kriemann’s descent into the darkness of the mine is not unlike her previous mining of similarly dusky archives—though this time in search, quite literally, of the physical facts of *light*: indeed, what was first extracted from Barringer Hill well over a century ago are some of the most eagerly sought-after raw materials in the world today—rare earth elements used in the production of the LED screens around which so much of our lives revolves these days. (Back in 1902, these elements were first used in the manufacture of the Nernst Lamp, an early rival to the tungsten incandescent light bulb.) The minerals found in Barringer Hill emit light, but they are also intensely radioactive, burning the faces of the miners who first excavated them—an organic example, if you will, of labor’s precarious, risk-ridden relationship to light. The network established by the inventions of gas lighting, steam power and telegraphy, which so closely mirrors the circulatory map of the human body (early on, Hermann von Helmholtz compared the human nervous system’s synapses with the lines of the telegraph), has now, with the increasing digitization of communication and the drive to live our daily lives online, become inextricably bound with our biology. If, to quote Walter Benjamin, in the 19th century already “technology subjected the human sensorium to a complex kind of training,” then in the 21st century human perception has been so well-trained that it can hardly exist any longer outside the LED screen’s imperious gaze. In Kriemann’s work, the many ironies of this relationship are made explicit: she uses the light of her smartphone to manipulate photographs in the darkroom—photographs taken of an area where a mine once produced the very materials that illuminate the phone’s screen. This mine now lies vacant under a lake dug by human hands.