

Nocturnal Experiments on Worthless Bodies Gothic Poetics in Friedrich Engels' Ethnography of Night Work

Jayson Althofer

Volume 44, Number 1, 2022

Ethnographies nocturnes : esthétiques et imaginaires de la nuit
Nocturnal Ethnographies: Aesthetics and Imaginaries of the Night

URI: <https://id.erudit.org/iderudit/1096062ar>

DOI: <https://doi.org/10.7202/1096062ar>

[See table of contents](#)

Publisher(s)

Association Canadienne d'Ethnologie et de Folklore

ISSN

1481-5974 (print)

1708-0401 (digital)

[Explore this journal](#)

Cite this article

Althofer, J. (2022). Nocturnal Experiments on Worthless Bodies: Gothic Poetics in Friedrich Engels' Ethnography of Night Work. *Ethnologies*, 44(1), 179–204. <https://doi.org/10.7202/1096062ar>

Article abstract

Friedrich Engels' *The Condition of the Working-Class in England* (1845) features a pioneering multisensory ethnography of the factory system. His critique of the industrial revolutionization of light for 24/7 production adapted a contemporaneous Gothic imaginary of the night. In *The Philosophy of Manufactures* (1835), Andrew Ure repudiated a physician who condemned night-work's effects on factory children – “if light is excluded from tadpoles, they never become frogs” – by counter-claiming: “the number and brilliancy of the gas-lights in a cotton-mill” militated against child-labourers lingering “in the tadpole state.” Dispelling Ure's thinking as blinding fantasy, Engels revealed “the vampire property-holding class” penetrating night-workers with “very powerful light ... most injurious to the sight.” He brilliantly anticipated Karl Marx's demonstration in *Capital* (1867) that industrial revolutionism, involving capital's rapid take-up of new lighting technologies, occurred “at the expense of the workpeople. *Experimenta in corpore vili*, like those of anatomists on frogs, were formally made.”

NOCTURNAL EXPERIMENTS ON WORTHLESS BODIES

Gothic Poetics in Friedrich Engels' Ethnography of Night Work

Jayson Althofer
Independent scholar

What might be toward, that this sweaty haste
Doth make the night joint-labourer with the day?

Shakespeare 2003 [1603]: 1.1.77–78

The [French] middle-class revolutionary party of 1789 cried out in horror and indignation against the lords, who through the long summer nights compelled their serfs to beat the ponds near their castles to keep the frogs from croaking. What would they say if they saw what we see? Improvements in lighting date from the capitalist period. [Lamp and candle designs were improved], then gas was discovered, then petroleum, then the electric light, turning night into day. What benefits have these scientific improvements in lighting brought to the workers? They have enabled employers to impose night work upon millions of proletarians . . . The industrial applications of mechanics and chemistry have transformed [work] into a torture which exhausts and kills the proletarian.

Lafargue 1907: 86–87

Prologue

The night, particularly the night possessed by capital, has been a field of social dislocation and dissynchrony since the artificially lit dawning of the Industrial Revolution. Temporal rifts, or *untimely* upheavals, consequent upon capital's usurpation of the night as a field to exploit workers for its self-valorisation were evident at the time. As Jonathan Crary observes in his study of "the ends of sleep" under capital's sleepless surveillance, Joseph Wright of Derby's painting *Arkwright's Cotton Mills by Night* (c. 1782) emanates "spectral disjunctions," notably an "unsettling" severance of work hours "from the cyclical temporalities of lunar and solar movements."

“The artificial lighting of the factories announces,” Crary elucidates, “the idea of productive operations that do not stop, of profit-generating work that can function 24/7. At the particular site shown in the painting, a human labor force, including many children, was set to work at the machines in continuous twelve-hour shifts” (2013: 61–62). Surveying English textile manufacture since the late 1700s, Peter Gaskell remarked in 1833: “unsatisfied with the day labour, the night was almost uniformly spent by one portion of the hands in the mill; the owners ... thus securing twenty-three hours out of the twenty-four, for making his [*sic*] machinery valuable” (176–177). Gaskell quoted a founder of the Manchester Board of Health from 1796: “The untimely labour of the night, and the protracted labour of the day, with respect to children [working in cotton mills] tends to diminish future expectations, as to the general sum of life and industry, by impairing the strength, and destroying the vital stamina of the rising generation” (177–178). Charles Babbage registered, rhetorically, the awesome, untoward character of capital’s extension of its productive regime into the night: “Is it usual, or necessary, to work night and day without stopping?” (1832: 96)

Sensible of the night’s changing gravitational pull, Luc Gwiazdzinski *et al.* comment: “Long marginal, the night has gradually become a central focus of economic actors, public policy, tourism, and urban planning” (Gwiazdzinski *et al.* 2018: 11). This claim can be historicised in the light of the Industrial Revolution. From the early days and nights of industrialised production, the night was a central focus of leading economic actors, the capitalist and labourer; in *Capital* (1867), Karl Marx called them “our *dramatis personae*” (35: 186), who increasingly performed, and fought, under artificial light.¹ Also, the parliamentarian, physician, philosopher, factory inspector, even factory tourist, and other figures, acting in a conflictual ensemble of social relations, took the night, night work, overwork and unlimited work hours as outstanding matters of political debate, social campaign and class struggle. Of grave concern, “the industrialization of light” (Schivelbusch 1995) and its colonisation of workspaces were forced on labourers, less as a gradual progression, than as a precipitous shock to and displacement of pre-industrial patterns of work, rest and sociality. As Eric Hobsbawm relates, “industrialists absorbed innovations with great speed”; cotton-masters, for instance, quickly “learned to build in a purely functional way” and “lengthened the working day by illuminating their factories with gas. Yet the first experiments in gaslighting went no further

1. All quotations of Marx and Engels are from their *Collected Works* (50 vols., 2010). In-text references note the volume number followed by the page number(s).

back than 1792” (1968: 43). Advocating “the interdisciplinary field of ‘night studies,’” Christopher Kyba *et al.* touch on this fundamental history: “Over the past 150 years, the night has undergone a series of major transformations. Electrification, industrialization, and capitalism have altered humanity’s experiences with night as both a time and place” (2020: 1–2). Yet the major transformations or, more aptly, the world-historic revolutionisation of the time-space “night” began well over two centuries ago.

The working day enjambed / Into the night

In *The Condition of the Working-Class in England: From Personal Observation and Authentic Sources* (1845; hereafter, *Condition*), Friedrich Engels (1820-1895) alluded to *Hamlet* – “The time is out of joint” (1.5.189) – in summarising the application and effects of three interlinked levers: “The division of labour, the application of water and especially steam, and the application of machinery, are the three great levers with which manufacture, since the middle of the last century, has been busy putting the world out of joint” (4: 325), and, indissociably, busy enjoining new shapes on the world and its industrial workers.² With great speed or, to reinvoké *Hamlet*, “sweaty haste,” capital both disjointed the world and joined the night to the working day. Engels’ ethnography of lived experience under industrial capitalism correlated the macrocosmic dialectic of conjointment and disjointedness with microcosmic images of labourers collectively reshaped from a diurnal into a cathemeral workforce and individually mauled and misshaped by machinery:

I have seldom traversed Manchester without meeting three or four [factory workers], suffering from ... distortions of the spinal columns and legs ... It is evident, at a glance, whence the distortions of these cripples come; they all look exactly alike. [In textile mills] work between the machinery gives rise to multitudes of accidents ... which have for the operative the secondary effect of unfitting him for his work ... The most common accident is the squeezing off of a single joint of a finger ... in the machinery. (4: 445–446, 455)

Unfitting individual labourers was the flipside of fitting the working class into work hours that optimised the machinery’s profitability (see

2. Except for Engels’ dedicatory address, “To the Working-Classes of Great-Britain,” which he wrote in English, *Condition* was written and first published in German. He intended to have the address printed separately and sent to “English party leaders, literary men and Members of Parliament” (4: 703). The authorised English edition of *Condition* was published in 1892. I quote from that English translation, made by Florence Kelley-Wischnewetzky and edited by Engels himself.

Marshall 2021: 129). Artificial lighting was necessary for the enjambment of the working day into the night and thus integral to the infrastructural machinery that put the pre-industrial world out of joint. Its use also put out the eyesight of night workers. Engels' ethnographic account of the ophthalmological conditions of workers, whose eyes were strained, inflamed and blinded by their work, is accented by flashes of monstrous forces: prolonged, intensely bright light was *torture* to night workers' eyes and capital's *vampirism* overworked them, sucking out their health and life.

This article reads *Condition* for Engels' pioneering study of the night's possession by capital and focuses on the Gothic poetics of his ethnography of night work. To adapt Henri Lefebvre, Engels was not an ethnographer, but an ethnography is in *Condition*.³ For Engels, Marx and their peers, Corbin Hiday argues, "institutionalized frameworks [for specialised disciplines] were not yet in place; social thought during this period [that is, the mid-1800s] coalesced around a series of interrelated practices and discourses that included journalism, interviews, ethnography, philosophy and political economy" (2019: 139). Hiday declares: "Within the burgeoning moment of industrialization and attempts at its theorization, Engels produces a defining work containing elements of ethnography, sociology and social anthropology" (144). Significantly, too, by Engels' *détournement* of elements of Gothic literature, *Condition* is the foundational work of "Gothic Marxism" (Althofer 2020 and 2022a).⁴ A Gothic poetics, it is argued here, constitutes the gravamen of his critique of night work.

Condition even anticipates, John Parham argues, Clifford Geertz's practice of *thick description*: "Engels utilised a method similar to what is now called thick description" (2019: 354). Parham summarises his portrayal of the industrialised "reshaping and distorting [of] human life":

Gradually Engels builds a thick description of health hazards, spanning from surface afflictions to chronic threats to life: external bodies are reconstituted – diminished eyesight; deformities of knees, ankles, legs and shoulders, curvature of the spine; internally, bodies are attacked by illness, infection and fever – scarlet fever, chest infections, asthma, anaemia, intestinal disorders, consumption, or typhus. The material

3. "Marx is not a sociologist, but there is a sociology in Marx" (Lefebvre 1968 [1966]: 22; original emphasis). It is worth mentioning that in Lefebvre's *Éléments de rythmanalyse* (1992), "the discussion of how the mechanical repetition of the cycles of capitalist production is imposed over our circadian rhythms should remind us of the discussion of the working day [and its prolongation into the night] in Marx's *Capital*" (Elden 2004: xii) – and in Engels' *Condition*.
4. For discussion of Engels and Marx's practice of *détournement*, see Althofer 2022b: 8–9.

consequences of industrial labour permeate bodies, undermining their capacity for labour, their human being. (356)

Personal observation of night work's debilitation of workers' eyesight, among other results, critically aggravated and generated Engels' insights – "The splinter in your eye is the best magnifying-glass" (Adorno 2005 [1951]: 50) – fostering the permanent enlargement of his fields of vision and investigation. From Stanley Edgar Hyman likening Engels to "a good field ethnographer ... naming the patent medicines that contain laudanum and are thus responsible for the deaths of children" (1962: 53) to Robbie Shilliam mentioning that "Engels, in ethnographic mode, notes the prevalence of peddlers on street corners selling ginger beer" (2015: 205), close readings of *Condition* cannot but acknowledge Engels' "sharp eye for detail" (Blackledge 2019: 23). What makes his urban-industrial ethnography outstanding is "not merely his eye for illuminating detail but," as Paul Blackledge states, "his method for making sense of this detail" (26–27). Indeed, his emergent historical-materialist method enabled him to see the factory system's hell lodged in an eyeball.

Engels "immersed himself in the actual workers' way of life" (Herres 2015: 20), not least their nocturnal conditions, undertaking his ethnographic explorations "at all hours of the day and night" (Marcus 1974: 98).⁵ So, besides "thick description," he was a precursor of *l'ethnologie de proximité*, as indicated by this self-description: "Twenty-one months I had the opportunity to become acquainted with the English proletariat, its strivings, its sorrows and its joys, to see them from near, from personal observation and personal intercourse, and at the same time to supplement my observations by recourse to the requisite authentic sources" (4: 302). Engels' immersion in workers' life-worlds involved self-observation and -reflection – in other words, aspects of autoethnography – and self-transformation. Close daily and nightly contact with workers revealed that "we German theoreticians still knew much too little of the real world" (4: 303) and thereby bolstered his striving from Left Hegelian theoreticism to internationalist communist praxis.

5. See Kyba *et al.*: "Humans are diurnal, and it is difficult to conduct research at night, regardless of disciplinary specialization. Moreover, as most people (including scholars) sleep at night, nocturnal processes and issues are easily overlooked" (2020: 2). As indicated, this article considers the epochal shift from diurnality to cathemerality among some humans, namely factory workers, during the ascendancy of industrial capitalism. To study this shift, Engels too had to become part creature of the night, or the endless day, refashioning the pattern of his activities as cathemeral. As also indicated, he made his lucubration before disciplinary specialisation was institutionally normalised.

Before outlining the youthful Engels' biography and more fully delving into his ethnography of night work, the article treats two works that are key to articulating the genealogy, dialogism and partisanship of *Condition*: Andrew Ure's *The Philosophy of Manufactures* (1835) and Thomas Carlyle's *Past and Present* (1843).⁶ A Scottish physician, scientist and business theorist, Ure aestheticised the factory – child workers are “lively elves” (1835: 301) – as if it were the theatre for a gaslit midsummer night's dream. Engels drew on a Gothic imaginary of the industrialised workday to overturn Ure's supernaturalised pastoral, recasting it in dreadful light to spot vampires devouring the lifeblood of elves. Carlyle was a Scottish cultural critic and sensational experimentalist in prose forms whose anti-capitalist criticism and weird wordsmithing impressed Marx and Engels (Althofer 2022b: 12–16). *Past and Present* is a wired mash-up of investigative reportage and hallucinatory lamentation, eldritch satire and strident prophecy, in which Carlyle unfolded what he called “real-phantasmagory” (124) to diagnose the Condition of England as well as describe the poetics of his diagnosis. Engels reviewed *Past and Present* in 1844 and Carlyle's real-phantasmagorical probing of lived, and living-dead, experiences in industrialised England galvanised the Gothicism of *Condition* (Althofer 2020: 85–86). In 1845, Engels' newfound collaborator, Marx, also a reader of Mary Shelley's *Frankenstein* (1818) and John Polidori's *The Vampyre* (1819), was deeply moved by *Condition*'s multisensory ethnography of the factory system. *Capital*, notably Marx's chapter “The Working Day,” represents a fully theorised elaboration of *Condition*'s Gothic-inflected ethnography. Murray Melbin's germinal sociological thesis, “Night as Frontier” (1978), acknowledges Marx's apprehension of night work as “a new mode of exploiting human labor” (4).⁷ Despite Engels' intimate intellectual partnership with Marx from 1845 until the latter's death, his earlier ethnography of night work has not received sustained or focused critical attention.

-
6. For a broader contextualisation of Ure, Carlyle and Engels than possible here, see Joshua B. Freeman's (2018) history of the factory “behemoth” from Manchester to Shenzhen. Freeman's mention of the factory tourists for whom gaslights were a dazzling spectacle (21) is reconfigured by Althofer and Musgrove (forthcoming) through Marx and Engels' Gothic imaginary of the torturous factory.
 7. Likewise, the CANDELA collective writes, apropos Marx's studies: the night appears “comme un territoire conquis pour y imposer l'ordre politique et économique qui gouverne le jour,” night work becoming the “forme ultime d'exploitation de la force de travail” (2017: 13). Also see Palmer (2000: chapter 7).

Engels adapted fundamental Gothic motifs to document horrific truths about bourgeois domination and exploitation of the proletariat. The trope of vivisepture imparted physical and psychological torments engendered by factory work: “This condemnation to be buried alive in the mill, to give constant attention to the tireless machine is felt as the keenest torture by the operatives, and its action upon mind and body is in the long run stunting in the highest degree” (4: 466). To escape from live burial was also to escape vampirism: workers must overcome beliefs and habits that “make them weak and resigned to their fate, obedient and faithful to the vampire property-holding class” (4: 526).⁸ For John Locke, “The ideas of goblins and sprights, have really no more to do with darkness than light” (1823 [1690]: 326). Locke’s point was effectively updated by Marx and Engels’ conceptualisation of modern vampirism. The day-for-night inversions that perpetually revolutionise social existence under capital revealed that its vampirism is not of the folkloric kind, killed by light, but a modern monstrosity feeding in the endless artificial day afforded by the installation of new lighting technologies. As Marx put it, “The prolongation of the working day beyond the limits of the natural day, into the night ... quenches only in a slight degree the vampire thirst [*Vampyrduerst*] for the living blood of labour. To appropriate labour during all the 24 hours of the day is, therefore, the inherent tendency of capitalist production” (35: 263). Acting in, even activated by, artificial light, “the vampire will not lose its hold on [the labourer] ‘so long as there is a muscle, a nerve, a drop of blood to be exploited’” (35: 306). These excerpts from *Capital* – in the second, Marx quoted Engels’ article “English Ten Hours’ Bill” (1850) – epitomise the Gothic charge of the poetics they shared.⁹ Marx’s “explicitly horrific

8. Engels’ and, later, Marx’s pictures of the factory as a topography of carceral sublimity instance the Gothic preoccupation with live burial. Concomitantly, their views can be situated and interpreted in terms of what J. Hillis Miller calls, in his reading of Thomas de Quincey, “the Piranesi effect” (1963: 67). Althofer and Musgrove (forthcoming) relate De Quincey’s Piranesian dreaming to Marx and Engels’ treatment of the artificially lit factory as a prison-house of terror. Crucially, however, Marx and Engels do not treat live burial as a sign of the proletariat’s mere inert victimhood. Rather, proletarian struggle for unburial demonstrates collective agency for working-class self-emancipation, which, inseparably, digs the grave of bourgeois hegemony. Also, their representations of live burial and unburial have marked Biblical resonances (Althofer 2020: 77, 89–90).
9. The literature about Marx’s vampires is voluminous; influential studies include Moretti (1997 [1983]), Carver (1998: chapter 1) and McNally (2011: chapter 2). Engels’ use of vampirism and of Gothicism in general is relatively unregarded; see Palmer (2000: 121–122), Kehler (2008), Althofer (2020 and 2022a) and Marshall (2021). Engels was a formative figure in André Breton’s “Gothic Marxism” (Löwy 2009: chapter 3).

visions” (Sutherland 2019: 205) often referenced Engels’ thick descriptions of workers’ bodies and senses drained by capitalist exploitation.

The Gothic poetics at stake in Engels’ ethnography of the night is nigh indistinguishable from *Capital’s* poetics. The latter, as Keston Sutherland articulates, revolves around “a hideous dredging into vacuousness,” conveyed by “Marx’s emphatic, brutal, disfigurative description of the pumping out and sucking empty of what is dead. Capital, says Marx, is an *Auspumper*, literally a pumper-out, that performs the *Aussaungung* of the worker, literally the sucking out, or sucking hollow, of a ‘stunted, short-lived and rapidly replaced human being’” (2019: 205). “Marx assaults his reader,” amassing imagery of workers “crushed, sucked out, laid waste, desertified, elasticated, tortured and distorted into human specks, stumps and fractions” (206). He intended to agitate, disturb and disgust his readers into somatised awareness that capital’s *Aussaungung* is not aberrant or exceptional, but essential to its autocracy. Sutherland emphasises, “it is not excess to ‘the rule’ of the logic of categories and value forms to say that capital sucks the worker empty, but the resounding truth of that rule” (207). By 1839, when an excited eighteen-year-old Engels wrote from Bremen, “I cannot sleep at night, all because of the ideas of the century” (2: 422), capital’s ascendancy had made, and was incessantly remaking, night work into a living nightmare, shucking off restorative sleep and sunlight for night workers and sucking out their sight, strength and very existence. At Manchester in the early 1840s, Engels would confront a post-human scheme: for the capitalist class it was usual and necessary for the working class, to reprise Babbage, “to work night and day without stopping.”

Some are born to endless light

Fiat experimentum in corpore vili – Let the experiment be performed on a worthless body. The Industrial Revolution progressed, Marx wrote, “at the expense of the workpeople. *Experimenta in corpore vili*, like those of anatomists on frogs, were formally made” (35: 460; see Chamayou 2008: 338–339). The industrialisation of light necessary for night work was one such experiment. As an innovative technology whose rapid absorption in the factory system developed toward ubiquity, artificial lighting profoundly determined the elastication and transmogrification of primarily diurnal labourers into newly shaped, cathebral proletarians. For capital’s intellectuals, the forms and transformative effects of experimentation and improvement in lighting were, literally and figuratively, brilliant. Completed with psycho-physiological research on expendable lives

and vile bodies, ideological support for “man’s labour power ... stretched to an extreme” (35: 417) required what Marx called *der kapitalistischen Anthropologie*. The disciplinary objectives of “capitalistic anthropology” involved redefining the periods of childhood and the workday. He reconstructed the contemporary history of class struggle over legislative parameters for children’s workplace initiation into adult status and thus into relatively unrestricted work hours. Capital’s position, he observed, “turned chiefly on the age of those [labourers] who, under the name of children, were limited to 8 hours’ work ... According to capitalistic anthropology, the age of childhood ended at 10, or at the outside, at 11” (35: 285). Capital’s “anthropologists” argued for a procrustean demarcation of childhood and a workday of unlimited length. One unmeasured apologist, or budding absolutist, for cutting down the working definition of childhood and removing legal limits from work hours was Andrew Ure.

“Convulsions accidentally observed in the limbs of dead frogs, originally suggested to Galvani, the study of certain phenomena” (Ure 1819: 283). So Ure, Professor of Natural Philosophy, began “An Account of Some Experiments Made on the Body of a Criminal” (1819) – the report of his and fellow Professor James Jeffray’s galvanic experiments on the corpse of hanged murderer Matthew Clydesdale in the University of Glasgow’s anatomy theatre on 4 November 1818. Their attempt to revivify Clydesdale followed many such experiments performed by “eminent philosophers” (291) on the bodies of executed criminals. As a natural philosopher – “my *minor* voltaic battery [is] a philosophical apparatus” (288, 290; original emphasis) – Ure justified his experiments as additions to the corpus of research science: “a probability that life might have been restored ... however little desirable with a murderer, and perhaps contrary to law, would yet have been pardonable in one instance, as it would have been highly honourable and useful to science” (292). Criminal bodies realise value when utilised by philosophical, if illegal, experimentation to progress scientific reason under capital. As Marx later ironised, referring to the extrajudicial violence and exterminism of bourgeois revolutionism and capital accumulation, “revolutions are not made by laws” (35: 738).

Gothic flourishes amplified the frisson of Ure’s report, which he read to the Glasgow Literary Society. When he varied the voltage to a heel and a nerve in Clydesdale’s forehead, “most extraordinary grimaces were exhibited ... rage, horror, despair, anguish, and ghastly smiles united their hideous expression in the murderer’s face, surpassing far the wildest representations of a Fuseli or a Kean ... several of the spectators were forced

to leave the apartment from terror or sickness, and one gentleman fainted” (290). Famous for *The Nightmare* (1781), artist Henry Fuseli specialised in supernatural and uncanny subjects. Legendarily, Shakespearean actor Edmund Kean was only eight when he played Puck in *A Midsummer’s Night Dream* at Drury Lane. In Ure’s person, natural philosopher and Gothic artist became doppelgängers, converting Clydesdale into “an anonymous, mechanistic and vigorously theatrical body ... a spectacle to be gazed at like a sensational painting or a theatrical performance ... an organic automaton manipulated for the edification and entertainment of Ure’s audience” (Inglis 2011: 67).

In *The Philosophy of Manufactures* (1835), Ure forged discursive chainlinks with his galvanic experiments and Galvani’s dead frogs. If Richard Arkwright is the Ur-manufacturer of the Industrial Revolution – “a man of a Napoleon nerve and ambition, to subdue the refractory tempers of work-people accustomed to irregular paroxysms of diligence” (Ure 1835: 16) – Ure is its arch-rhapsodist, the Pindar of capitalist spin. He celebrated manufacturing practices that applied scientific knowledge to introduce new technology and synchronise workers’ motions with machinery geared toward 24-hour production cycles. He theorised a “great doctrine”: “when capital enlists science in her service, the refractory hand of labour will always be taught docility” (368). Engels heard “the [English] bourgeoisie speaking through the mouth of its chosen apostle, Dr. Ure” (4: 457). Ure’s *Philosophy*, for Marx, “perfectly expresses the spirit of the factory, not only by its undisguised cynicism, but also by the naïveté with which it blurts out the stupid contradictions of the capitalist brain” (35: 439–440). Dissecting Ure’s idea of the factory as a vast automaton, Marx insinuated that Ure, too, was an automaton, who involuntarily expressed mixed messages, especially when jolted into argumentative convulsion by resistant and militant workers.

Ure complained in *Philosophy* that night work’s alleged ill effects on “factory people” was “the theme of medical mystification” in testimony provided by certain London doctors to the British Parliament’s Select Committee on Factory Children’s Labour in 1832. “One ingenious physician, when asked about the effects of night-work on factory children, condemned it ‘because Dr. Edwards, of Paris, found that if light is excluded from tadpoles, they never become frogs’” (374). Ure refuted the claim that lighting was insufficient for night work: “the number and brilliancy of the gas-lights in a cotton-mill [demonstrate] that, as far as light is concerned, mill children need not linger in the tadpole state” (375). Working under

numerous blazing lights, “mill children” would mature into healthy “factory people,” a period epithet, which, in Ure’s styling, implied that the factory was the natural habitat for an extremophile species adapted to around-the-clock light exposure. Yet, from here he hung a confounding footnote: “Night-work, however, is scouted by all respectable mill-owners, as being equally unprofitable and demoralizing” (375n.). Despite his rationale to justify night work, Ure tripped on a contradiction immanent to ideological suasion for capital’s *Aussaugung* of people. Capital, according to Marx, “is animated ... by the longing to reduce to a minimum the resistance offered by that repellent yet elastic natural barrier, man” (35: 406). Ure voiced both the ruling class’s “respectable” but residual humanism – night work demoralises fellow human beings – and its predominant inhumanity, or post-human technoscience: workers are repellent bodies, fit for experimentation and elastication *in extremis*. Overall, Marx concluded, “his book is a vindication of a working day of unrestricted length; that Parliament should forbid children of 13 years to be exhausted by working 12 hours a day, reminds his liberal soul of the darkest days of the Middle Ages” (35: 440).

Ure’s conjuring of benighted pre-industrial times, contrasting them with the enlightenment symbolised by gaslit night work, was another reflex of bourgeois mentality – “the capitalist brain.” In *Condition*, Engels recalled the “time immemorial” custom amongst Manchester carpenters of “not ‘striking a light’ from Candlemas [2 February] to November 17, i.e., of working from six in the morning till six in the evening during the long days, and of starting as soon as it was light and finishing as soon as it began to get dark during the short days.” In 1844, building contractors attacked this “‘barbaric’ custom,” determined to extinguish it as a “relic of the ‘Dark Ages’ with the help of gas lighting, and when one evening before six o’clock the carpenters could not see any longer and put away their tools and went for their coats, the foreman lit the gas and said that they had to work till six o’clock” (4: 585–586). Engels demystified the contractors’ Ure-like image of Dark-Ages custom eclipsed by enlightened enterprise: enlisting artificial lighting robbed the carpenters of wages, time and rest.

Although the Industrial Revolution heralded an epochal rupture, a continuity in ruling class sensibility spans the “darkest” feudal rule to bourgeois hegemony’s brilliancy. Across different forms of class society, labourers must be forced to work by “master-spirits” (Ure 1835: 17). Lords of the *ancien régime*, as Marx’s son-in-law Paul Lafargue wrote, “compelled their serfs to beat the ponds near their castles to keep the frogs from croaking.” Capitalists applied, and still apply, all science and technology at

their disposal to keep their proletarian “frogs” working without refractory paroxysms of class-conscious activism. In this light, Ure composed “a paean to the capitalist use of machines to thwart, subvert and eventually crush working-class resistance to their masters’ rule. Indeed, Ure seems to positively rejoice in the capitalist’s recruitment of science to tame and, if need be, eliminate workers” (Caffentzis 2013: 152–153). Working *people* are eliminated lexically: *Philosophy* is a manifesto for master spirits to discipline *tadpoles* into docile *frogs*.

Ure also envisioned child labourers as “lively elves,” lightly disporting amidst heavy machinery. “I have visited many factories, both in Manchester and in the surrounding districts, during a period of several months, entering the spinning rooms, unexpectedly, and often alone, at different times of the day,” he reported (301) – as if he were a disinterested observer whose surprise visitations did not influence the behaviour of the observed during his ethnographic fieldwork. His description of child labour reads like an ekphrasis of a “scene” from an industrial *Gesamtkunstwerk*:

They seemed to be always cheerful and alert, taking pleasure in the light play of their muscles, – enjoying the mobility natural to their age. The scene of industry, so far from exciting sad emotions in my mind, was always exhilarating. It was delightful to observe the nimbleness with which they pieced the broken ends, as the mule-carriage began to recede from the fixed roller beam, and to see them at leisure, after a few seconds’ exercise of their tiny fingers, to amuse themselves in any attitude they chose, till the stretch and winding-on were once more completed. The work of these lively elves seemed to resemble a sport, in which habit gave them a pleasing dexterity. Conscious of their skill, they were delighted to show it off to any stranger. As to exhaustion by the day’s work, they evinced no trace of it on emerging from the mill in the evening; for they immediately began to skip about any neighbouring play-ground ... (301)

Ure’s metaphorical dehumanisation and romanticisation of child workers as elves slotted into his grand vision: a world without factory workers, where commodities and profits are made without the need of organic automata, or disciplined workers, let alone refractory frogs; “a capitalist utopia of the production process without labour” (Edwards 2001: 17).¹⁰ As parts of Matthew Clydesdale’s body were “set a-playing”

10. Ure codified the Ur-myth of today’s “tech tycoons” whose blueprint for an “automated dreamworld is more fantasy than reality. Behind the search engines, apps and smart devices stand workers, often those banished to the margins of our global system ... Perversely tasked with building this future are [workers whose] implicit role is to erase their own work and that of others. The data they process

by Ure applying his *minor* “philosophical apparatus” (1819: 290, 292), so the collective body of child labour was set a-playing by its environing in a *major* philosophical apparatus: the factory. Unlike the scientific gentlemen who flinched or fainted at the sight of Clydesdale’s Gothic grimaces, Ure in his tripping prose delighted in the children’s manifestation of supposedly “natural” nervous energy.

Engels quoted Ure’s passage about “these lively elves” in *Condition*, which is based on his own lived experience of Greater Manchester. He bristled at the obscenity, a passing view of working children as of some titillating spectacle: “Ure should have waited to see whether this momentary excitement had not subsided after a couple of minutes. And besides, Ure could see this whole performance only in the afternoon after five or six hours’ work” (4: 458–459). Ure did not stay to watch, much less work, a twelve- or sixteen-hour shift. He did not meet, or admit to seeing, zombielike children, deadened in mind and virtually dead on their feet, such as those interviewed by a Children’s Employment Commissioner whom Engels paraphrased:

They were so little capable of thinking of what they said, so stolid, so hopelessly stupid, that they often asserted that they were well treated, were coming on famously, when they were forced to work twelve to fourteen hours ... They knew nothing of a different kind of life than that in which they toil from morning until they are allowed to stop at night, and did not even understand the question never heard before, whether they were tired. (4: 492)

Flipping Ure’s daydream image of self-theatricalising elfin youth, Engels perceived children and adults alike in thrall “to the vampire property-holding class” and trapped by industrial immurement: “condemnation to be buried alive in the mill.”

Fiant luminaria

Thomas Carlyle devised “real-phantasmagory” to conduct, among other things, an ardent attack on Ure-type philosophy, both “natural” and industrial. *Past and Present* begins by reporting Gothic news from within industrialised England: “some baleful fiat as of Enchantment has gone forth” (1). Galvanic experiments on human bodies symbolised that fiat. Galvanism is a leitmotif of Carlyle’s Romantic anti-capitalist jeremiads from “Signs of the Times” (1829) – “galvanic piles” indicate that “we see nothing by direct

powers [for example] the lights-out manufacturing set to supplant factory workers.” (Jones 2021: 1, 79)

vision; but only by reflexion, and in anatomical dismemberment" (443, 454); through *Sartor Resartus* (1833-34) – "spasmodic, galvanic sprawlings are not life, neither indeed will they endure, galvanise as you may, beyond two days" (1999: 176); to *Past and Present*: "Men [are] restless, with convulsive energy, as if driven by Galvanism, as if possessed by a Devil" (1843: 206). Overhanging Carlyle's recoil from this English Tophet is the fall, or felling, of the night by the *coup de foudre* of new lighting technologies. Sprawling constellations of gaslights in a panoply of workspaces, including theatres of dismemberment and divertissement within the knowledge and culture industries, literally illuminate but spiritually endarken Enchanted England, foreshadowing the end of the night. Night is embourgeoised and desecrated by "Cash-payment" – another of Carlyle's neologisms, adopted by Engels in *Condition* and later by he and Marx in the *Communist Manifesto* (1848).

For Carlyle in *Past and Present*, "the faith in an Invisible, Unnameable, Godlike, present everywhere in all that we see and work and suffer, is the essence of all faith whatsoever." However, it "remains believable," in the faithless, artificially lit galvanic world, "that Heroism means gaslighted Histrionism" (148). The pyrotechnics of Carlyle's own histrionic prose emits multiple allusions, not least to gaslit performances on theatre stages by heroised histrios such as Edmund Kean and in anatomy theatres by self-dramatising galvanists such as Ure. In the glaring night of industrialism, Carlyle posed a national reckoning: "England will either learn to reverence its heroes, and discriminate them from its Sham-Heroes ... and gaslighted Histrios; and to prize them as the audible God's-voice amid all inane jargons and temporary market-cries ... England will either learn it, or England will also cease to exist among Nations" (219). This is largely rhetorical, for the factory system's national and international expansion doomed England and English workers, in Carlyle's pained eyes, to diminished and fast-disappearing stature. While European capitalists mimicked English industrialisation, he used mock exhortation to warn their factory workers against surrendering themselves, existentially, physically and spiritually, to foreshortened destinies: "become ye the general gnomes of Europe, slaves of the lamp!" (183–184)

Against artificial lighting and its instrumental role in the creation of industrial "slaves," Carlyle revered the direct vision and transcendental leadership embodied by a twelfth-century monk: "continued vigilance, rigorous method, what we call 'the eye of the master,' work wonders. The clear-beaming eyesight of Abbot Samson, steadfast, severe, all-penetrating, – it is like *Fiat lux* [Genesis 1.3] in that inorganic waste whirlpool; penetrates

gradually to all nooks, and of the chaos makes a *kosmos* or ordered world!" (90) The sublunary rise of artificial lighting was wrecking the world and re-creating *Tohu wa-bohu*: "the furious vortex of disorder and chaos," as Engels encapsulated Carlyle's vision of the gaslighted globe in his review of *Past and Present* (3: 459). By this reading, "some baleful fiat as of Enchantment" can be named as capital's expropriation-cum-commodification of God's words: "Fiant luminaria" (*Genesis* 1.14). *Let there be lights* and, henceforth, "slaves of the lamp!" As a sign of Carlyle's phantasmagorical times, the wonders his authentically heroic abbot worked mirror the horrors of England's gaslit condition. Conceptually, his nostalgic idealisation of Samson of Tottington's pure, panoptical brightness is an unconscious mimesis of the systemic, totalising penetration of artificial lighting that ordered and oversaw night work. The model for "the eye of the master" is less *Fiat lux* than the new-fangled eminence, the incubator and invigilator of night work, that appalled Carlyle but enchanted Ure: "the number and brilliancy of the gas-lights in a cotton-mill," to recall an image from the latter's hero worship of master spirits who enlisted science in capital's service. Carlyle's beaming Hero was a doppelgänger of capital's artificially lit system; its *kosmos* functioned incessantly with an infrastructure of artificial luminaries that had become indispensable to its "natural" order.¹¹

The Edinburgh Review of June 1829, which included Carlyle's "Signs of the Times," carried another essay that Gothicised the industrial night. Its anonymous author called capitalist insatiability "that abasement and corruption from which our master manufacturers have taken too little care to protect our establishments," that is, English factories: "The appetite for gain may be as devouring and as cannibal-like as that for blood. We trembled

11. An intensive reading of Carlyle's "eye of the master" would elaborate what he termed "Benthamee Radicalism, the gospel of 'Enlightened Selfishness'" (1843: 27). In the early 1800s, Jeremy Bentham proposed the Panopticon as a disciplinary formula for factories, poorhouses and prisons. For Marx, "a gigantic 'Workhouse' for the industrial worker ... called the Factory" (35: 282) became capitalist anthropology's model apparatus for "Enlightened" confinement, discipline and *Aussaugung* under artificial illumination. See Michel Foucault's reflections on the Gothic "fantasy-world of ... darkness" in relation to a power-form that would "refuse to tolerate areas of darkness" (and, like Carlyle's Samson Agonistes, "penetrate ... to all nooks"). Bentham's Panopticon "provided a formula applicable to many domains, the formula of 'power through transparency,' subjection by 'illumination.'" In the Panopticon, there is used a form close to that of the castle – a keep surrounded by walls – to paradoxically create a space of exact legibility" (Foucault 1980: 154). Foucault is a source for Chris Otter's important study of illuminated "networks of inspection" and "the *oligoptic*, or the self-regulating visual economy" (2008: 254).

as we read the testimony against the smaller manufacturers of Lancashire ... The encouragement in their old age of some legislative limit to the hours of infant labour, will hardly weigh down, in the scales of eternal justice, a swollen fortune rolled up out of the sleepless nights and broken constitutions of the helpless poor” (s.n. 1829: 489–490). While this author highlighted disjointed, mangled conditions – “sleepless nights and broken constitutions” – Carlyle decried how the industrialisation of labour, light and life forged new manacles, exposing our organic sentience and very subsistence to extinction by mechanisation: “[We] stand leashed together ... shackled in heart and soul with far straiter than feudal chains. ... ‘the deep meaning of the Laws of Mechanism lies heavy on us’; and in the closet, in the marketplace, in the temple, by the social hearth, encumbers the whole movements of our mind, and over our noblest faculties is spreading a nightmare sleep” (1829: 457). The oppressive images of “sleepless nights” and “nightmare sleep” burdened by a mechanical incubus signified two sides of a Gothic imaginary of the industrial night available to Marx and Engels. Their *détournement* of the Gothic mode to critique political economy foregrounded the dialectical unity of capital breaking workers’ constitutions and reconstituting their heads and hands for the discipline of night work. They visualised capital swelling up in sleepless nights by stretching and sucking out living labour-power to the utmost.

Light torture

Engels was born in 1820 at Barmen, a manufacturing town in the Rhineland’s Wupper Valley, Germany’s most industrialised region, known as *das deutsche Manchester*. By upbringing – his father was a capitalist in the cotton industry – and a political precocity that impelled his extensive exploration of the German Manchester, he mingled with the region’s *dramatis personae* in their rehearsal of the Industrial Revolution. His “Letters from Wuppertal,” published anonymously in *Telegraph für Deutschland* (1839), reported on working conditions that performed the *Aussaugung* of workers: “The weavers, who have individual looms in their homes, sit bent over them from morning till night, and desiccate their spinal marrow” (2: 9). And his newspaper article “Landscapes” (1840) prefigured his discovery in North England’s industrial heartland that the newest incarnation of a *Nacht-Märchen* trope, the vampire, sucks in the brightness of endless day: “Only after I became acquainted with the North-German heathland did I properly understand the Grimm brothers’ *Kinder- und Haus-Märchen* ... at nightfall the human element vanishes and the terrifying, shapeless creations of popular fantasy glide over a desolate land which is eerie even

in the brightness of midday” (2: 96). In July 1842, Engels described himself as “a ‘travelling agent’ in philosophy” (2: 545), and in November that year, he travelled to Manchester itself to help manage his father’s textile firm.

In England, he led a double life: a well-trained son of his family’s Anglo-German capitalist interests and an autodidactic, philosophically materialist student of working-class life, living death and death. Engels, Steven Marcus recounts, “undertook to investigate Manchester on his own – on his own time and in his own way. He was himself aware of the intensity and systematic rigor with which he pursued this project ... taking to the streets, at all hours of the day and night, on weekends and holidays” (1974: 97–98). Marcus acknowledges that Engels was not always on his own: Irish worker Mary Burns acted as his native informant and later became his common-law wife. Burns provided access and security to quarters dangerous for a foreigner and a capitalist to venture. She accompanied Engels “on his expeditions into the inner recesses of the city [and] inducted him into certain working-class circles and into the domestic lives of the Manchester proletariat. Thus Engels learned to read a city in the company – or through the mediation – of an illiterate Irish factory girl [sic]. He learned to read it with his eyes, ears, nose and feet. He learned to read it with his senses” (98–99).¹² He returned to Germany in August 1844, started writing *Condition* in September and finished it in March 1845, when he penned its dedicatory address, “To the Working-Classes of Great Britain.”

12. Engels shared numerous telling details about various sensory experiences. For example: “The atmosphere of the factories is, as a rule, at once damp and warm ... and, when the ventilation is not very good, ... the smell of the machine oil, which almost everywhere smears the floor, sinks into it, and becomes rancid” (4: 447). “In many rooms of the cotton and flax-spinning mills, the air is filled with fibrous dust ... The most common effects of this breathing of dust are blood-spitting, hard, noisy breathing, pains in the chest, coughs, sleeplessness” (4: 454). Operatives must “give constant attention to the tireless machine [for] the engine moves unceasingly; the wheels, the straps, the spindles hum and rattle in [their] ears without a pause” (4: 466). In potteries where “stoneware is scoured, the atmosphere is filled with pulverised flint,” the workers suffer “violent coughing, and come to have so feeble a voice that they can scarcely be heard” (4: 496). Engels himself experienced sensory overload upon broaching the unspeakable Gothic sublime materialised by urban-industrial progress in human, social and environmental devastation. He metaphorised this sublimity as a *wilden Strudel* or “fierce whirlpool” (4: 331; see Althofer 2022b: 16). This morbidly effervescent sublimity is intimated, and its attendant crisis of representation enunciated, on multiple occasions, when he expressly found “it impossible to describe” or “cannot describe in further detail” certain brute realities (4: 391 and 577; see Marcus 1974: 181–182 and Althofer 2022a: 45). Nevertheless, Engels constructed a brilliantly descriptive narrative of a descent into a maelström.

Engels' address considers the conjunction of and distinction between the sensuous-experiential and text-based methodologies signalled by his subtitle, *From Personal Observation and Authentic Sources*. He made a methodological distinction, which is a polemical and political one too, between abstract and experiential knowledge, contrasting print sources and his personal experiences, "rather in the manner of modern auto-ethnography" (Carver 2020: 61). He told Great Britain's workers:

I have studied the various official and non-official documents as far as I was able to get hold of them – I have not been satisfied with this, I wanted more than a mere *abstract* knowledge of my subject, I wanted to see you in your own homes, to observe you in your every-day life, to chat with you on your condition and grievances, to witness your struggles against the social and political power of your oppressors. (4: 297)

Reflecting on his research and results, he suggested that those oppressors practised forms of bodysnatching and cannibalism: "I hope to have collected more than sufficient evidence of the fact, that ... the middle-classes intend in reality nothing else but to enrich themselves by your labour while they can sell its produce, and to abandon you to starvation as soon as they cannot make a profit by this indirect trade in human flesh" (4: 298). Upon some print sources, he acted like a fairy-tale prince, awakening them from deathlike sleep before they turned to dust: have the middle-classes, he asked rhetorically, "done more than paying the expenses of half-a-dozen commissions of inquiry, whose voluminous reports are damned to everlasting slumber among heaps of waste paper on the shelves of the Home Office? Have they even done as much as to compile from those rotting blue-books a single readable book from which everybody might easily get some information on the condition of the great majority of 'free-born Britons'?" (4: 298)

Engels' ethnography exemplifies the class-based literary and epistemological mode that has been termed "proletarian grotesque" (Libettri 1995; Denning 2010: 118–123). Proletarianisation of the grotesque constructs working-class consciousness from below, debasing bourgeois abstractions, conceptualisations and imaginaries by portraying their shocking real-world materialisations. *Condition* and *Capital* are paragons of the proletarian grotesque. Page after page, Engels and Marx degraded and ridiculed bourgeois idealisations of wage labour, child labour and night work, tirelessly rehearsing the astringent, grisly, congenitally brutal character of capital's *Aussaugung*.

Engels collapsed the aestheticised distance and scientific detachment that Ure construed from the abstracted objects of his philosophical gaze: “factory people,” “refractory hands,” “lively elves,” “tadpoles” and “frogs”. He adjudged Ure’s complicity in a class-based form of serial mass murder. For he adopted the Chartist concept of “social murder” to critique “society,” by which he meant “the ruling power of society” – “the bourgeoisie”:

when society places hundreds of proletarians in such a position that they inevitably meet a too early and an unnatural death ... when it deprives thousands of the necessities of life, places them under conditions in which they *cannot* live – forces them ... to remain in such conditions until that death ensues which is the inevitable consequence – knows that these thousands of victims must perish, and yet permits these conditions to remain, its deed is murder just as surely as the deed of the single individual. (4: 393–394)¹³

He named some socially murdered workers and catalogued seemingly endless injuries, illnesses and deaths caused by their conditions of labour specifically and life generally. “Nothing is more revolting than to compare the long register of diseases and deformities engendered by overwork ... with the cold, calculating political economy of the manufacturers, by which they try to prove that they, and with them all England, must go to ruin, if they should be forbidden to cripple so and so many children every year. The language of Dr. Ure alone, which I have quoted, would be yet more revolting if it were not so preposterous” (4: 461).¹⁴ He debunked Ure’s analogical abstraction of tadpoles metamorphosing in the “brilliance of the gas-lights” by depicting night workers suffering from torturously intense light:

Touching [the stocking weavers of Nottingham, Derby and Leicester], the Children’s Employment Commission reports that the long working-

13. Medvedyuk, Govender and Raphael (2021) review the present critical resurgence of the concept “social murder.” Foster (2020: 569n.) suggests that Engels’ use of the concept merits comparison with the category “slow violence” developed by Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (2011).
14. Re. capitalist forecasts, or threats, of social ruination following any regulation or outlawing of inhuman means to profits, Marx wrote in “The Working Day”: “*Après moi le déluge!* is the watchword of every capitalist and of every capitalist nation. Hence Capital is reckless of the health or length of life of the labourer, unless under compulsion from society. To the outcry as to the physical and mental degradation, the premature death, the torture of overwork, it answers: Ought these to trouble us since they increase our profits?” (35: 275–276). As per Engels’ “fierce whirlpool,” Marx intimated that a global *déluge* was engulfing working populations: “as soon as people ... are drawn into the whirlpool of an international market dominated by the capitalistic mode of production,” they suffer “the civilised horrors of overwork” (35: 244). Capital should cry out, *Par moi le déluge!*

hours, imposed by low wages, with a sedentary life and the strain upon the eyes involved in the nature of the employment, usually enfeeble the whole frame, and especially the eyes. Work at night is impossible without a very powerful light produced by concentrating the rays of the lamp, making them pass through glass globes, which is most injurious to the sight. At forty years of age, nearly all wear spectacles. The children employed at spooling and hemming usually suffer grave injuries to the health and constitution. They work from the sixth, seventh, or eighth year ten to twelve hours daily in small, close rooms. It is not uncommon for them to faint at their work, to become too feeble for the most ordinary household occupation, and so near-sighted as to be obliged to wear glasses during childhood. (4: 479)

Here, industrial workshops morph into torture chambers and shiftworkers are creatures of the night debilitated by light. In effect, Engels identified the force that the poet Paul Celan would name *Lichtzwang*: light duress or compulsion. “Pure brightness is a kind of *light torture*. In nature,” Thomas Posch reflects, “light never shines continuously from a fixed direction,” whereas “modern society is subject to a kind of ‘light compulsion’” (2012: 50, 56; original emphasis).¹⁵ Light compulsion’s genesis lies in the duress that Marx called the “dull compulsion of economic relations,” which subjects the labourer to the capitalist; the infrastructure of artificial lighting was incorporated into, and facilitated the intensification of, the “grotesquely terrible ... discipline necessary for the wage system” (35: 726).

As Engels learned to read Manchester and the English factory system with his eyes, ears, nose and feet, so he learned, and recounted in his multisensory ethnography, how night workers experienced in their collective sensorium the grotesque terror by which capital forms and reproduces itself. He also collated “the barbarism of single cases” from print sources:

how children are seized naked in bed by the overlookers, and driven with blows and kicks to the factory, their clothing over their arms, how their sleepiness is driven off with blows, how they fall asleep over their work nevertheless, how one poor child sprang up, still asleep, at the call of the overlooker, and mechanically went through the operations of its work after its machine was stopped ... how children, too tired to go home, hide away in the wool in the drying-room to sleep there, and could only be driven out of the factory with straps; how many hundreds came

15. *Condition* presents generative ethnographic and social epidemiological observations of the health effects of “light intensity,” notably exposure to what some contemporary scientists have named “ALAN” – “artificial light at night” (Cho *et al.* 2018).

home so tired every night, that they could eat no supper for sleepiness and want of appetite ... (4: 457)

The long, ugly register runs on: how the threaders' "frequent night-work ... is very bad for the eyes," how "inflammations of the eye, pain, tears, and momentary uncertainty of vision during the act of threading are engendered," how winders' "work seriously affects the eye, and produces, besides the frequent inflammations of the cornea, many cases of amaurosis and cataract" (4: 481–482), how hat- and dress-makers work "nineteen to twenty-two hours, if not the whole night through," and how their numerous disorders include "swelled, weeping, and smarting eyes, which soon become short-sighted ... In many cases the eyes suffer so severely that incurable blindness follows" (4: 498–499). As the world was broken out of its pre-industrial frame and wrought into capital's industrial mode, so workers were pulled out of joint – their organs of sight convulsed and straitened – and pushed into alignment with the radical levering of the night into the production process. To this day, Engels assails his reader with true cases of capital sucking workers empty, robbing them blind and blinding them by light. Gothic poetics, real-phantasmagory, proletarian grotesque: by any name, he fashioned a compelling imaginary of the night that shows how capital's artificially lit *Aussaugung* – gouging out eyesight, laying waste to sleep, draining the dark from the night – is a necessary condition for its ongoing existence.

Precarious sleep and torturous sleep deprivation figure, then, in Engels' thick descriptions of "whole generations wrecked, afflicted with disease and infirmity, purely to fill the purses of the bourgeoisie" (4: 457). He had discovered that capital's systemic attack on working-class sleep is integral to its compulsion – utopian for the likes of Ure – to break in and, ultimately, eliminate workers. Capital would allow workers only sleep that is absolutely requisite to maintain them in bare existence as workers. In *Principles of Communism* (1847), a draft of the *Communist Manifesto*, Engels insisted that wage-labour is paid the bare minimum "required for the worker to maintain himself in a condition in which he is capable of working and to prevent the working class from dying out" (6: 343). The same with minimising sleep: to adapt the *Manifesto*, workers live merely to increase capital and are permitted to sleep only in so far as capitalist interests require it (6: 499). Engels' insights prefigure Marx's characterisation of capital's denaturing *Vampyrdurst*: "As the major remaining obstacle – in effect, the last of what Marx called 'natural barriers' – to the full realization of 24/7 capitalism, sleep cannot be eliminated. But it can be wrecked and

despoiled” (Crary 2013: 17). Vampirism, night work, ruined sleep and the prolepsis of class-based extinction – the working class dies out or is socially murdered outright – are inseparable from environmental catastrophe and collapse. *Condition*, in Andreas Malm’s evocation, reads as a critical eco-Gothic guidebook to an apocalypse, a revelation of capitalism’s always-already destructive drive and destiny: “Engels walks among the ecological ruins of the Industrial Revolution” (2016: 393), which impelled the perpetual expansion of the fossil economy. The incendiary awakening of dead plant matter from ancient resting places, “the very act of digging up fossil fuels and setting them on fire” (Malm 2018: 4), and keeping people awake to operate its non-stop, earth-scorching mode of production: these interrelated rampancies manifest capital’s profit-mongering despoliation of the metabolic repose of workers and our very world.

Going round and round in the night, consumed by light

Untimely night work and shiftwork’s destruction of circadian rhythm, dating from the incipient 24/7 worktime of the 1790s, are drivers of ongoing distemper and trauma. The global proliferation of disturbed and disordered sleep has origins in the ramifications of capital’s successful protraction of the working day into the night. The working night’s incessancy weighs, to adapt Marx’s Gothic idiolect, “like a nightmare on the brain of the living” (11: 103). In 1866, Marx instructed delegates of the International Working Men’s Association that “the *limitation of the working day*” is an essential condition of working-class self-emancipation: “We propose 8 *hours work* as the *legal limit* of the working day. ... Nightwork to be but exceptionally permitted ... The tendency must be to suppress all nightwork” (20: 187; original emphases). This meant fighting a monster, namely capital, which is driven to embed and distend night work, using permanent artificial illumination of itself. If, as he declared in *Capital*, “capital comes [into the world] dripping from head to foot, from every pore, with blood and dirt” (35: 748), with sweaty haste it learnt to reproduce itself, around the clock, with light pouring from every pore. Yet when Marx pictured capital’s embodiment as the factory system – “a mechanical monster whose body fills whole factories, and whose demon power, at first veiled under the slow and measured motions of his giant limbs, at length breaks out into the fast and furious whirl of his countless working organs” (35: 384–385) – its artificial lighting was unspoken instead of remarked. That *laissez-faire* silence is itself a remarkable testament to the second nature, rapidly taken for granted, created by capital’s *Fiant luminaria*.

References

- s.n. 1829. [Article IX]. *Edinburgh Review* 49(June): 473–525.
- Adorno, Theodor. 2005 [1951]. *Minima Moralia: Reflections on a Damaged Life*, translated by E. F. N. Jephcott. London and New York: Verso.
- Althofer, Jayson. 2020. “Friedrich Engels and Gothic Marxism: A Fairy-Tale Introduction.” *Critical Imprints* 8: 77–94.
- . 2022a. “Living-Dead Liminality in Friedrich Engels’s Gothic Marxism.” In Aoileann Ní Éigeartaigh (ed.), *The Graveyard in Literature: Liminality and Social Critique*: 34–51. Newcastle upon Tyne: Cambridge Scholars Publishing.
- . 2022b. “Perfect Tatters: Friedrich Engels and the Fashioning of *The Communist Manifesto*.” In Pavel Liška and Robin Mudry (eds.), *TEXTile Manifestoes*: 5–19. Prague: Academy of Arts, Architecture and Design in Prague.
- Althofer, Jayson and Brian Musgrove. Forthcoming. “The Devil’s Light: Marx, Engels and Diabolic Enlightenment.” In Carol M. Davison (ed.), *Gothic Dreams and Gothic Nightmares*. Manchester: Manchester University Press.
- Babbage, Charles. 1832. *On the Economy of Machinery and Manufactures*. London: Charles Knight.
- Blackledge, Paul. 2019. *Friedrich Engels and Modern Social and Political Theory*. Albany: State University of New York Press.
- Caffentzis, George. 2013. In *Letters of Blood and Fire: Work, Machines, and the Crisis of Capitalism*. Oakland: PM Press.
- CANDELA. 2017. “Pour une sociologie politique de la nuit.” *Cultures & Conflits* 105-106(printemps/été): 7–27.
- Carlyle, Thomas. 1829. “Signs of the Times.” *Edinburgh Review* 49(June): 439–459.
- . 1843. *Past and Present*. Boston: Little and Brown.
- . 1999 [1833-34]. *Sartor Resartus*. Oxford: Oxford University Press.
- Carver, Terrell. 1998. *The Postmodern Marx*. Manchester: Manchester University Press.
- . 2020. *Engels before Marx*. Cham: Palgrave Macmillan.
- Chamayou, Grégoire. 2008. *Les corps vils. Expérimenter sur les êtres humains aux XVIII^e et XIX^e siècles*. Paris: La Découverte.
- Cho, YongMin *et al.* 2015. “Effects of Artificial Light at Night on Human Health: A Literature Review of Observational and Experimental Studies Applied to Exposure Assessment.” *Chronobiology International* Early Online: 1–17.
- Crary, Jonathan. 2013. *24/7: Late Capitalism and the Ends of Sleep*. London: Verso.

- Denning, Michael. 2010 [1997]. *The Cultural Front: The Laboring of American Culture in the Twentieth Century*. London: Verso.
- Edwards, Steve. 2001. "Factory and Fantasy in Andrew Ure." *Journal of Design History* 14(1): 17–33.
- Elden, Stuart. 2004. "Rhythmanalysis: An Introduction." In Henri Lefebvre, *Rhythmanalysis: Space, Time and Everyday Life*, translated by Stuart Elden and Gerald Moore: vii–xv. London and New York: Continuum.
- Foster, John Bellamy. 2020. *The Return of Nature: Socialism and Ecology*. New York: Monthly Review Press.
- Foucault, Michel. 1980. "The Eye of Power" [1977], translated by Colin Gordon. In Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*: 146–165. New York: Pantheon.
- Freeman, Joshua B. 2018. *Behemoth: A History of the Factory and the Making of the Modern World*. New York and London: Norton.
- Gaskell, P. 1833. *The Manufacturing Population of England, its Moral, Social, and Physical Conditions, and the Changes which have Arisen from the Use of Steam Machinery; with an Examination of Infant Labour*. London: Baldwin and Cradock.
- Gwiazdzinski, Luc, Marco Maggioli and Will Straw. 2018. "Géographies de la nuit / Geographies of the night / Geografie della notte." *Bollettino della Società Geografica Italiana* serie 14, 1(2): 9–22.
- Herres, Jürgen. 2015. "Rhineland Radicals and the '48ers." In Terrell Carver and James Farr (eds.), *The Cambridge Companion to The Communist Manifesto*: 15–31. New York: Cambridge University Press.
- Hiday, Corbin. 2019. "Nineteenth-Century Social Theory." In Jeff Diamanti, Andrew Pendakis and Imre Szeman (eds.), *The Bloomsbury Companion to Marx*: 139–151. London: Bloomsbury Academic.
- Hobsbawm, Eric. 1968. *Industry and Empire: An Economic History of Britain since 1750*. London: Weidenfeld and Nicolson.
- Hyman, Stanley Edgar. 1962. "A Neglected Masterpiece." *The Centennial Review* 6(1): 52–63.
- Inglis, Katherine. 2011. "Maternity, Madness and Mechanization: The Ghastly Automaton in James Hogg's *The Three Perils of Woman*." In Deirdre Coleman and Hilary Fraser (eds.), *Minds, Bodies, Machines, 1770-1830*: 61–82. Houndmills: Palgrave Macmillan.
- Jones, Phil. 2021. *Work without the Worker: Labour in the Age of Platform Capitalism*. London and New York: Verso.
- Kehler, Grace. 2008. "Gothic Pedagogy and Victorian Reform Treatises." *Victorian Studies* 50(3): 437–456.
- Kyba, Christopher et al. 2020. "Night Matters – Why the Interdisciplinary

- Field of 'Night Studies' is Needed." *J – Multidisciplinary Scientific Journal* 3(1): 1–6.
- Lafargue, Paul. 1907. "Socialism and the Intellectuals" [1900]. In Paul Lafargue, *The Right to be Lazy and Other Studies*, translated by Charles H. Kerr: 63–104. Chicago: Charles H. Kerr.
- Lefebvre, Henri. 1968 [1966]. *The Sociology of Marx*, translated by Norbert Guterman. New York: Pantheon.
- Libretti, Tim. 1995. "What a Dirty Way to Get Clean: The Grotesque in the Modern American Novel." In Michael J. Meyer (ed.), *Literature and the Grotesque*: 171–190. Atlanta: Rodopi.
- Locke, John. 1823 [1690]. *An Essay Concerning Human Understanding*. London: William Baynes.
- Löwy, Michael. 2009. *Morning Star: Surrealism, Marxism, Anarchism, Situationism, Utopia*. Austin: University of Texas Press.
- Malm, Andreas. 2016. *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming*. London: Verso.
- . 2018. *The Progress of this Storm: Nature and Society in a Warming World*. London: Verso.
- Marcus, Steven. 1974. *Engels, Manchester, and the Working Class*. New York: Random House.
- Marshall, Bridget M. 2021. *Industrial Gothic: Workers, Exploitation and Urbanization in Transatlantic Nineteenth-Century Literature*. Cardiff: University of Wales Press.
- Marx, Karl and Frederick Engels. 2010. *Collected Works*. Digital edition. [London]: Lawrence and Wishart.
- McNally, David. 2011. *Monsters of the Market: Zombies, Vampires and Global Capitalism*. Leiden and Boston: Brill.
- Medvedyuk, Stella, Piara Govender and Dennis Raphael. 2021. "The Reemergence of Engels' Concept of Social Murder in Response to Growing Social and Health Inequalities." *Social Science & Medicine* 289(November): 114377.
- Melbin, Murray. 1978. "Night as Frontier." *American Sociological Review* 43(1): 3–22.
- Miller, J. Hillis. 1963. *The Disappearance of God: Five Nineteenth-Century Writers*. Cambridge: Harvard University Press.
- Moretti, Franco. 1997 [1983]. "Dialectic of Fear" [1978]. In Franco Moretti, *Signs Taken for Wonders: Essays in the Sociology of Literary Forms*, translated by Susan Fischer, David Forgacs and David Miller: 83–108. London and New York: Verso.
- Otter, Chris. 2008. *The Victorian Eye: A Political History of Light and Vision in*

- Britain, 1800-1910*. Chicago and London: University of Chicago Press.
- Palmer, Bryan D. 2000. *Cultures of Darkness: Night Travels in the Histories of Transgression*. New York: Monthly Review Press.
- Parham, John. 2019. "Biggish Data: Friedrich Engels, Material Ecology, and Victorian Data." *European Journal of Cultural and Political Sociology* 6(3): 343–364.
- Posch, Thomas. 2012. "From the Magic of the Light to the Destruction of the Night." In Agnes Husslein-Arco, Brigitte Borchhardt-Birbaumer and Harald Krejci (eds.), *Awakening the Night: Art from Romanticism to the Present*: 50–57. Munich: Prestel.
- Schivelbusch, Wolfgang. 1995 [1983]. *Disenchanted Night: The Industrialization of Light in the Nineteenth Century*, translated by Angela Davies. Oxford: Berg.
- Shakespeare, William. 2003 [1603]. *Hamlet, Prince of Denmark*. Cambridge: Cambridge University Press.
- Shilliam, Robbie. 2015. "Decolonizing the Manifesto: Communism and the Slave Analogy." In Terrell Carver and James Farr (eds.), *The Cambridge Companion to The Communist Manifesto*: 195–213. New York: Cambridge University Press.
- Sutherland, Keston. 2019. "The Poetics of *Capital*." In Peter Osborne, Éric Alliez and Eric-John Russell (eds.), *Capitalism: Concept, Idea, Image – Aspects of Marx's Capital Today*: 203–218. London: CRMEP Books.
- Ure, Andrew. 1819. "An Account of Some Experiments Made on the Body of a Criminal Immediately after Execution, with Physiological and Practical Observations. (Read at the Glasgow Literary Society, Dec. 10th, 1818)." *The Journal of Science and the Arts* VI: 283–294.
- . 1835. *The Philosophy of Manufactures: Or, An Exposition of the Scientific, Moral, and Commercial Economy of the Factory System of Great Britain*. London: Charles Knight.