

1-1-1998

Charles Knight and Sir Francis Bond Head: Two Early Victorian Perspectives on Printing and the Allied Trades

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In his article on the editorial character and readership of the *Penny Magazine of the Society for the Diffusion of Useful Knowledge*, Scott Bennett points out that its publisher, Charles Knight, “wrote its history not in the usual editorial terms, but in commercial ones” (128). Alluding to Knight’s four-part series “The Commercial History of a Penny Magazine,” published in monthly supplements of the second volume of the *Penny Magazine* (1833), Bennett laments the paucity of specific information regarding the readership and editorial mission of the periodical.¹ Knight’s “Commercial History” may well disappoint historians in search of readership statistics and overt statements of editorial policy; however, for scholars interested in the manufacture of British periodicals in the 1830s the series offers much of value. Encompassing several distinct aspects of periodical publishing, including paper making, type-founding, wood engraving, composing, stereotyping, presswork, and bookbinding, these articles offer abundant information on printing and its allied trades in early Victorian Britain. Additional interest lies in the fact that Knight’s “ideological bent” (Bennett 128), which is clearly evident beneath the surface of the series, becomes apparent when the piece is considered within the larger context of Knight’s work and within the context of contemporary writing about the printing trade. One example of the latter which provides a particularly instructive comparison with Knight’s “Commercial History” is Sir Francis Bond Head’s “The Printer’s Devil,”² an “essay-like review” published in the *Quarterly Review* in December 1839 and ostensibly occasioned by the publication of two further contributions by Knight on the subject of printing: *The Printer* (London: Charles Knight, 1838) and “Printing in the Fifteenth and in the Nineteenth Centuries” (*Penny Magazine*, 30 November 1837).³ In juxtaposing Knight’s “The Commercial History of a Penny Magazine” and Head’s “The Printer’s Devil,” this

essay will explore a number of significant points of divergence between these two nearly contemporary and thematically parallel specimens of early Victorian journalism. In doing so, it will clarify their authors' unique perspectives on commerce, industry, and the condition of the working classes, and by extension, illuminate the editorial positions of the periodicals that conveyed these articles to their respective audiences.

The biographies of Charles Knight and Francis Bond Head reveal an intriguing series of intersections and oppositions in the lives of the two men. Knight, who was born in Surrey in 1791 and died in 1873, was almost an exact contemporary of Head, who was born in the adjacent county of Kent in 1793 and for many years resided in Surrey, where he died in 1875. Both enjoyed relatively privileged social positions, although Head, who was a descendant of Sir Richard Head, M. P., a baronet, and who was himself knighted in 1831 and made a baronet in 1836, was rather more secure in his connections than Knight, whose father was a printer, publisher, and bookseller, and reportedly an illegitimate half-brother of George III (Clowes 28). Professionally, the two men pursued two divergent paths (at least initially) – Knight, as a publisher, and Head, as an officer of the Royal Engineers who was decorated for his role in the battle of Waterloo and later journeyed to Argentina and Chile as a manager for a British company investing in South American mines. With these adventures behind him, however, Head became an Assistant Poor Law Commissioner in 1834, one year before Knight was named publisher to the Poor Law Commission. But while Knight was “an enlightened champion of workingmen's rights” (Anderson, “Charles Knight and Company” 167) who devoted many years to advancing the educational and political goals of the Society for the Diffusion of Useful Knowledge, Head was a Tory aristocrat whose rabid antirepublicanism was tested and unequivocally confirmed during his brief stint as Lieutenant-General of Upper Canada (1835–37). In contrast to the reform-minded Knight, Head had little interest in the working classes and their problems. As his biographer, Sydney Jackman, explains,

Sir Francis, while a humane man himself, was opposed to all this tomfoolery [of various reform projects]. He was convinced that the world of high society was far more evil and sinful than the world of the ‘humble poor’. He saw no reason to improve the latter until something had been done about the former. (130)

After his retirement from politics, writing became Head's chief professional interest. Between 1826 and 1872, he authored some sixteen books, ranging from political commentary and military strategizing to travelogues and even an equitation manual (*The Horse and His Rider* has been called “Sir Francis's most useful and probably most intelligent book”

[Jackman 143]). In addition, he contributed regularly to the *Quarterly Review*, published by his friend John Murray, who was also a friend of Charles Knight's.⁴ It is perhaps surprising given their differing outlooks that Knight once offered to publish a pamphlet of Head's after Murray turned it down. But the pamphlet, titled "English Charity," was "a capable apologia for the new [Poor Law] system" (Jackman 65), to which Knight was thoroughly committed. Moreover, Knight shared Head's conviction that the pamphlet should be printed cheaply for as broad a readership as possible. Even here, though, Knight and Head fundamentally differed in their attitude towards the largely untapped working-class audience. To Knight it comprised honest and hard-working individuals who would benefit both materially and intellectually from suitably enriching reading matter. To Head, however, this non-elite group would always remain merely "the rough class of people" (quoted in Jackman 137).

Perhaps the most obvious basis for considering these two writers side by side is the fact that both had occasion to investigate as journalists the printing business of William Clowes.⁵ In Knight's case, three of the four parts of his "Commercial History of a Penny Magazine" focus on Clowes's business (the first article describes John Dickinson's paper manufactory at Albury Mill), while Head's essay, "The Printer's Devil," is a thirty-page narrative tour of Clowes's factory. The selection of this particular firm is not coincidental, for Clowes was the printer of books by both Knight and Head.⁶ In addition, both the *Penny Magazine* and the *Quarterly Review* were produced by Clowes's company, a fact which lends both authenticity and a sense of immediacy to the articles under consideration. Finally, Clowes's firm was an industry leader in nineteenth-century England – a progressive company which pioneered mechanized printing (Howe 294) – and, therefore, was an appropriate place for journalists like Knight and Head to assess the "state of the art" of printing.⁷ According to a company history published in 1953 by a descendant of William Clowes, by 1828 the firm had become the largest printing works in the world, and by 1840 it employed over 600 people, including 200 compositors, and operated twenty steam presses at its Duke Street factory (Clowes 26, 40, 36).⁸ Clowes's factory was also an appealing site to investigate because, in addition to printing, the firm carried on the businesses of type-founding, ink manufacturing, and bookbinding on site. This unusual level of diversification enabled those reporting on the company to direct their attention to a variety of activities, all related to the manufacture of publications such as the *Penny Magazine* and the *Quarterly Review*. The common basis of Knight's and Head's articles, formed by their mutual interest in the printing works of William Clowes, thus provides a kind of touchstone with which to assay their respective sensibilities as observers of industry and society.

In keeping with the ideological project of the *Penny Magazine* and its sponsoring organization, the Society for the Diffusion of Useful Knowledge, "The Commercial History of a Penny Magazine" is an educational series which aims to enhance the practical knowledge and moral and economic responsibility of its readers. As such, it combines discussions of the history of the technologies it describes with moral didacticism and economic argumentation. In attending to these three functions, Knight's series inserts itself into the tradition of printing trade manuals such as John Johnson's *Typographia* (1824), Thomas Curson Hansard's *Typographia* (1825), Charles H. Timperley's *Dictionary of Printers and Printing* (1839), and William Savage's *A Dictionary of the Art of Printing* (1841). Indeed, Knight acknowledges his indebtedness to these earlier trade handbooks at numerous points in his series and frequently cites references to other historians of printing, including Moxon, Stower, and Ames.⁹

A look into English printers' manuals of the first half of the nineteenth century reveals that a marked feature of their historical content is the delineation of an illustrious tradition of which the current practitioner is to consider himself the heir. With their attention to great historical personages, such as Gutenberg and Fust, the inclusion of portraits of exemplary figures, and their suggestion that future generations will be indebted to current practitioners, these manuals stress the responsibility of the workers to uphold their art and carry forward its noble tradition.¹⁰ Similarly, in the *Penny Magazine* series, Knight emphasizes the progress of the industry and the continuance of a distinguished tradition. Detailing the successive advances in printing, from the earliest experiments with wooden presses to the latest mechanical innovations, Knight sketches its evolution, always underscoring the march of progress and the continual betterment of society. The various men who have contributed to the advancement of printing appear in the text as exemplars whom the reader would do well to emulate. Similarly, the ingenuity exhibited by their inventions is a topic worthy of the reader's profound admiration and wonder, as is suggested, for example, by the following passage in which Knight describes the mechanized conversion of rags to paper:

This is, at first sight, as miraculous as any of the fancies of an Arabian tale. Aladdin's wonderful lamp, by which a palace was built in a night, did not in truth produce more extraordinary effects than science has done with the paper-machine. (382)

Throughout "The Commercial History of a Penny Magazine," Knight enthusiastically advocates new technologies. While his argument is not entirely uncritical, he tends to de-emphasize the negative aspects of mech-

anization. For example, in the case of stereotyping, which was still somewhat controversial in 1833, Knight devotes over a page of text to an analysis of the pros and cons of stereotyping and machine printing.¹¹ After carefully detailing how stereotyping works, he proceeds to analyze its cost-effectiveness, concluding with the argument that in the long run its adoption will create jobs by increasing the market for cheap publications.¹² His argument, couched in the rhetoric of technological progress and social improvement, is one that was by no means universally accepted at the time, even by other analysts of the printing industry. Less than a decade earlier, for example, Johnson noted that “the baneful effects of the Steam and Hand Machines,” which he lumped together with stereotyping, were in part responsible for the “falling off of the Profession” (645), and posed the question, “from the present state of things, what can reasonably be expected but disorder and confusion, when each master is endeavouring to supplant his neighbour, not as to excellence, but as to cheapness ... ?” (662).

Just as Knight downplays the controversial nature of the debate over increased mechanization, he also palliates or glosses over entirely other unpleasant aspects of the industry.¹³ Once again, a comparison with contemporary printers’ manuals is instructive. Johnson and Hansard devote considerable attention to such matters as the posture recommended for compositors who wish to avoid physical impairment and eventual disfigurement through laboring too long in awkward positions; technological advances which allow heavy work previously done by men to be taken on by women and children; and the deleterious effects of toiling long hours in damp conditions. But to Knight, paradoxically, industry is not inconsistent with the pastoral and the picturesque. In the following passage, for example, his depiction of paper mills draws attention to the beauty and serenity of their riverside locations while overlooking their less benign aspects:

A paper-mill, moved by water-power, is generally a very agreeable object. It is in most instances situated in some pretty valley, through which the little river glides; – and as it is important that the water, (which is not only employed for turning the wheels, but for converting the rags into pulp,) should be of the purest quality, the stream is generally one of those transparent ones which are so common in England – now bubbling over pebbly shallows, and now sleeping in quiet depths. The paper-mill at Albury is of this picturesque character. (379)

Two paragraphs later Knight evinces an awareness of the resulting pollution, referring to the mill water as “foul,” yet he stolidly maintains that the “first process,” by which a score of women sort and cut rags in a dust-filled room, is “strangely in contrast with the general appearance of cleanliness which distinguishes [the] paper-mill” (379–80). In passing, he

mentions "a deafening noise" in the washing shed of Albury Mill (380), but he does not go to the lengths of Hansard, who describes a paper-mill as a scene of intolerable din: "the washer... produces the most horrible growling which can be conceived, and is so violent as to shake the whole building" (215). Interestingly, the official history of Clowes's company corroborates Hansard's version by relating an incident in which the Duke of Marlborough, who resided near a printing facility of Clowes', complained of billowing smoke, thunderous noise and vibrations that caused plaster to fall from his ceilings, not to mention "smuts [that] came down like black snow day and night" (Clowes 22-3).

This discrepancy between Knight's rosy depiction of industry and actual factory conditions is perhaps even more striking in some of the woodcuts that accompany Knight's text. These technical illustrations, which comprise a significant feature of the series (and indeed of the *Penny Magazine* generally – a running counterpoint to its lavish reproductions of fine art), portray a spacious, sanitized workplace that bears little resemblance to the scenes suggested by historical accounts and by contemporary printers' manuals.¹⁴ The following remarks by Scott Bennett, made in connection with some illustrations of collieries featured elsewhere in the *Penny Magazine*, apply as well to many of the illustrations in "The Commercial History of a Penny Magazine"

[The] illustrations showed people engaged with their machinery in the manufacture of goods. They did not show the danger or monotony of factory life. That omission did not constitute a denial of those facts...; rather it constituted a characteristic editorial focus on the superhuman scale and power of industrialization, the rationality of its organization, and the production of goods that enrich life. (132-33)

Perhaps the most notable "omission" in Knight's "Commercial History" pertains to the elision or diminution of the factory workers themselves. (See Figure 1.) This is evident at various levels of the series, from the iconic – the illustrations usually depict machinery and only rarely include human figures – to the syntactic: Knight's pervasive use of the passive voice allows him to ignore the matter of human agency. Describing the paper-making process, for example, Knight writes,

The heap is then subjected to the action of a powerful press. The sheets, after this pressure, have acquired sufficient consistency to enable them to be pressed again by themselves. The felts are accordingly removed, and one sheet being laid upon another, the heap is subjected to a moderate pressure. The sheets are next parted; then dried, five or six together; next sized, by dipping; again dried and pressed; examined to throw out any damaged sheets, or to remove knots; and, finally, put into quires and reams. (382)

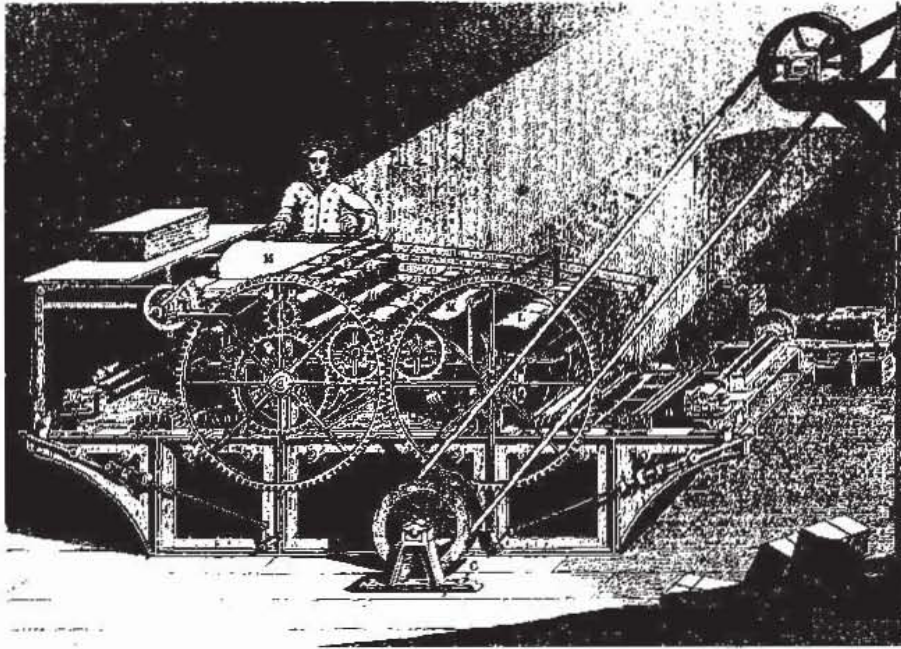


Figure 1.

Here, as elsewhere in the series, what must have been a staggering amount of labor is reported without so much as a passing glance at the laborers who performed the work. Similarly, Knight deflects attention from the particular characteristics of individual workers by treating them collectively. In the following passage, a group of women is reduced, as if telescopically, to a single representative figure:

In a long room, filled with dust, are some twenty or thirty women employed in sorting and cutting rags. Each woman stands at a frame, or table, whose top is covered with wire: on her left is a quantity of rags. ... It is the business of the woman to sort and cut the rags. She spreads a few on the wire frame before which she stands; and as she shakes them a great deal of the dirt passes through the wire to a box beneath. ... An active workwoman can sort and cut about a hundred-weight a day. (380)

In this passage, Knight first narrows his focus from “twenty or thirty women” to “each woman,” and then substitutes “each woman” for “the woman,” creating a synecdoche in which one woman stands for the entire group. Finally, “the woman” becomes “an active workwoman,” a shift which, in replacing the definite pronoun with the indefinite (a shift analogous to the substitution of “a Penny Magazine” for *the Penny Magazine* in the series title), signals an abstraction, a removal from the actual to the possible or merely theoretical.

This tendency of Knight’s to treat the workers in his series as abstrac-

tions or hypothetical figures rather than flesh-and-blood laborers is particularly pronounced in the section describing Clowes's composing department. After explaining to the reader the arrangement of frames in the composing room, the set-up of the compositors' cases, and so forth, Knight proposes, "[l]et us now for a little while follow the compositor in the progress of his work" (467). It soon becomes evident, however, that "the compositor" is a fictive figure, a hypothetical compositor who is subsequently replaced in the text by "the practised compositor," "a good compositor," and other representative types. This rhetorical tactic reaches its pinnacle in the following passage, in which the moral character of the compositor correlates with or even determines his professional stature:

No one unacquainted with the details of a printing-office can conceive the great differences between the correctness of one compositor and of another. The differences in the talent, the acquired knowledge, and even the moral habits of different men, are the causes of these remarkable variations. A *proof* shall be brought to the reader produced by the joint labour of two or three compositors of different degrees of merit. In a particular part of it he will find one letter constantly substituted for another, although the sense is upon the whole given correctly: this is the work of the careless and slovenly compositor, who does not take the trouble to look over the types as he sets them up line by line. ... Again, in another part of the proof, although the merely literal faults may be very few, there is a perpetual substitution of one word for another. This is the work of the ignorant or conceited compositor, who jumps at the meaning of his author, and thus contrives to produce the most ludicrous errors in his original proofs, and to insinuate some error or other into the most carefully corrected book. (467)

Ultimately, in Knight's scheme of things, the moral type of the worker determines even his economic rewards: "The best work is generally put into his hands [the hands of the compositor who exhibits carefulness and good sense]; and he is enabled to execute it with so much facility, that his earnings are often nearly double those of the ignorant and slovenly workman" (468).

As mentioned earlier, the woodcuts in "The Commercial History of a Penny Magazine" usually show machinery rather than people at work.¹⁵ Yet even in the instances in which human beings are depicted, their visual representation actually serves as another means by which individual workers are banished from the text, for here too the workers appear to be representative figures. (See Figure 2.) Moreover, Knight, in describing the goings-on at Clowes's factory, tells not what actual individuals were doing at the time of his investigation, but rather what figures in the woodcuts are doing, thus placing the workers at a further remove from the reader:

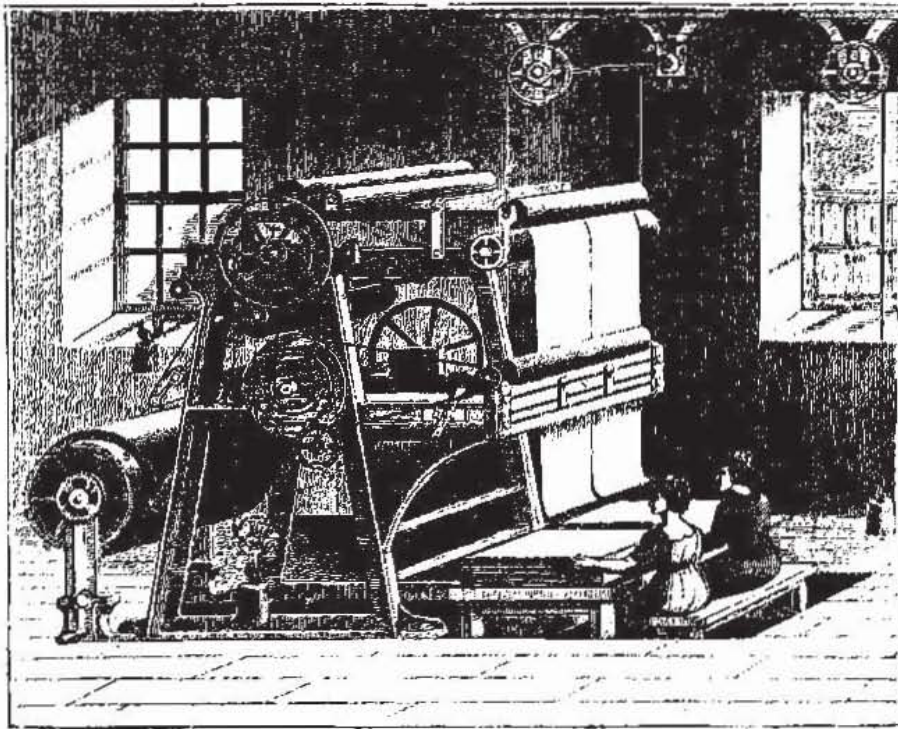


Figure 2.

In the larger cut at the end of this article, there is a representation of three furnaces. At the first, which is unoccupied, may be seen the little table at which the founder works, and the pot out of which he dips the heated metal with a very small ladle. At the second furnace the workman is shown at the moment after he has poured the metal into the mould. And at the third, the other workman is represented in the act of separating the two parts of the mould, and picking out the letter from the lower half, with the hook shown at the top edge of the other half. (423)

The implied subjects of the second, third, and fourth sentences of this passage are not, as one might expect, the workers, but in the first case the reader (or viewer) and subsequently the artist. Thus, even though the woodcuts were presumably executed from drawings of actual workers in the factory, Knight's narration attends not to the activities of the workers during his visit, but to their later representation in the artist's illustrations.

The guided-tour approach of Knight's series creates an audience of silent observers who "watch" from a distance the procedures described. At times this "guided tour" is mediated by the figure of an overseer, or manager, who acts as a kind of emissary between the narrator and the

workers: for example, Knight writes, "upon entering the Foundry, the superintendent, or overseer, will exhibit to the visitor a Punch and a Matrix" (423). In contrast, Head's article, "The Printer's Devil," takes the reader on a different tack by dispensing with the intermediary supervisor and, rather than diverting attention from the workers, scrutinizing their surroundings for clues as to their individual characteristics. The result is an expository essay that becomes almost voyeuristic as the narrator investigates the scene for indications of the diverse human beings at work in the apparently impersonal occupations of the printing-office. In this respect, among others, Head's article affords a striking contrast with "The Commercial History of a Penny Magazine."

While their shared concern with the business of William Clowes provides a common setting for Knight's "Commercial History" and Head's "The Printer's Devil," the observations recorded in these two articles – appealing to two disparate target audiences and reflecting distinctly opposed interests and concerns – are remarkably dissimilar in substance and in tone. Knight, writing for the *Penny Magazine* exhibits a kind of idealism and optimism – he is interested not so much in what the laborers *are* but in what the laboring class *could* be. His perspective is characterized by faith in progress and is predominantly forward-looking, even as he sketches for his readers the great achievements of the past. In contrast, Head takes a much more realistic approach, drawing the reader's attention to actual factory conditions and teasing out the human interest of the subject rather than exploring its technical and theoretical dimensions.

Unlike "The Commercial History of a Penny Magazine, whose four parts are devoted to four distinct branches of industry, "The Printer's Devil" is structured according to a typical workday at Clowes's printing office. The narration begins at dawn with the workers streaming in from all directions to their various stations. When the workers break for lunch, the article also "breaks," and the narrator fills the interim while the workers are away by providing a historical overview of printing. The article draws to a close at the end of the eleven-hour workday as the factory hands depart to their respective homes. The guiding structure of the narrative is therefore temporal, with Head adopting a point of view consistent with that of the workers, in contrast to Knight, whose text is structured by spatial relationships in keeping with the point of view of the manager who observes the operations that occur in specific functional areas.¹⁶

Although Head's article is not illustrated, his narration continually picks up on visual details which Knight, in his pictorial account, suppresses. For example, at the start of the business day, before the workers have arrived at their posts, the narrator surveys his surroundings. In the deserted compositors' hall, he observes,

Not a sound is to be heard save the slow ticking of a gaudy-faced wooden clock, the property of the workmen, which faithfully tells when they are entitled to refreshment, and which finally announces to them the joyful intelligence that the hour of their emancipation has arrived. On the long wall opposite to the range of windows hang the printed regulations of a subscription fund, to which every man contributes 2*d.*, and every boy 1*d.* per week, explaining how much each is entitled to receive in the sad hour of sickness, with the consoling intelligence that 5*l.* is allowed to bury him if he be a man, and 2*l.* 10*s.* if merely a boy. (3)

A little farther on, the narrator describes the immediate workspaces of the compositors, that is, the area around their individual frames:

The roomy stools which some have purchased (and which are their private property, for be it known that the establishment neither furnishes nor approves of such luxuries) are not without their silent moral; those with a large circumference, as well as those of a much smaller size, denoting the diameter of a certain recumbent body, while the stuffed stool tells its own tale. The pictures, the songs, the tracts, the caricatures, which each man, according to his fancy, has pasted against the small compartment of whitewashed wall which bounds his tiny dominions, indicate the colour of his leading propensity. One man is evidently the possessor of a serious mind, another is a follower of the fine arts. A picture of the Duke of Wellington denotes that another is an admirer of stern moral probity and high military honour; while a rosy-faced Hebe, in a very low evening gown, laughingly confesses for its owner that which we need not trouble ourselves to expound. (3-4)¹⁷

The narrator's imaginative rendering of the worker's joy at "the hour of emancipation," his ironic tone in describing the funeral provisions furnished through the workers own contributions, his pointed indication that the workers must provide their own insurance, their own stools, and even their own timepiece, and above all, his attempt to infer something about the workers from such scant visual evidence as the clock and the posted regulations, the stools and the wall decorations, announce to the reader that Head's sensibilities are fundamentally at odds with Knight's.

In "The Printer's Devil," the narrator is acutely attentive to signs of the employees' discomfort. For instance, in the composing room, he observes that "the height of the frames at once declares that the compositors must perform their work standing, while the pair of easy slippers which are underneath each stand suggest that the occupation must be severely felt by the feet" (3). The readers are described as working in "very small cells" (9), and, observing the composing room during the lunch hour, Head reports,

The halls of the compositors appear to be empty; for while enjoying their humble

meal, sick of standing, they invariably seat themselves underneath their frames, and thus, like rats in their holes, they can scarcely be discovered. (16)

While Knight, as indicated earlier, shows generic workers who are "raised" to the level of efficient machines, Head reveals a company of highly idiosyncratic workers who have been degraded to the condition of so many nameless, faceless rodents.

While on rare occasions Knight blandly refers in passing to child laborers, "The Printer's Devil" contains a number of carefully drawn and well aimed references to children at work. Coffee, tea, and rolls are served by "little girls...with well-combed hair and clean shining faces" (5); "an urchin" (9) (later called a "small, intelligent boy" [10]) assists the reader by reading copy aloud; "a troop of little girls" (15) (not actually employed by Clowes, presumably) sells lunches to the factory workers; and "a gang of sharp little boys of about twelve years of age, with naked arms," (27) collates the printed sheets of paper. This last group, collectively identified as the gatherers, comes to exemplify for the readers of the *Quarterly* the monotony involved in factory work – they "usually perform per day a thousand journeys, each of which is, on an average, about fourteen yards" (27) – as does a man who, "stands, from morning till night, with naked arms, red fingers, and in wooden shoes," and has the "sole occupation, for the whole of his life" of damping paper for the press (26).

In addition to the discomfort and monotony of factory work, and its dependence on child labor, "The Printer's Devil" exposes to view the many occupational hazards of the industry. The type-foundry appears to be a singularly dangerous place to work. According to Head, "the type-founder, following the general fashion of the establishment, performs this scalding operation with naked arms, although in many places they may be observed to have been more or less burned" (21). In a still more shocking passage, Head writes,

As soon as there is a sufficient heap of type cast, it is placed before an intelligent little boy, (whose pale wan face sufficiently explains the effect that has been produced upon it by the antimony in the metal,) to be broken off to a uniform length.... At this operation a quick boy can break off from 2000 to 3000 types an hour, although, be it observed, by handling new type a workman has been known to lose his thumb and forefinger from the effect of the antimony. (21).

As with his earlier concern about mindless repetition and monotony, Head, with his calculated exposure of the occupational dangers of the industry, not only rewrites Knight's earlier depiction (and thus undercuts the two texts which his article nominally reviews), but also anticipates the observations of factory conditions made a short while later by Thomas

Carlyle and by other socially concerned essayists, journalists, and industrial analysts, including, most famously, Engels and Marx. It is interesting to note that in appealing to a working-class audience, Knight continually diverts attention from individual workers, while Head, in addressing a conservative upper-class audience, persistently focuses on the human aspects of the workers. Knight distances himself and his readers from the laborers in order to concentrate on the technology and promote its advantages, while Head, who also admires the technology, seems wary of allowing himself to be dazzled by the wonders of science lest he become blinded to their potentially devastating effects on human lives. The apparent inconsistency between Knight's mission to improve the lives of working-class men and women and his virtual erasure of workers from the content of his "Commercial History" is heightened by the tension between the fundamental political conservatism of the *Penny Magazine* and Knight's own relatively enlightened economic views, which required that he highlight the benefits of mechanization and capital while deflecting attention from what he might have (naively) considered to be the minor discomfort of a few workers.¹⁸ On the other hand, Head shows an almost paternalistic concern about the monotonous, hazardous, and dehumanizing nature of the labor involved and implicitly advocates a return to more traditional ways of life. This was, in fact, very much in keeping with the political tone of the *Quarterly Review*. As Frank Whitson Fetter observes,

The need to take care of the poor, to control the abuses of industry, and to make financial provisions against the hazards of industry kept recurring [in the *Quarterly Review*] but always within a framework of maintaining the supremacy of the landed aristocracy and of keeping the lower orders contented but in their place. (50)

Actually, the fear that the poor, if further oppressed, might revolt against the existing social order lurked beneath the editorial platforms of both the *Penny Magazine* and the *Quarterly Review*. This concern was one of the few views the two publications held in common. But while the *Penny Magazine* did its utmost to avoid political topics, especially those which might fan the flame of worker unrest (and pointing out the more disagreeable aspects of factory work certainly qualifies), the *Quarterly* aired political views with the calm assurance that its readers emanated from the upper echelons of British society.¹⁹

While we should not lose sight of the fact that "The Printer's Devil" describes Clowes's factory some six years after "The Commercial History of a Penny Magazine," the contrasting points of view reflected in the articles can be taken to exemplify tensions in the Victorian response to industrial expansion and the socio-economic condition of England: tensions between a newly achieved faith in abstract theories of political econ-

omy and growing social concern over the effects of industrialization on members of the working class. If, more than one hundred and fifty years after the publication of "The Commercial History of a Penny Magazine" and "The Printer's Devil," it is not always easy to reconcile the conflicting attitudes in these texts, it is at least comforting to know that Knight himself was keenly aware of the possibility that these apparently contradictory ideas would be misconstrued. Shortly after the publication of *Hard Times*, he wrote to his friend Charles Dickens with the concern that he had been the unwitting inspiration for the misguided Utilitarian of Coketown. Dickens responded:

Indeed there is no fear of my thinking you the owner of a cold heart. My satire is against those who see figures and averages, and nothing else, – the representatives of the wickedest and most enormous vice of this time – the men who, through long years to come, will do more to damage the real useful truths of political economy than I could do (if I tried) in my whole life; the addled heads who would take the average of cold in the Crimea during twelve months as a reason for clothing a soldier in nan-keens on a night when he would be frozen in fur, and who would comfort the labourer in travelling twelve miles a day to and from his work, by telling him that the average distance of one inhabited place from another in the whole area of England, is not more than four miles. Bah! What have you to do with these? (408–9)²⁰

As evidenced by both "The Commercial History of a Penny Magazine" and "The Printer's Devil," Knight's and Head's positions were considerably more complicated than the black-and-white characters of Dickens's *Hard Times*, and Knight, notwithstanding his tendency to overlook the human costs of industrial expansion, was only slightly more akin to Thomas Gradgrind than Sir Francis was to the big-hearted and colorful Mr. Sleary.

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ENDNOTES

1. Although "The Commercial History of a Penny Magazine" is unsigned, there is strong evidence to attribute this series to Charles Knight, who contributed regularly to the *Penny Magazine*. Most compelling, passages of the "Commercial History" appear verbatim in works which bear Knight's name as author. (Compare pp. 256–57 of *The Old Printer and the Modern Press* and p. 379 of the "Commercial History.") An annotated electronic edition of "The Commercial History of a Penny Magazine," edited by Laura K. Dickinson and Sarah Wadsworth, is available on the World Wide Web at <http://www-engl.cla.umn.edu/LKD/pm/CommHist.html>. See also Dickinson and Wadsworth.

2. "The Printer's Devil," unsigned on its initial publication, is included with minor revisions in a collection of *Quarterly Review* essays authored by Sir Francis Bond Head. See *Descriptive Essays*, vol. 1, pp. 257–306.
3. Borrowing the term "essay-like review" from Walter Bagehot, Joanne Shattock explains a common reviewing practice of the 1830s as follows: "The more experienced [reviewers] tended to choose a subject rather than a book, and then to fasten a title, recent or otherwise, as a heading, or 'peg' as it was generally known, on which to 'hang' the review, in order to give the impression that the essay was in fact a review" (110). Similarly, in the "review-like essay," the writer "used the book or books under review as an excuse for a discourse on a subject which interested him" (112).
4. In his autobiography, *Passages of a Working Life*, Knight recounts the role his father played in Murray's early success. (See vol. 1, p. 66). For details of Sir Francis's friendship with John Murray, see George Paston's *At John Murray's* and Samuel Smiles's *A Publisher and His Friends*.
5. Ten years after the initial publication of Knight's articles, and four years after the publication of "The Printer's Devil," portions of both texts were folded into George Dodd's article, "A Day at a Printing-office," one of a long series that was written for the *Penny Magazine* and published in book form as *Days at the Factories*. (See Tweedale.)
6. Jackman relates an incident in which Head, during the production of the revised edition of *Bubbles from the Brunnens of Nassau* (1834), appeared at the printing office in his robe, prepared to spend the night if necessary. In a note to John Murray, Clowes wrote, "Major Head is here, with his dressing gown on, and will not leave before all is ready for the press, which will not, I think, be the case before 6 in the morning" (58). See also Smiles, vol. 2, p. 356. In Knight's case, the connection with Clowes was deepened by the fact of a close personal friendship between the two men. Clowes rescued Knight from bankruptcy in 1841 when the *Penny Cyclopaedia* failed (Clowes 41), and Knight's daughter, Mary, married George Clowes, one of William Clowes's sons.
7. The company, now called William Clowes Ltd. and based in Beccles, Suffolk, is still in operation.
8. These figures are roughly corroborated by Charles H. Timperley in his *Dictionary of the Art of Printing* and by Head (although there are discrepancies). Timperley reported in 1839 that Clowes utilized eighteen steam printing machines, fifteen common presses (for fine printing), and five hydraulic presses for pressing paper. According to Timperley the firm employed 160 compositors, thirty type-founders, six stereotype-founders, and seven paper-dampers. In the same year Head reported that the firm had nineteen steam presses, twenty-three common or hand presses, and 340 workmen at Duke Street (Clowes also had a branch office at Charing Cross). Knight, in his "Commercial History," reports sixteen printing machines powered by two steam engines and affirms that at "Mr. Clowes's printing establishment ...

there are more printing machines at work than at any other office in the world" (510).

9. These early histories became the *urtexts* of many later books about printing, which incorporated and often plagiarized them. The preface to Hansard's *Typographia* includes a useful discussion of how subsequent writers appropriated these early texts.
10. As Johnson tells his readers, the printers of today "merely hold the Profession in trust for their successors, to use fairly, but not to abuse; so that when they are called upon to render it up, they may appear in the character of good and faithful stewards; on which account their names will ever be dear to all those who may hereafter follow them" (662)
11. Although Knight points out that stereotyping is suitable only for certain books in high demand, Savage, writing several years later, criticized Knight for endorsing machine printing in the *Penny Magazine* while continuing to have his "fine printing" done with the old-fashioned presses. He writes, "The Penny Magazine has trumpeted the same fallacy [that machine printing produces results of a quality equal to printing by hand press]; and yet the spirited Publisher has all his splendid works, with their beautiful illustrations, printed also at the press: thus tacitly acknowledging its superiority, and denying the opinions which he is the means of publishing to the world" (466)
12. The following passage from the *Results of Machinery* nicely sums up Knight's position: "... the applications of science to the manufacturing arts have the effect of ensuring cheap production and increased employment. These applications of science are principally displayed in the use of MACHINERY; and we shall endeavour to prove that, although industrial labour may be partially displaced, or unsettled for a time, by the use of this cheaper and better power than unassisted manual labour, all are great gainers by the general use of that power" (quoted in Tweedale, 890).
13. A cautionary remark of Geoffrey Tweedale's, directed toward George Dodd's *Days at the Factories*, into which Knight's "Commercial History" was later incorporated (see note 2), applies equally to this series: "It is perhaps Dodd's omissions that provide the most telling criticism of his writing.... Debilitating working and social conditions were often ignored or receive relatively little mention. So, too, were the negative influences on the introduction of the mechanical arts. Looking into Dodd's harmonious factories, one finds a placid work force laboring diligently with their tools, undisturbed by thoughts of unionism or machine breaking..." (897)
14. Johnson's *Typographia* contains an illustration that provides a telling contrast with Knight's illustration of a compositor working at his frame. In the analogous figure in Johnson, one frame is attended by a very small boy who holds his composing stick almost at eye level in order to reach the lower case (143).
15. Some of these have been reproduced by later historians of printing, including Timperley, Clowes, and Handover.

16. In *The Printer*, one of the "pegs" which "The Printer's Devil" hangs upon, Knight adopts a narrative device similar to the one Head employs. In this book, part of a series called "The Guide to Trade," Knight follows the activities of a newly hired printer's apprentice over the course of his first week of employment.
17. This description of the workers' use of prints illustrates Patricia Anderson's point that printed images had entered into the experience of the working class by the end of the 1830s. (See *The Printed Image and the Transformation of Popular Culture, 1790-1860*.) One might speculate whether the images that decorated the walls of Clowes's factories were illustrations from the *Penny Magazine*, which, after all, was produced on the premises.
18. For a discussion of Knight's economic theories see William F. Kennedy, "Lord Brougham, Charles Knight, and *The Rights of Industry*."
19. Although the *Penny Magazine* was aimed at working-class readers and the *Quarterly* at an upper-class audience, there is evidence to suggest that both periodicals were widely read by members of the middle class as well. On the readership of the *Penny Magazine* see Anderson, *The Printed Image*, p. 80. On the *Quarterly Review*, see Shattock, p. 13 and p. 158.
20. For this quote, I am indebted to William F. Kennedy, who cites a further abridgment of this letter from Dickens to Knight in his article on Brougham, Knight, and *The Rights of Industry*.

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