# 1 In Search of the Lost Paycheck

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When the Huffington Post was sold to AOL in February 2011, fair labor advocates finally had a high-profile vehicle for their fight against exploiters of free online content provision. Legions of bloggers who had polished the site's reputation over the years were passed over when owner Arianna Huffington collected a cool \$315 million from the sale of the site. Regular HuffPo contributors from ArtScene and Visual Art Source announced a boycott that burgeoned into a full-blown e-strike after Huffington ridiculed the action of the unpaid writers. "Go ahead, go on strike," she scoffed, opining that no one would notice, or care. In March, the 26,000-member Newspaper Guild threw its weight behind the strike, as did the National Writers Union (NWU)/UAW Local 1981), and an electronic picket line was thrown up.<sup>1</sup> Progressives who crossed the line to write for HuffPo drew heated protests, and some were labeled scabs for putting their bylines above the calls for professional solidarity. In April, a class action suit, claiming \$105 million on behalf of the uncompensated bloggers, was filed by media labor activist Jonathan Tasini, who described the plaintiffs as "modern-day slaves on Arianna Huffington's plantation." Tasini had a good track record. Previously, in 2001, he won a milestone victory when the U.S. Supreme Court ruled (in New York Times Co. Inc. et al. v. Tasini et al.) that publishing companies must obtain permission from freelance writers before reusing their works in electronic databases.

By any measures, the practical impact of the boycott was limited, and, from the outset, the prospects for the lawsuit were not bright. But Huffington's let-them-eat-cake posture, amplified by her public renown as a left-leaning pundit, helped to push the affair into the limelight. Arguments about fair compensation for digital content got a good airing, along with some elements of the debate about free labor, which had been nurtured by the coterie of cybercritics for the last decade. The volume of the hubbub far exceeded the low-key grumbling that had accompanied previous sales of social web properties such as YouTube (to Google), Flickr (to Yahoo), and Bebo (to AOL itself).

Apologists for the "attention economy" played up all of the nonmonetary benefits that page-view exposure delivers to freelance strivers, piloting their

do-it-yourself careers through the turbulence of the blogosphere. According to this view, the value of free promotion on a wide platform outweighs any benefits to be gotten from the surety of a professional pay scale. It was also argued that the publisher's relationship with her bloggers simply reflected the already-established norms of the digital information landscape, which seem to demand an initial donation of services as a customary price of entry. In any event, it was concluded that the owner was under no contractual obligation to share the spoils with those who had volunteered their labor up front. On the other side of the debate, supporters of the boycott played up the continuity of the case with traditional forms of capitalist expropriation. The lucre extracted by Huffington was not different in kind from that enjoyed by brick-and-mortar owners who profit from shortchanging their workers. Talk about the benefits of self-promotion is the sort of deceptive practice touted by employers who are in a position to take advantage of an oversupply of market labor. As for the publisher's debt to the bloggers, it was argued that she had a moral obligation, at the very least. But Tasini's class action suit went further, alleging "unjust enrichment" on Huffington's part—a legal claim that did not depend on whether writers had agreed up front to write for free.

Increasingly thrown on the defensive, Huffington insisted that, in her new position as AOL's head of content, she was pushing for the hiring of hundreds of professional journalists to staff the bureaus the company had opened as part of its Patch.com local news operation. That was a valid argument. But closer examination suggested that these new recruits would be servicing operations that are difficult to distinguish from what is known as a content farm—a site with shallow, non-original stories written specifically to trigger popular search queries and to game Google algorithms into placing the site on the first page of search results. Leading content farms such as Demand Media and Associated Media churn out low-quality articles and video in the field of online advice, paying a measly piece rate to their free agent creatives. As Dan Roth reported in his original 2009 Wired article on the topic, "pieces are not dreamed up by trained editors nor commissioned based on submitted questions. Instead they are assigned by an algorithm, which mines nearly a terabyte of search data, Internet traffic patterns, and keyword rates to determine what users want to know and how much advertisers will pay to appear next to the answers." As a gauge to the fast growth of this spam-like sector, Roth estimated that Demand Media alone would soon be publishing "the equivalent of four English-language Wikipedias a year."<sup>2</sup>

Just as these sites are ushering in a fast food revolution in content, they are engaged in a race to the bottom when it comes to remunerating employees. The filmmaker featured in Roth's 2009 article was paid \$20 per clip for each how-to video he shot on location, edited at home on Final Cut Pro, and then uploaded to Demand Media. Given the growth rate of this sector, that \$20 piece rate has undoubtedly come down in the intervening years. AOL's own business model for its big push into online content proved to be one of the factors driving the wage depreciation. The AOL Way, the company's expansion plan that was leaked

in February 2011, revealed how it would pay a pittance to in-house writers who were expected to pen up to 10 blog articles per day, each prepped for search engine friendliness and for maximum ad exposure.<sup>3</sup>

Creatives who have been knocked to the ground by the recent Great Recession feel pressured to sign up with this kind of word factory when, increasingly, it is the only game in town that pays. After all, the alternative to churning out junk product for a content farm is to play the reputation game by posting for free, like the Huffington Post bloggers. The former option involves the kind of routine toil that is anathema to aspiring creative professionals. The latter option promises the kind of unalienated expression of thought that is closer to their ideal. Yet only one of these will guarantee food on the table.

On the face of it, this does not appear to be a new dilemma. Creatives have been facing this kind of choice since the eighteenth century, when the onset of commercial culture markets offered them the choice of eking out a living with the Pope's Grub Street or of building scribblers on name-recognition relationship with the fickle public. Literary agents, unions, and other professional organizations sprang up or evolved in order to protect their livelihoods from the rough justice of the marketplace, and while the explosive growth of new media has outpaced and outsmarted the traditional agents of bargaining and regulation (such as the press unions), ever-fresher versions are likely to emerge. The Freelancers Union, for example, was founded in 2001 specifically to respond to the needs of the self-employed, and it has been the fastest-growing union in the United States in recent years. Its members are learning how to acquire an ever-larger share of social insurance and political clout while surfing each new wave that washes over the ever-mutating creative/digital landscape. Beginning in the 1990s, WashTech pioneered the business of labor protection for permatemps in the tech industry, and other Communications Workers of America (CWA) locals are following suit in their efforts to recruit independent contractors.

But it would be wrong to conclude that in the realm of digital labor there is nothing new under the sun. On the contrary, each rollout of online tools has offered ever more ingenious ways of extracting cheaper, discount work from users and participants. The transition from web 1.0 to social web was a quantum leap in this regard. The youthful zeal that went into the first generation of web designs was bought with cappuccinos and beaming admiration from clueless elders. Building the pioneer environment of the web was like a

massive barn raising, largely dependent on uncoordinated volunteer effort. Its successor also trades on the openness of youth, but the sophisticated operations of its hidden labor economy bear as much resemblance to the block-building of web 1.0 as the exotic derivatives of today's Wall Street do to the origins of pork belly trading on the Chicago Mercantile Exchange. The social platforms, web crawlers, personalized algorithms, and other data mining techniques of recent years are engineered to suck valuable, or monetizable, information out of almost every one of our online activities. Whether all this activity can or should be classified as labor according to any traditional criteria of political economy is a case in point, and one of the themes of this book. To address the question more fully, as I will do in the pages that follow, involves delving far below the visible surface of the digital landscape on which the Huffington affair was exposed.

From the outset, however, let us bear in mind that new media are not determining agents. Like any other technology, they are facilitators, not causes, of changing social forces. So, too, as Marx and many others have noted, technologies are not simply weapons of class war, designed to control and deskill workers, they also harbor the potential to eliminate wage labor, socialize production, and free up our time. Whether they are deployed for the latter purpose depends not so much on their technical development as on what Marx called the "relations production"-that of is, the state of our socioeconomic relationship capital. to property, and governance. Reverse engineering begins with technology, but unless it is also taken up as a social challenge, the chances are that the outcome will only benefit tech-savvy elites.

#### Formerly Known as Employment

In the heyday of the labor movement, it was commonly observed that the bosses needed workers but that workers didn't need bosses. Yet in the third and fourth quarters of 2010, corporate America posted record profits at a time when the U.S. Bureau of Labor Statistics reported the real unemployment rate at 17%. Does this yawning disjunct between profits and joblessness mean that the bosses have learned how to get by without workers? Not exactly, no, but the statistics, which can be dissected a hundred ways, might suggest that a sea change is occurring in the world of work.

Two of the reasons for the high earnings seem to be beyond dispute. Corporations are moving more and more of their operations offshore, especially jobs in high-skilled sectors, where the largest savings in labor costs can be gotten. So they still need workers, but not expensive ones in the North. A second explanation rests on what business economists call increased productivity. Roughly translated, this means that employees have been pressed, by the stiff threat of redundancies, either to work harder and longer for the same paycheck or to take a cut. In any downturn, employers will push their advantage in this way, but in a soul-sucking recession like this one, there is no quarter; the assault comes from all sides, whether in the form of pay freezes, concessions, furloughs, layoffs, or further casualization. A third reason-and this is the unfamiliar quantum-is the growing reliance on new kinds of free labor to boost the balance sheet of companies that are canny enough to harvest it. Hard evidence for this footprint is not so easy to muster,

but the strong anecdotal record suggests it is large enough to be statistically significant.

Free, or token-wage, labor is increasingly available though a variety of channels: crowdsourcing; data mining or other sophisticated digital techniques for extracting rents from users/participants; expanded prison labor programs; the explosion

of unpaid, near-obligatory internships in every white-collar sector; and the whole gamut of contestant volunteering that has transformed so much of our commerce in culture into an amateur talent show, with jackpot stakes for a few winners and hard-luck swag for everyone else. The web-enabled developments have attracted the most media attention, not least because the tidal surge of free online content directly threatens the livelihoods of professional writers and artists. all. the widespread shuttering of newspapers, After magazines, and overseas news bureaus has seen a generation of union jobs scattered to the winds. Professional pay scales are reduced to dust as the online content aggregators sweep all before them, and resistance was few and far between until the Huffington affair came along. In most corners of the information landscape, working for nothing has become normative, and largely because it is not experienced as exploitation.

From the early days of the Great Recession, business press pundits have wondered how far firms could go in taking advantage of new sources of free labor in order to stay afloat and improve their market positions. How can we take advantage of all the free time (or "cognitive surplus," as net evangelist Clay Shirky puts it) that people have, especially the newly unemployed? Since many of the latter will be spending their newly free time online, how can we exploit their willingness to explore any avenue in search of the possibility of employment? Can we take advantage of their inclination to take on tasks that feel like fun? Or, more ominously, how can we harness their habitual need to participate in something that feels like work, in the absence of paid work and just to keep their hand in? Advocates for this line of thinking have seen it as a viable business strategy. They have also made overblown bonanza-scale claims for the potential windfall, inspired no doubt by the high valuations of social media firms. Inevitably, it has been suggested that social networking is the oil of the twenty-first century; yet, so far at least, it looks as if oil is still the oil of the twenty-first century.

Even so, the financial profile of these companies is remarkable. In 2011, Face-book took in an estimated \$4.3 billion in revenue, and almost \$1 billion of that was net profit. Leaving aside its pre-IPO valuation at more than \$100 billion, these numbers are big enough, especially if you consider that the firm only had not many more than 2,000 employees on payroll. This ratio of employees to revenue is unusual by any historical standards, but it is typical of firms that dominate the upper stratosphere of information services. In 2011, Google, for example, had around 30,000 employees, but it pulled in an estimated \$35 billion in revenue for a \$13 billion profit. The fast-growing social media companies-Twitter, other Groupon, Zynga, LinkedIn, and Tumblr-are in the same boat.

For the rapidly shrinking population that are not Facebook users, Aaron Sorkin's film The Social Network must have presented a conundrum. On the one hand, the story of creative conception that it presents is reasonably familiar. Take a hot-house Ivy League environment where collegiate values are easily trumped by the predatory marketplace ethos already incubating on the campus and add a cast of recognizable characters: a socially challenged white male engineer; a brainy white

girlfriend who challenges him even further through humiliation; a socially desirable male entrepreneur; assorted and primarily Asian female groupies who are irresistibly attracted to Jewish men; and a neo-bohemian start-up crew working 24/7 to make a market breakthrough. These are all updated components of the standard Hollywood template for myth making in the field of technical invention. This is how national champions labor to bring dazzling innovations and lustrous wealth into existence.

On the other hand, there is no actual social networking depicted in the film, and so uninformed viewers could plausibly conclude that the firm's huge financial success rests on the subscription base of Facebook's half a billion users. Yet these users are not consumers in any traditional sense of paying customers. Rather, the variety of activities they perform (technically known as click signals) is the source of valuable data that is sold to the true customers—advertisers or behavior market vendors such as Bluekai, TargusInfo, and Acxiom. According to Eli Pariser, "Acxiom alone has accumulated an average of 1500 pieces of data on each person in its database, which includes 96% of Americans."<sup>4</sup> Some of these customers pay to advertise on the site, though most use the information to follow users around the web with personalized spot advertising. The trade-off for users, of course, is free access to the platform and the software, but, from the company's perspective, the cost of hosting and maintenance is dwarfed by the tradeable value of the

information it can extract from the daily churn on its site. By far the majority of social network users are unaware of how the platform owners profit from the volunteer content of their communications, or indeed how they themselves are generating monetizable product for the owners. But as Andrew Lewis has succinctly put it, "If you're not paying for something, you're not the customer, you're the product being sold."<sup>5</sup>

The 1960s futurist Alvin Toffler coined the term "prosumers" to describe the class of consumers who had evolved beyond a passive acceptance of marketplace choice. But he could hardly have imagined how the term would come to be used, as it is today, to denote the mass of Internet users whose devoted efforts to build relationships and polish their online social identity are the raw material for tidy profits enjoyed by others Nor could any of the other sunnv 1970s prognosticators of postindustrial society such as Daniel Bell have imagined the new order being driven by an attention economy, or that it would be sustained not by the gainful labor of cognitive workers but by the self-promotion of ordinary, unpaid individuals. Moreover, the rewards that underpin this economy are, in some respects, redolent of the kinds of assets that secured social standing in an era that preceded industrialization, when the careful and laborious nurturing of relationships with wealthy and powerful names were sources of considerable worth

Today, we can see the resurgence of such a culture based on the cultivation of social capital, whether for those in search of breakthrough or blockbuster attention in the reputation stakes (in Twitter trending and top viral links) or in the more low-hanging circuits of Internet self-exposure. In some quarters, this affective

currency has replaced the wages of industrialization, especially for professionals who used to earn a structured living from paid content and who now disseminate their bylines far and wide in hopes of securing a niche livelihood from name recognition. But by far the most substantial rewards are allocated, on an industrial basis, to those who build and maintain the technologies of extraction, who hold the system's intellectual property, and who can trade the aggregate output of personal expression as if it were some bulk commodity like grain or beets.<sup>6</sup> The real spoils, in other words, do not go to the aspiring stars, ranked and rated by the battery of metrics that measure Internet sentiment and opinion, but to behind-the-scenes content hosts and data miners, who utilize these and other metrics to guarantee their profits. The outcome, for this latter group, is a virtually wage-free proposition. When all is said and done, the informal contract that underpins this kind of economy is a profoundly asymmetrical deal.

The art of producing gratis media content by showcasing the vox populi has a long history; its origins could arguably be traced to the establishment of letters to the editor columns in print publications. Since these contributions were selected, edited, and, in many cases, fabricated in order to support the editorial line of newspapers and magazines, they offer a good illustration of how supposedly unsolicited public opinion can be generated, shaped, or even ventriloquized. Websites that depend on user input, whether for the main action or in the form of comments posted in response to a featured item, are in direct linear descent from these first letters to the editor. More raw and unfiltered by far, they build on the popularity and cost-effectiveness of their print antecedents.

In recent years, as the open comments sections ("Comment Is Free") have lengthened and proliferated, more and more online newspaper versions have turned to crowdsourcing appeals for readers to generate free columns, images, videos, designs, fact checking, and other information supplies.<sup>7</sup> The principle underlying these appeals is that readers will be gratified to participate and that the results will be more authentic, especially if they are drawing on skills and knowledge unavailable to a commissioned reporter. Outside of the mainstream media, this principle also applies to the widespread uptake of crowdsourcing as a semi-industrial technique for extracting ideas, opinions, designs, and intelligence with little or no compensation for the provider other than name recognition. Informal evidence suggests that as long as a task can be advertised as fun or cool, there is a good chance you can get it done for free, or for a pittance from the seemingly ever-obliging crowd. Moreover, if some of the input seems to be very professional, that is because either the crowdsourcing call is specifically crafted to appeal to professionals on their downtime, or else because it quite probably comes from someone who used to be a professional employee and has been cast into the amateur demimonde of the volunteer content provider.

At the other end of the spectrum are more routine tasks, such as those put out for bid on programs like Amazon's Mechanical Turk. The bids are accepted in return for a minimal fee set by the requester and are assigned to tasks that may take no more than a few minutes to perform.<sup>8</sup> The registered taskers of the Mechanical Turk and other e-lance operations would not be thought of as remotely resembling temporary employees any more than the uncompensated creatives who respond to the more skill-intensive kinds of crowdsourcing. They leave no trace of their employment, and certainly nothing to implicate an employer in any legal or regulated network of obligations. What they do, however, is bring the definition of a job much closer to its etymological source—a discrete lump, or piece, of work that exists only for the duration of its fulfillment.

#### **Distributed Workplaces**

Distributed labor has been suggested as a way of describing the use of the Internet to mobilize the spare processing power of a widely dispersed crowd of discrete individuals. This should not be confused with an older use of this term to describe the business process outsourcing business model for coordinating geographically dispersed workplaces, whether from telecommuting or from distant nodes on a global production chain. That model was especially critical to the wave of white-collar offshore outsourcing in the first half of the last decade, and it depended on sophisticated work-flow platform technologies to slice up, allocate, and recombine work. So, too, the new model should be distinguished from the distributed work-place known today as the mobile office. Business strategists advocate on behalf of the benefits to employee morale of allowing high-wage corporate talent to work anytime, anywhere, and on any device. But it is the boost to efficiency and productivity that commands the most attention in their reports. Untold revenue can be extracted

from the steady erosion of the boundary between work and leisure time—a long-held dream of employers—which results from putting employees on an unforgiving 24/7 leash.

The new kind of distributed labor does not need to be performed by payroll employees in far-flung branch locations, or by notebook toters in wired coffee shops, the default workplace for a generation of contract freelancers who forsake the privacy of their homes (Toffler's "electronic cottage") to work in public view, braving, or feeding off, the gregarious hum of society. Rather, it is done either by users who do not perceive their interactive input as work at all, or else it is contracted out online-through a growing number of e-lance service sites-to a multitude of taskers who piece together lumps of income from motley sources. As in the offshore outsourcing model, the dispersion of this labor is highly organized, but it is not dependent on physical relocation to cheap labor markets. Instead, the cost savings can be derived from either the latent talent of the crowd or the microdivision of labor into puzzles, stints, chores, and bits, which, if they amount to anything more than distractions, require only fitful bursts of concentration.

The devising and parceling out of these microtasks is arguably only the latest development in a lineage of work management that derives from Taylorism. Taskers are effectively deskilled, dispersed, and deprived of any knowledge about the

nature of the product to which their labor contributes. The coordinating manager, by contrast, is in complete control of the labor process. As for the donor labor of the crowd, that has a longer historical lineage since it owes a lot to the traditions of creative work, where sacrifices in monetary compensation are commonly made in return for iob gratification or for the opportunity to test and advertise one's talent. This willingness to donate labor was referred to as self-exploitation when it first emerged as an industrial prototype in the formal employment offered by the New Economy or dot-com firms of the late 1990s. In the course of my own ethnographic research on these new media workplaces, for No-Collar, I recall that one of my interviewees told me her job offered "work you just couldn't help doing"-a description that seemed to sum up the mentality of passionate, or sacrificial, labor.9 Subsequent ethnographic studies of knowledge and creative industry workplaces have shown that job gratification comes at a heavy cost—longer hours in pursuit of the satisfying finish, discounts in return for aesthetic price recognition. self-exploitation in response to the gift of autonomy, and dispensability in exchange for flexibility.<sup>10</sup>

One of the ways to contextualize the rise of the creative industries over the course of the last decade is to interpret it quite literally as an effort to industrialize creativity, aimed, of course, at the market prize of intellectual property.<sup>11</sup> Adapting the tempo of creative work to an industrial template is an acute managerial challenge, however, and, in a jackpot intellectual property economy, the costs of competing are considerable. The turn to crowdsourcing offers a more impersonal solution that slices costs and delivers owners from any employer-type obligations. The crowd is not only smarter than trained employees, you don't need to make social security contributions to take advantage of its wisdom or put up with the wayward personalities of the creatives on payroll. Crowdsourcing and allied techniques are the progeny of strange bedfellows. On the one hand, there is a clear debt to the collaborative basis of the open-source movement, shareware, and the hacker ethic, which is profoundly proto-anarchistic in its embrace of the principle of the commons. The underlying spirit of mutuality, or what Trebor Scholz and Geert Lovink call "the art of free cooperation," has been surprisingly tenacious in the face of concerted efforts on the part of would-be monopolists to enclose, privatize, and commercialize the digital domain.<sup>12</sup> After all. a handful of corporate giants-Google, AOL, Facebook, Yahoo, and Microsoft-now account for the overwhelming majority of daily web traffic. On the other hand, the corporate race to the bottom in pursuit of cut-price labor costs is also drawing heavily on the same collaborative spirit. It is no surprise that entrepreneurs scouting around for a fresh, dressed-to-impress business model have seized on crowdsourcing as a technique that unleashes the latent, or native, genius of Internet culture.

Many readers will no doubt conclude that this dual utilization is all part of some big-picture trade-off. After all, the social web has opened up a whole new universe of information-rich public goods—including the potential for anticapitalist organizing; really, really free markets; peer-to-peer common value creation; public access culture; cyberprotest; and alternative economies of all sorts (and, if you believe any of the cyberhype about the Twitter revolution, it is even the key to overthrowing authoritarian rulers in Middle Eastern and North African states). On balance, then, it could be said that the role social web platforms are playing in new modes of capital accumulation is simply the price one pays for maintaining nonproprietary networks whose scope of activity is large and heterogeneous enough to escape the orbit of government or corporate surveillance. Though the enclosers are pushing hard, the balance, for the time being, is still in favor of the commons. From this point of view, all of the free labor that gets skimmed off can be seen as a kind of tithe we pay to the Internet as a whole so that the expropriators stay away from the parts of it we really cherish.

# **Computers Are Not to Blame**

Participants in the free labor debate often come close to assuming that digital technology is its causal agent—responsible in and of itself for punching a colossal hole through the universe of employment norms. Yet blaming new media is a sorry instance of the fallacy of technological determinism at work. Among other things, it ignores the proliferation of unpaid labor in old media and other parts of the employment landscape over the last decade and a half.

There is no doubt that new media, which has the technical capacity to shrink the price of distribution to almost zero, is hosting the most fast-moving industrial efforts to harness the unpaid effort of participants. But old media has also seen heavy inroads from the volunteer or amateur economy. Nowhere is this more visible than in the rise of reality TV, which was recognized and nurtured as a degraded labor sector almost from the outset. Indeed, the first significant lurch in the direction of utilizing free content as a business model was in the TV industry of the late 1980s, when producers responded to the explosion of cable channels and the concomitant fragmentation of audiences by introducing genre formats that drove down production inputs and professional

labor costs.<sup>13</sup> The cumulative outcome was an assault on entertainment unions. The response was a strike wave on the part of several of these media unions and craft guilds. The twenty-two-week-long 1988 strike by the Writers Guild of America was especially significant in the annals of reality TV, because it opened the door to the sector's longest-running show, COPS. Faced with an acute content shortage, and on the lookout for scab material, the Fox network green-lighted this unscripted show, which required no actors' salaries and boasted extra-low production costs. Indeed, much of the cinema verité feel of reality programming was pioneered by the use, in COPS, of handheld cameras to capture real-life police officers as they pursued their more action-oriented assignments.

Since 2001, with the jumbo success of Survivor and Big Brother, the programming share claimed by reality TV and amateur challenge game shows has ballooned. The production costs of these shows are a fraction of what producers pay for conventional, scripted drama, while the ratings and profits have been mercurial. Indeed, they are so cheap to make that virtually all the production costs are earned back from the first network showing; syndicated or overseas sales are pure profit. From the outset, owners have insisted that producers and editors are not so much writers, who pen scripts and dialogue, as editors, who patch together chunks of real life. Anyone who views raw footage of reality shows can see that the dialogue is carefully scripted and plotted and that the supposedly real-life scenes, usually shot in multiple takes, are highly constructed. Nonetheless, this fiction is used to keep the Writers Guild of America out of reality programming. So, too, networks have begun to

categorize game shows as reality programming in order to produce them without contracts.

Not surprisingly, the nonunionized reality sector teems with substandard conditions. Below-the-line workers, such as production assistants, loggers, assistant editors, drivers, and other technical crew, are often asked to work eighteen-hour days, with no meal breaks and no health or other benefits, and they face employer coercion to turn in time cards early. Wage rates are generally half of what employees on scripted shows are paid, and most overtime goes unpaid.<sup>14</sup> Writers, pressured to produce by just-in-time network schedules, are also faced with the same roster of wage and hours violations, and, since they are usually hired at-will, suffer chronic job instability.<sup>15</sup>

Nor are the amateur contestants much better off. They are not considered actors and so do not enjoy the rights and protections that an actors' union would afford. Yet, as befits a jackpot economy, talent on the top shows can make a bundle. Indeed, some are paid handsome fees for each episode, though most of their remuneration comes from aftermarket revenue in the form of endorsements. However, the majority receive trifling stipends, if anything, and the price for their shot at exposure is to endure conditions—deprived of sleep and plied with hard alcohol—that are designed to spark tension, conflict, and confrontation on screen.

The labor infractions in these old media sectors are conspicuous because they take place against the still heavily unionized backdrop of the entertainment industries. In the world of new media, where unions have no foothold whatsoever, the blurring of the lines between work and leisure and the widespread exploitation of amateur or user input has been normative from the outset. It would be more accurate to conclude, then, that while digital technology did not give birth to the model of free labor, it has proven to be a highly efficient enabler of nonstandard work arrangements.

Another illustration of the explosion of free labor is the white-collar or no-collar internship, arguably the fastest-growing job category of recent years for a large slice of educated youth trying to gain entry into workplaces that are leaner and meaner by the day. Entrants now go to extreme lengths (including paying outright for positions in the internship marketplace) to secure an unpaid internship (often the first of many) that might help them build a resumé and win a foot

in the door, or a leg up in the skilled labor market. The biggest beneficiary of this galloping trade, of course, is the employer. In Ross Perlin's book on the internship explosion, he estimates that corporate America enjoys a \$2 billion annual subsidy from internships alone, and this sum does not include the massive tax dodges that many firms execute though employer misclassification.<sup>16</sup> Perlin confirms that the Great Recession has seen a generation of full-time jobs converted into internships, while formerly paid internships have rapidly morphed into unpaid ones. An estimated 50% of U.S. internships are now unpaid or below minimum wage, 51% in Germany, and 37% in the United Kingdom.

If interning really were a rational career investment with a guaranteed payoff, then the ethics of this form of employment would be more transparent. But the conversion rates that Perlin cites—recording how many interns move into permanent positions—are not very impressive. In good times, and at some companies, the rate used to be as high as 50%,

but in recent years, it has taken a nosedive, all across the board. Indeed, the figures are trending toward the sweepstakes pattern that has become so emblematic of late neoliberalism. Interning, in other words, will only win you the equivalent of a lottery ticket in the white-collar job economy if things continue along this path.

Given these stingy odds, why are more youth not turning toward the blue-collar forerunner of the internship, an apprenticeship in the skilled trades? Apprenticeships still offer a solid pathway-albeit after a lengthy probationary term-to distinct livelihoods in as many as a thousand trades. Some of these occupations die off as technologies and markets mutate, but most of them are relatively safe from offshoring-plumber and electrician jobs are not sent overseas. So, too, their association with manual craft evokes the kind of artisanal autonomy that excites the moralists among us-witness the overheated reception of Matthew Crawford's book Shop Class as Soulcraft. No doubt, the stigma of manual work is still the biggest factor in steering educated youth away from considering trade apprenticeships. But most of the trades in question remain male strongholds, an inconvenient fact that stymied Crawford's effort to exalt his own beloved art of motorcycle maintenance and its kindred occupational spirits. While less than 10% of registered apprentices are female, women tend to dominate the most precarious sectors of white-collar and no-collar employment, and it is no surprise that they are assigned the majority of unpaid internships-77% according to one ί7 survey.

Can we conclude that the intern economy is yet another reflection of what sociologists call the feminization of work?

If so, then it is not just because it involves women in the majority, doing a lot of unpaid work. Internship labor also blurs the line between task and contract, between duty and opportunity, and between affective and instrumental work. Women are disproportionately burdened when these kinds of boundaries are eliminated. The sacrifices, trade-offs, and humiliations entailed in interning are more redolent of traditional kinds of women's work, whether at home or in what used to be called the secondary labor market (to distinguish it from the family wage generated by the primary market).

The internship is particularly relevant to our overall discussion because most interns do not see themselves as hard done by. In this respect, it is one more example of the twisted mentality of self-exploitation that has marched on to the killing fields of employment. Today, there is fairly broad agreement on what constitutes fair labor in the waged workplace of industry, or, to be more accurate, there are limits to the range of disagreement on the topic. People understand, more or less, what a sweatshop is, and also recognize that its conditions are unfair. By contrast, we have very few yardsticks for judging fairness in the salaried or freelancing sectors of the new, deregulated jobs economy, where any effort to draw a crisp line around work and pay (not to mention work and play) seems to be increasingly ineffectual.

## Marx or Not?

Capital owners have long sought to transfer work from the producer to the consumer or user, or from the formal site of

production to decentralized points of consumption. Michael Palm's account of the rise of self-service (a major component of this history of work transfer) begins with Bell's elimination of telephone operators in favor of customer dialing. Persuading phone customers to take on the additional work of dialing for themselves required a great deal of cajoling, not to mention practical education.<sup>18</sup> In retrospect, of course, dialing for ourselves is very small beer compared to the much more challenging tasks we have taken over from producers in the intervening century. Think of the massive amount of buyer's time and energy that goes into researching and assembling consumer products, or the growing volume of user input that is considered mandatory for customer services of all sorts. Because these time soaks are palpable, especially those involving customer service, they are the ones that irritate us most, and so we end up venting our anger on robo-voices or on hapless call center employees in Bangalore.

But these burdens are only the most tangible evidence of what Italian operaismo theorists such as Mario Tronti called the "social factory." According to this thesis, the work discipline of the factory is exported far beyond its bounded walls, and a large share of the work of production is subsequently and increasingly performed, without remuneration, in our daily social doings. Consequently, the entire content of our everyday lives-our net subjectivity-and not just our workplace toil. material becomes raw for capital accumulation. In the mid-1970s when this thesis was put forth, it was an avant-garde analysis of the efforts of capital owners to liberate themselves from factory-bound conflicts with unionized and often militant workers organizations. The transfer of work outside of the traditional sites of production was only part of capital's response. Another was to relocate to cheaper, union-free locations, and a third was to casualize workforces wherever possible. Today, offshore outsourcing is a fait accompli, and the forced march of temping into most professions seems to be unstoppable. Nor is there anything avant-garde about the concept of social factory, at least not when business strategies to extract

rents through social web platforms and crowdsourcing techniques are openly discussed and urged in the pages of Businessweek.<sup>19</sup>

One of the salient questions at The Internet as Playground and Factory conference was whether the Marxist labor theory of value is still applicable to the new modes of capital accumulation exemplified by Facebook. The new profile of glad-some work-sometimes referred to as play-labor or "playbor"<sup>20</sup>—does not seem to fit neatly into Marx's classic analysis of how surplus value is generated from socially necessary, waged labor. On the other hand. some commentators in the Italian school have suggested that Marx, in a few prescient passages in the Grundrisse, predicted the increasing dependence of capitalism on the "general intellect" or "social brain"-the vast network of cooperative knowledge that is the source and agent of the cognitive mode of production.<sup>21</sup> On the face of it, this theory does seem capable of accommodating or explaining the exploitative use of donated or passionate effort that is part and parcel of immaterial labor

In response to the first debate about the relevance of Marx, it is worth noting that waged labor is not the only, or the best, lens through which to view work under capitalist conditions. Michael Denning has argued that, for Marx, the accumulation of labor was just as significant a feature of capitalism as the accumulation of capital.<sup>22</sup> In that regard, the proliferation of unwaged (and thus less measurable) work may be a better analytical standpoint for understanding global economic life. After all, the template of the bounded, waged workday (and five-day work-week), with its formal wraparound of mutually observed rules, obligations, and expectations, was a highly artificial product of bargaining in the advanced economies during the temporary postwar truce between capital and labor. Though it was adopted and referred to as standard employment in those decades, there was nothing natural about its norms, and it applied almost exclusively to the primary employment of unionized male industrial workers. Indeed, this closely contested arrangement floated upon an ocean of unpaid work in the home, and it coexisted with casualized work in the secondary employment sector and wageless work in the informal sector, both of which have swelled in the last quarter century.

In addition, and this hardly goes without saying, the vast majority of human labor, historically and to this day, is wageless—only 7% of India's workforce, for example, enjoys regular wages and salaries, and that number is on the decrease. The chances are that waged labor in a legally limited workday may soon come to be seen as the short-lived norm for a small minority, and most of them employed in the world's increasingly besieged public sectors.<sup>23</sup> The upsurge of precarious work in the private sector—whether in low-wage services or in the high-wage knowledge and creative industries, where a self-employed or gig-based profile is more and more normative—may be seen as the degradation of the formal model, but it is viewed quite differently by those who were excluded from standard employment in the first place. The under-40 workforce, who

have known nothing but precarious underemployment, have their own understanding of what counts as fair or unfair labor, and it is highly contextual and subject to continual readjustment.

Are they not the arbiters of their own exploitation? To argue otherwise is to come close to charging them with "false consciousness."

On the question of the general intellect, there is little dispute that some high-growth industrial sectors are increasingly dependent on ideas and creative talent, and that capital has had to grant some concessions in order to guarantee a supply of cognitive skills. As long as their control over intellectual property is assured, capital owners have been willing to cede some ground over labor discipline; the creative work landscape now hosts multiple forms of autonomy and self-organization, at a far remove from the Taylorist rules of standardization and deskilling. Yet the copy-fight over intellectual property is a fraught terrain, featuring running skirmishes with the commons-loving hacker fractions of the policing of digital cognitive over the class rights management. So, too, the exposure of capital to open knowledge networks for sources of profit carries its own risks; investments in technically specific business models can go south rapidly when access to the same knowledge is widely available at no cost. In the case of free inputs, the hand that gives is also the hand that takes.

The least we can say, then, about capital's dependence on the general intellect is that the outcome is a field of engagement within which contests can crop up virtually anywhere. In this respect, we are far beyond the confrontation at the factory gates—the customary location of the wage earner's efforts to

negotiate the sale of labor power—or the bargaining of a wage contract—which is the legal or symbolic effort to limit this confrontation. Indeed, as Angela McRobbie has recently pointed out, the cognitives or creatives who quarry the general intellect are often less consumed by struggles over compensation than by other political causes. They often invest more of their time and energy in fights over schooling, community development, food sovereignty, racism, sexism, and homophobia on the information landscape or other issues affected by unfair distribution.<sup>24</sup>

It would be naive, however, to conclude, as some advocates of immaterial labor do, that capital has been weakened or outsmarted by the need to forage far and wide, and on especially uncertain and hostile terrain, for cognitive inputs and surpluses. The evidence from the current rent-extraction boom is that profits from new markets are far from soft, whether for jumbo monopolists like Google and Facebook or rapidly expanding content farms like Demand Media and Associated Content or for the army of smaller content aggregators. Moreover, their business models are highly quantitative and are very precisely tied to the measurable value of inputs from users or contributors. In this regard, it is by no means clear that the increasingly sophisticated Internet metrics industry represents a significant departure from the gainful calculus of the labor theory of value. Far from transforming the conventions of worker productivity and rewards beyond recognition, the digital labor system, as Chris Lehman suggests, has "merely sent the rewards further down the fee stream to unscrupulous collectors."25

Nor should the dizzying pace of development in the information sector lead us to conclude that factory gates are no longer important flashpoints. Virtually all of

the technological infrastructure for this sector is manufactured in the workshops of the world in East Asia, where harsh factory conditions give rise to high-intensity labor conflicts on a regular basis. Where the creative use, say, of a notebook computer involves a highly customized work experience, emblematic of the fluid, flexible, self-organized profile of post-Fordism, the conditions of its manufacture could not be more different. Factories employing hundreds of thousands of workers are more and more common in the electronics production chain, and the most recent tendency in the industry is to integrate all the component operations under one roof, as opposed to contracting out to suppliers in different parts of the world. The result looks something like Fordism on steroids.

The giant Taiwanese original design manufacturer notebook makers like Quanta, Compal, Wistron, and Inventec grew to monopolize global production by building a component supply chain that snaked all over East Asia and by utilizing cheap Chinese labor to integrate and assemble the finished products. Yet this contracting model is currently undergoing a sea change as a result of the 2009 entry into the notebook sector of another Taiwanese heavyweight called Hon Hai Precision Industry Co., better known to the world as Foxconn. Foxconn's rise to industrial prominence threatens to revolutionize manufacture in the way that Walmart changed the retail industry. According to what passes for humor among its executives: "In 20 years, there will be only two companies; everything will be made by Foxconn and sold by Walmart."<sup>26</sup> Until recently, the company was itself a supplier of the Taiwanese notebook kingpins. Because its profit margin from making components was much larger than the margins it enjoyed from computer assembly, Foxconn was able to take them on by integrating all the parts manufacture and lowering its own margin on the final assembly work. Now that it is the largest private employer in China, with more than one million workers, Foxconn has the market power to force these former customers to adopt its vertical production methods by merging with its other component suppliers. Moreover, as part of the megafirm's bid to become an original design manufacturer, it is developing its own design capacity, aimed ultimately at taking on the top brands that it currently supplies: Dell, Hewlett-Packard, Apple, Acer, and Sony.

Foxconn is the same company that has earned a toxic reputation for the militaristic labor discipline in its gargantuan factories. In 2010, a string of worker suicides focused international scrutiny on its Longhua factory campus in Shenzhen, which houses and employs an army of 400,000, migrant, youth from China's hinterland. mostly The deaths-eighteen in all, and dozens of others narrowly averted-were widely interpreted as an existential response to the brutality of factory labor conditions, heightened by an oppressive speed-up brought on by the sharp market demand for Apple's iPad. After the twelfth jump from the dormitory windows, a worker blog carried this poignant post: "Perhaps for the Foxconn employees and employees like us ... the use of death is simply to testify that we were ever alive at all, and that while we lived, we had only despair."

Foxconn's CEO, Terry Gou, launched an extensive public relations crusade in response to the outcry and promised to

raise wages. The most telling response to the suicides, however, has been to move production inland to the western provinces; to Chongging, 1,000 miles up the Yangtze River, to the Sichuanese capital of Chengdu, and to Zhengzhou, the capital of a province, Henan, that is home to one-fifth of Foxconn's workforce. The firm has a lot of company. In the biggest restructuring since the migration across the Taiwan Straits a decade ago, the entire PC industry looks to be moving lock, stock, and barrel to Chongqing and Chengdu to take advantage of the much cheaper labor, generous government subsidies (the result of fierce bidding among inland provinces), and locations that are farther removed from the scrutiny of labor and human rights groups. But this time, Foxconn is at the head of the pack, and its methods of labor discipline and vertical production models are setting the pace.<sup>27</sup>

Foxconn's move to integrate production may seem like a throwback to the IBM model of the 1960s, when the original computer giant made everything in-house. So, too, Foxconn's vast, ruthlessly marshaled workforces are redolent of the Taylorism of the early twentieth-century assembly lines. Both of these industrial models are supposed to be gathering dust, irredeemably associated with the bygone era of mass society. Yet here they are, thriving at the profitable heart of one of the world's most advanced manufacturing sectors. For the best part of two decades, anti-sweatshop activists have tried to force consumers in the global North to confront the human costs that lie behind their clothing purchases. Whether the same moral crusade can be applied to information technology products remains to be seen. Apparel never had the air of magical production that sustains the aura of high-tech. For their part, Foxconn's Longhua workers used the most extreme

means at their disposal to generate public attention—"To die is the only way to testify that we ever lived." Through their suicides, they spelled out the literal implications of the "dead labor" precept used by Marx to explain the process of capitalist production. Nor are they likely to be the last to publicize their alienation in this way.

# Two Ends of the Chain Gang

In Marx's well-known analysis, "living labor" is needed to reanimate the "dead labor" embodied in factory machinery. As a result of the surplus generated (Marx described this as a vampiric act), capital is able to roam, zombie-like, wherever it pleases, until its profiteers are forced, under communism, to dig their own graves in an act of self-administered exorcism.

In the case of the new generation of work technologies, especially the mobile ones, the living labor is also allowed to range freely, choosing when and where to clock in, and whether to play along the way. In return for this rare permission, though not exactly out of gratitude, we seem to be offering up more and more of our work for free, or at a tidy discount. Mobile workers—whether they are

banging away in a coffee shop, a teleworker "hotel," or on a beach—appear to be at a far remove from the sweaty precincts of the industrial age. But their parcours digital feats depend on the uniform regimentation of mass workforces at the other end of the production chain, some of them larger in scale and more strictly controlled than anything dreamed of by Henry Ford. As fast as we can dream of ever more personal tools and applications, those individual desires get mined and harvested into industrial demands that are serviced by the most impersonal forms of manpower that modernity has seen.

low-wage manufacturing locations, work In these is feminized not because it involved a blurring between the factory and the traditionally feminine household sphere, but because the workforce is disproportionately composed of the most vulnerable segment of the population: rural teenage girls. It's worth noting the female dominance of this factory labor pool has come into being at the same time as young women have disproportionately entered the precarious world of self-employment and creative labor at the other end of the production chain, moving, as McRobbie has put it, "from the reserve army of labor" to the very "heartland of new forms of work."<sup>28</sup> The women in the first kind of workforce are firmly disciplined according to traditional gender roles at the same time as they have access, for the first time, to some disposable income and to the feel of urban freedoms. The women in the second—the so-called creative industries—enjoy full equality of access and unprecedented control over the scheduling of their lives at the same time as their gendered skills and aptitudes around networking, multitasking, and social finessing of a whole range of work-leisure overlaps have made them ideal workers for the most neoliberal forms of flexible accumulation

These creative workers operate in the do-it-yourself economy, where skilled entrants fashion their own livelihoods by piecing together disparate lumps of work and income. Yet this defiantly postindustrial world of custom-built workers does not subsist on its own ethereal, cyberspace foundation. It is tied, as I have shown, to conditions of production that have much in common with the early stages of industrialization. The workers that service either end of the chain are drawn from quite different strata—one is educated and urban, the other underresourced and migrant—but they share the existential condition of radical uncertainty that intermittent work begets. Whether they labor in the increasingly thin regulation state of reform China or in the hothouse creative capitals of the world, they find themselves isolated from any protective framework of social insurance, marooned in the crowded ether of selfhood.

## Notes

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