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"A Finer and Fairer Future": commodifying wage earners in American pulp science fiction

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Long-neglected by scholars, the pulp science fiction (SF) magazines of the Gernsback era (1926–1937) are due for re-examination. Presumed to be sub-literary stories for boys or, paradoxically, escapist leisure reading for practicing scientists and technicians, the SF from this period is actually neither. It is a powerful resource for understanding the ways ordinary people engaged with the promise and peril of industrial modernity. Published by a passionate entrepreneur seeking fame and fortune, composed by writers paid piecework rates and read by young science and technology enthusiasts aspiring to authentic remunerative work, the earliest pulp SF necessarily provoked inter-class discussions about labor, management, production and consumption.

A 'New Sort of Magazine'

In April 1926 the editor, entrepreneur and amateur radio pioneer Hugo Gernsback hailed his *Amazing Stories* as an entirely 'New Sort of Magazine', one devoted to 'the Jules Verne, H.G. Wells, and Edgar Allan Poe type of story – a charming romance intermingled with scientific fact and prophecy.' Gernsback urged his early readers to think of these new romances as something more than dressed-up wonder tales. By reading carefully, he dubiously suggested, diligent readers could glean as much science from 12 months' editions of *Amazing Stories* as from a yearlong university course. Science fiction (SF), or rather 'scientifiction' as Gernsback first called it, was a mechanic's muse, describing future inventions 'down to the last bolt!' 'Imparting knowledge, and even inspiration, without once making us aware that we are being taught', SF contributed to human progress by going far beyond the common sense of academic and industrial science. Television, atomic power, synthetic gold and even everlasting life – nothing was impossible to a truly 'scientific' mind, by which Gernsback meant one willing to look beyond the mundane and see the wonders of science already at work in the world. Science and technology had entered 'intimately' into 'our entire mode of living', creating 'an entirely new world' [1]. Adventure, marvel and romance awaited people who, guided by scientifiction, could see through the chaos of the present to the promise of the future.

Gernsback was once dubbed the 'Father of Science Fiction' by SF fan and historian Sam Moskowitz. However, many SF critics have disputed this accolade, arguing that the SF he published between 1926–1937 had little scientific or literary value. According to SF writer and critic Brian Stableford, Gernsback's 'procreative act was more akin to a casual visit to a prostitute than to any kind of responsible parenthood' [2]. In Stableford's view all of Gernsback's statements about the educational and prophetic functions of SF are examples of a dishonest entrepreneur's cynical rhetoric meant to part fools and their money. But this characterization might be unfair and misleading. Gernsback's celebratory vision of SF as a powerful way to examine the present through the lens of the future (and vice versa) might well have been naïve, and probably did serve promotional functions. But when considered in light of his biography and the life stories of the people who wrote and read SF, it also clearly functioned as an important catalyst for serious thought about the nature and future of industrial modernity. Written and published largely by middle-class professionals and para-professionals, and read mainly – although not exclusively – by young men about to become wage earners, American pulp SF is best understood as an inter-class discussion about the real life consequences of the institutionalization (in corporate research laboratories, university science departments and government bureaucracies) and professionalization of American science and invention, as well as the 'scientific' routinization this brought into industrial work.

Gernsback's promise

Born in Luxembourg in 1884, Gernsback left Europe aged 20 after France and Germany refused him patents for a battery. In 1904 he arrived in the USA wanting not only a career in science and technology, but also the respectability given to a professional scientist [3]. Unable or unwilling to earn the Bachelor of Science degree necessary to be hired by a corporate research laboratory and accused of industrial espionage on his first day of work as 'head of research' for a New York City battery manufacturer, Gernsback took the entrepreneurial path and tried to make a name (and a fortune) for himself in a variety of small scientific supply businesses aimed at home experimenters. By 1927, Gernsback was proprietor of the Experimenter Publishing Company, which had more than six titles on science, invention, radio and money-making to its credit (later Gernsback magazines would focus on such hot-button 'scientific' topics as sexology and technocracy), and the licensee of New York

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City radio station WRNY [4]. In view of his own failures and successes, Gernsback told readers that professional scientists were often too timid, conventional and incredulous to recognize uncredentialed genius when they saw it. Unfettered by the disciplinarianism of the professional environment and endowed with fresh imaginations, amateur scientists were the true inheritors of the scientific spirit, he argued. In short, even though science and invention had been professionalized and institutionalized for two decades already, amateur science was the *real* science; holding excellent prospects for financial reward and even opportunities for fame.

Gernsback intended his message to assure readers that their leisure time was being profitably and practically spent. Noting that the bulk of the fan letters that he published came from young men aged between 16–24, who were raised in working class families but aspired to professional jobs and saw science and technology as a pathway to a better future, Gernsback refined his rhetoric further. Appealing to obvious personal imperatives, Gernsback said that active participation in amateur science and SF would enable readers to rehearse the skills, ideas and behaviors they would need to find suitable occupations in modern industrial society. Judging from their published letters, many readers took him at his word. Even some who thought of SF as merely entertaining explained how the enthusiasm for science that influenced their reading preferences also permeated their social activities and drove their ambition. For this devoted core readership, Gernsback's promise translated directly into an intimate vision of a future made secure by a good job in a scientific or technological field and characterized by more individual autonomy, more wealth, more leisure and more consumption of the 'good things of life' [5].

This future is explicitly offered to readers in a full-page advertisement for the National Radio Institute published in the August 1930 issue of *Amazing Stories*. Headlined 'I Couldn't Get the Good Things of Life, Then I Quit My Job and "Found" Myself', the ad features Bill – a young clerk hoping to get married, but stymied by his $28-a-week salary. His poor wages leave him 'always on the outside of things. . .I didn't have the cash, that was all. No theatres, no parties, no good restaurants. No real enjoyment of life. I was just getting by.' Reading a magazine, Bill happens across an 'advertisement telling of big opportunities for trained men to succeed in the great new Radio field.' He returns the coupon and receives 'a handsome 64-page book, printed in two colors, telling all about the opportunities in the Radio field and how a man can prepare quickly and easily at home to take advantage of these opportunities.' In two months, 'under the guidance of the National Radio Institute', Bill starts a business of his own repairing radios. He marries his sweetheart with her father's blessing, drives his 'own car, has a good bank account, [and] enjoys all the amusements [he] pleases' [6].

This ad substantiates to some degree Gernsback's promise that specialized training in science and technology was the key to a better future, a message that was reinforced in short stories featuring maverick inventors that he published. However, the ad also establishes far more reserved limits regarding what such men could achieve than that of the Gernsback-era suggested. In stories such as D.B. McRae's 'The Gravitomobile' (*Amazing Stories,* July 1927) and George Frederick Stratton's 'Sam Graves' Gravity Nullifier' (*Amazing Stories*, August 1929), Gernsback and his editorial team asked readers to identify with a free-thinking hero who, although ridiculed by the public, pursued big ideas and contravened conventional wisdom at every turn [7]. These independent inventors were often freed by wealth (inherited or earned) to work outside industry. They made revolutionary discoveries, initiated new fields of study and upset the conventional wisdom of a society still uncomfortable with recent developments in science and technology. Whether for good or for evil, they were competent men of science armed with knowledge, skill and passion, whose fate rested mainly in their own hands. In the National Radio Institute ad, Bill's fate indeed seems to rest in his own hands; but his work – radio repair – is neither groundbreaking nor world shaking. Rewarded for his diligent study of science with the consumer luxuries of a more-or-less secure middle-class life, science has brought him neither fame nor authority. Targeted at men who could not afford college, the National Radio Institute ad reveals that, whatever Gernsback said, there were real-world limits to how far scientific and technological knowledge gained outside accredited universities could take one. By the early 1930s, when unemployment figures hit double-digit percentages, the discrepancy between Gernsback's grand promise and the personal experiences of his readers was readily apparent. The genre touting itself as a guide to the future no longer seemed to understand even the present.

Despite some class-based suspicion of Gernsback's promise that SF would prepare them for scientific and technical occupations, many devoted fans believed that SF taught them good science and they took up Gernsback's challenge to read it with a serious mind. After all, he was right about one thing: science and technology *had* entered 'intimately' into their 'entire mode of living' and created an 'entirely new world' of work. And, since the result was not entirely empowering (consider how often the monotony of mechanized assembly-line work was characterized in the press as soul-searing, mind-numbing and body-wasting), it shouldn't be too surprising to learn that some of the working-class readers of SF used it to think about the consequences of the reorganization of industrial work under mass production.

'There will be no rich, and no poor'

Just a few months after the Wall Street stock market crashed in the autumn of 1929, reader C.R. Lloyd – of Phoenix City, AL – wrote a letter to *Amazing Stories* about the short-term peril and long-term promise of mechanized mass production. In it, he described a time when science and technology would rationalize both production and capitalism, forging a working economy that served both the working masses and what he called the 'intelligent classes'. 'Some day,' he began, 'there will be hustling cities from one end of our country to the other, where every worker will compete with every other worker for efficiency. The machines will do it.' It is true, he admits, that 'machines will bring about a great unemployment problem.

[For a time, they] will bring discontent and unhappiness which will be a menace to life and property.' But 'the intelligent classes' will inevitably 'form a system of industry that will put everybody to work. Such a system will gradually do away with swollen fortunes and will put an end to poverty. Slowly, perhaps, but surely, will come the day when there will be no rich, and no poor. . .People will have time, money, and intelligence to devote to things scientific, which will be for their happiness and comfort; and which will satisfy the human craving for more knowledge, and greater achievement. Wouldn't this be a glorious planet to live on then [8]?'

Written from a city long known as 'the wickedest city in America' for its cross-border vice industries, Lloyd's vision of a millennial future of peace and prosperity by means of machine production echoes those advanced by prominent industrial apologists throughout the 1910s and 1920s. In 1925, department-store magnate and sometime social critic Edward Filene wrote that 'a finer and fairer future than most of us have dared to dream' awaited only the complete 'application of [Henry Ford's] mass principle to American industry.' In a truly Fordized America, prices would be lower, wages would rise and the workday would be shortened. In short, Filene explained, 'mass production. . .is *production for the masses*.' The designers of the mass production system had no interest in 'standardizing human life' or in creating 'hell on earth', Filene wrote in answer to their critics [9]. On the contrary, they sought to 'liberate the masses from the struggle for mere existence and enable them, for the first time in human history, to give their attention to more distinctly human problems' [10]. Besides enlightening the masses and ensuring a better future for all, mass production would forestall a more violent (that is, communist) or elitist (which is to say, technocratic) reordering of society [11].

In Filene's view, mass production stimulated and rationalized the economy, secured social stability, gifted the masses with more leisure and provoked social uplift, all in the name of profit. That Lloyd, like Filene, saw mechanized mass production and worker competition as the keys to a future of leisure and abundance, where the masses would finally become fully human, is a testament to the strength of the promotional rhetoric of modernity. And yet Lloyd's optimistic assessment of the coming of mechanized mass production failed to consider the persistence and consequences of the profit motive in Filene's and Ford's vision. Nor did he reflect on the power of the personal imperatives of those who owned the means of production. Indeed, without drawing much attention to the radical nature of his solution, he redistributed their wealth to put an end to poverty. Though Lloyd could not bring himself to see it, there was simply no place for capitalism in his utopian future.

'The Incredible Formula'

Lloyd's implicit criticism of capitalist mass production was made explicit a year later in *Amazing Stories*, when Paul Ernst's 'The Incredible Formula' appeared [12] (Figure 1). Ernst's June 1931 story seems a direct response to Lloyd's faith in the 'intelligent classes' to design a rational form of production. In it, capital dupes science and monopolizes

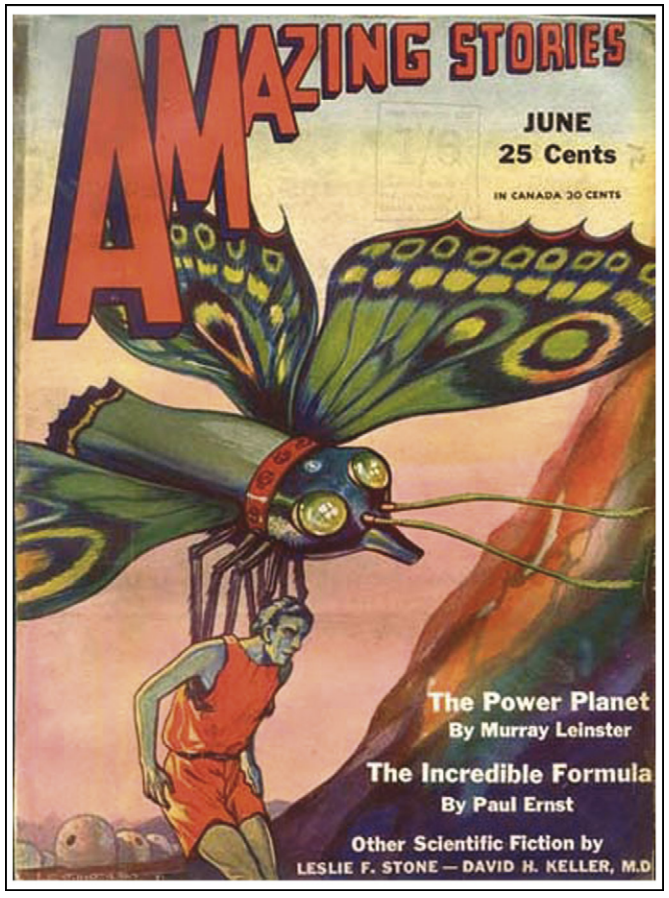

Figure 1. The Cover of Amazing Stories June 1931. Reproduced with permission of the British Library.

invention for its own benefit. Through his story, Ernst tried to equip readers with the knowledge to dismiss the naiveté of Lloyd's account and find the lie in Filene's discourse by giving them narrative access to one of the most powerful critiques of industrial capitalism ever produced. 'The Incredible Formula' employs the classic Marxist analysis of the production of deskilled industrial workers by industrial capitalism. Furthermore, it posits the emerging consumer economy, which so enamored 'Bill', as a ruse calculated to reward workers for submitting to their own alienation. In Ernst's tale, the creation of a perfectly Fordized America results not in the freedom, abundance and enlightenment of Lloyd's and Filene's 'finer and fairer' future, but in prosperity for the few, class warfare and, ultimately, genocide.

In 'The Incredible Formula', a Viennese chemist discovers a way to revive the recent dead using 'ephedrine-X'. Suffering from terminal cancer, he bequeaths the secret of ephedrine-X to his best student, an American named Vansom, who promises to perfect the formula and fulfil the old man's dream of life-extension. But 'distorted rumors' of the effects of the drug soon begin to appear in the New York newspapers, drawing the attention of a Syndicate capitalized with 'the wealth of nations'. Thinking that the Syndicate would soon lose interest when it discovered that ephedrine-X was 'not really an elixir of life', and hoping to finance his dream laboratory, Vansom sells the formula for $50 million without thought of long-term consequences.

Unfortunately, the Syndicate has duped the scientist. It values ephedrine-X not as a potential life-extension agent, but precisely for its ability to create animated corpses [13]. With it, the Syndicate soon produces millions of 'Livies' – mindless, soulless workers functioning as inexhaustible components of the system of production. Judged from the perspective of industrial engineers and their corporate employers, the interchangeable and deskilled Livies are ideal workers [14]. They can be set to work throughout the economy in factories, offices and shops, as well as on farms and boats. When not in use, they are simply 'stacked' in storehouses [15]. And unlike the real industrial workers of the time, who often tried to control the conditions under which they worked, Livies simply do whatever they are told. With Livies there is no restriction of output through work-group established norms and no negotiating with craft unions over work rules. Blue Mondays (so termed for the productivity losses caused by workers still hungover from the weekend's drinking) are no longer a problem, nor must factory-owners face demands for living wages or problems with worker turnover and tardiness [16]. Though not explicit in the story, Livies are stripped by death and chemical-rebirth of ethnicity, foreign languages, alien customs and class affiliations, thus fulfilling Henry Ford's dream for a homogenizing workplace – one capable of remaking workers in the American mold.

As gauged by newspaper editorials, pulpit sermons and soapbox orations, the Livies are an affront to what Karl Marx called the 'existing [social] relations of production' [17]. Faced with such total opposition, the Syndicate hires psychologists and public relations men to change the terms of public discourse, and prepare people for the widespread use of Livies. Although Livies threaten industrial workers with unemployment, the Syndicate promises that 'each workman. . .replaced by a Livy would receive for the balance of his life half of the earnings he had received at the time of discharge.' To make this proposal palatable, the Syndicate spin men rearticulate all of Filene and Lloyd's promises. Livies mean 'luxury for the poor, additional wealth for the wealthy, and a higher plane of living for all.' Livies will 'liberate humanity from at least two-thirds of the daily work that then took up its time. If the Livies could be set to work in the world. . .every man would have leisure, and every woman would have one or two cheap servants.'

From this beginning, the story proceeds along predictable lines. Although there is a great public outcry, Livies substantially reduce the cost of labor and the price of goods, and increase the profits of the business classes. Manufacturers and merchants publicly decry their use as heinous, but privately secure Livy workers and inexpensive Livy-made goods. Laborers demonstrate against being usurped, yet secretly 'envy the few of their neighbors who. . .were being paid a living wage for getting up at ten in the morning and loafing all day.' Soon, the Livies are an irreplaceable part of the economic system, and there's no going back. While, for a time, it's something of a shock to meet one's dear departed behind the shop counter, humanity soon adapts itself to the new economic conditions, consoling itself with unprecedented luxury and leisure. After living a life of ease, thus fulfilling a crucial economic function as consumers, displaced workers literalize the Marxist theory of the social reproduction of alienated labor – they die and become efficient, non-consuming members of the workforce. As Marx put it, and Ernst dramatized it, 'the more [workers] want to earn the more they must sacrifice their time and perform slave labor in which their freedom is totally alienated in the service of avarice [consumption]' [18].

With the public acceptance of the Livies and the Syndicate's capture of the means of production and distribution, capital can restructure social relations as it sees fit [19]. Taking a page from Georg Lukács's 1922 *History and Class Consciousness*, the Syndicate extends the "natural laws" of capitalist production. . .to cover every manifestation of life in society' [20]. In Syndicate society, as in Lukács's critique, displaced workers 'learn to satisfy all [of their] needs in terms of commodity exchange.' So when displaced workers earn extra money by selling dying relatives to the Syndicate for a 'substantial sum', even family members, women and children become commodities exchangeable for needs and wants [21]. According to Ernst, the imperative to consume requires not luxury and leisure, as Ford and Filene thought, but the commodification of workers and dramatic alterations in such important social relations as the family.

The story goes on to chronicle a history of stipend reduction, class war and finally genocide. When displaced workers rebel, the Syndicate turns the Livies against them, casualties of war become new Livies, and in the end, all of the displaced workers are converted into free labor. The final result: 'The planet of Earth had for its total population five thousand and twenty-four men, women and children. Each of these had a small army of Livies for personal service.' The Syndicate delivers on cutthroat capitalist Jay Gould's terrifying boast that he could 'hire half of the working class to kill the other half' [22].

The price of consumption

By separating productive labor and consumption into two figures, the Livy and the 'Replaced Worker', Ernst hoped readers would see that alienated labor is the price of consumption and to persuade them to reject the notion that consumption is an adequate reward for degraded labor. While Ernst's political motivations remain unclear, the narrative embodiment of Marx's analysis of alienated labor became a usable future for a significant subset of the most-devoted depression-era fans – who would later become important SF writers and editors. John B. Michel and Donald Wollheim in particular rejected the subordination of science to capital and nation. In a 1937 speech penned by Michel and read by Wollheim before the Third Eastern Science Fiction Convention in Philadelphia, they excoriated Nobel Prize winning physicist Robert Millikan for having 'lined up on the side of reaction'. According to Michel and Wollheim, Millikan's attendance at 'rallies and demonstrations to uphold our military honor and pride' amounted to support for 'this stupid asininely [sic] organized system of ours which demands that a man brutalize and cynicize himself for the possession of a few dollars in a savage, barbarous, and utterly boring struggle to exist' [23]. In *The Space Merchants*, Frederik Pohl and Cyril

Kornbluth described the inauthenticity of the culture created by the deep penetration of capitalism, advertising and consumerism into social life [24]. Even in Anthony Boucher's 'Q.U.R.', a story meant in part to celebrate the maverick inventor, the hero fixes the problem of a recalcitrant robot workforce by dehumanizing them [25].

That so many of the next generation of SF writers, once themselves avid pulp readers, sought occupational alternatives beyond the emerging industrial nexus of technical, scientific and academic institutions suggests that at least some people used the communitarian promise of SF to find a way out of a life path dominated by alienated work. Isaac Asimov disavowed civil service work after a brief taste of it, and was never wholly comfortable in academia. Wollheim, a 1930s fellow traveller, and Pohl, a Young Communist Leaguer, gave up their hopes for a fundamental reordering of capitalist America and sought consolation in entrepreneurship. Pohl started a literary agency. Wollheim worked on the margins of the publishing industry, serving as the editor of Ace Books and eventually started his own company – DAW (*D*onald *A*. *W*ollheim) Books – which later became part of the Penguin Putnam publishing conglomerate. Lester del Rey spent a lifetime freelance writing; his name (coupled with that of his wife, editor Judy Lynn del Rey) came to signify Random House's commitment to SF. Once remembered as radicals, these SF writers are now corporate brands. Of the fans-turned-writers of this generation, only the incredibly prolific Asimov came to personify the occupational promise of American SF, earning a living almost entirely by writing, editing and speaking, and becoming a household name for Americans who would be hard-pressed to name any other SF writer [26]. Despite the inability of SF to totally insulate its writers from the commodifying effects of the marketplace, the close community of SF fandom offered Asimov and the others compensations that were hard to come by outside of the SF enclave: autonomy, purpose and fame. SF fandom also provided less famous wage-earning readers with some respite from the world of work. Spending hours and honing skills to create such elaborate well-crafted products as fanzines, folksongs, costumes and epistolary communities, active fans have, since the 1930s, recaptured the feelings of meaningful, rewarding work denied them on the job. For them, fandom has been a place where they could live at least part of their life beyond the world of alienated labor. More than just a hobby, fandom was and is a way of life [27].

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1 Gernsback, H. (1926) A new sort of magazine. *Amazing Stories* 1, 3

2 Stableford, B. (1997) *Interzone* December, pp. 47–50 (op. cit. p. 50)

3 Westfahl, G. (1990) An idea of significant import: Hugo Gernsback's theory of science fiction. *Foundation - The Review of Science Fiction* 48, pp. 26–50 (op. cit. p. 39)

4 By the spring of 1929 one time assistant editor T. O'Conor Sloane had taken the editor's chair, as financial shenanigans drove Gernsback into bankruptcy and he lost *Amazing Stories*, his other magazines and WRNY to creditors. But Gernsback rebounded quickly, having purloined the subscriber list of *Amazing Stories* on his out. In June and July 1929, he pitched *Science Wonder Stories* and *Air Wonder Stories* to his former readers as the true inheritor of the promise of SF. By 1938, *Amazing Stories* had become part of the Ziff–Davis publishing chain. Unable to compete in the increasingly syndicate-driven magazine industry, Gernsback abandoned SF altogether, giving it one last abortive try in the late 1950s.

5 This synthesis of Gernsback's rhetoric is substantiated in my dissertation. Drown, E. (2001) *Usable Futures, Disposable Paper: Popular Science, Pulp Science Fiction and Modernization in America, 1908-1937*, University of Minnesota (Minneapolis, MN, USA). Available in full-text through the Dissertation Abstracts International database: accession number AAT 3031972.

6 National Radio Institute (1930) I couldn't get the good things of life. *Amazing Stories* 5, 385

7 For more on these stories, see my forthcoming article Drown, E. (2006) Business girls and beset men in pulp science fiction and science fiction fandom. *Femspec* 7 (1), 5–35

8 Lloyd, C.R. (1930) Published letter. *Amazing Stories* 5 (4), 75

9 Filene, E.A. (1925) *The Way Out.* Doubleday, Page & Company, Garden City, NJ, USA;
My source is Hounshell, D.A. (1984) *From the American System to Mass Production, 1800–1932: The Development of Manufacturing Technology in the United States.* Johns Hopkins University Press, Baltimore, MD, USA p. 305, Ironically, like the ruinous sons of the Syndicate, Filene was the son of the man who started Filene's department store. But unlike the Syndicate sons who ruined what their fathers built, Filene made his father's faltering concern into a successful venture

10 Filene, E.A. (1931) *Successful Living in This Machine Age.* Simon and Schuster p. 1;
Compare Filene and Lloyd's early 20th Century rhetoric with Timothy Walker's 1831 version: 'In the first ages of the world, when Mechanism was not yet known, and human hands were the only instruments, the mind scarcely exhibited even the feeblest manifestations of its power. . .[only after the] first rudiments of Mechanism made their appearance [did men have enough time to think]. Leisure gave rise to thought, reflection, investigation; and these, in turn, produced new inventions and facilities. Mechanism grew by exercise. Machines became more numerous and more complete. The result was a still greater abridgement of labor. One could now do the work of ten.' Walker is quoted in Marx, L. *The Machine in the Garden: Technology and the Pastoral Ideal in America*, Oxford University Press (New York, NY, USA), pp. 184–185. Neither Filene nor Walker predicted the proliferation of goods that characterizes America's consumer economy. The expanded production of such goods consumed any leisure time savings made possible by machine production.

11 'Mass production holds no dangers to the common welfare, but on the contrary holds possibilities of accomplishing for mankind all of the good that theoretical reformers or irrational radicals hope to secure by revolutionary means.' Filene, E.A. quoted in Hounshell (1984), p. 308.

12 Ernst, P. (1931) The Incredible Formula. *Amazing Stories* 6 (3), 218–227

13 In the 1970s, science fiction writer George R.R. Martin reclaimed the working corpse for a series of stories including 'Meathouse Man' and 'Override'. In these stories 'corpse handlers' are semi-skilled workers analogous to bulldozer operators or, as the name suggests, slave handlers. 'Override' deals with the relationship between semi-skilled workers and corporations controlling labor and natural resources. In 'Meathouse Man' a young, sensitive corpse handler comes to terms with the exploitation of corpses for work in a brothel. He learns that the dream of romantic love is the biggest lie of all, one meant to compensate workers for their alienated conditions Martin, G.R.R. (1976) Meathouse man. In *The Best Science Fiction of the Year 6* (Carr, T., ed.), Ballantine Books, pp. 258–290;
and Martin, G.R.R. (1985) Override. In *Nightflyers*, pp. 104–135, Tom Doherty Associates

14 As Charles Reitell, University of Pittsburgh business professor, described them in 1924, the best industrial workers were very much

like Ernst's Livies. They had to 'maintain a constant machine pace, to be able to eliminate all waste and false motions; to follow without wavering printed instructions emanating from an unseen source lodged in some far off planning department.' Reitell, C. (1964) Machinery and its effect upon the workers in the automobile industry. In *Giant Enterprise: Ford, General Motors, and the Automobile Industry* (Dupont, A.D., ed.), Harcourt & World, Inc, pp.181–188, (op. cit. p.183)

15 This image of workers stacked in warehouses had some currency in the 1930s. In 1936, writer Fred L. Dietz, of Portland, OR, claimed that 'some capitalists are hoping that scientists will develop a method to induce hibernation in WORKERS during periods of unemployment. The WORKERS could then be placed on shelves in warehouses, and be awakened when their services were needed to produce new commodities, or to serve as soldiers.' His self-published book –Dietz, F.L. (1936) *Martians Investigate This Crazy World,* (Portland, OR, USA) – is not a SF novel, but a dramatized analysis of American capitalism.

16 These production 'problems' are catalogued in Bernstein, I. (1960) *The Lean Years: A History of the American Worker, 1920–1933.* Houghton Mifflin Company, Boston, MA, USA p. 53;
and Green, J.R. (1980) *The World of the Worker: Labor in Twentieth-Century America.* Hill and Wang, New York, NY, USA p. 110

17 Marx, K. (1969) Preface to the critique of political economy. In *Karl Marx and Frederick Engels: Selected Works*, International Publishers, pp. 181–185 (op. cit. p. 182)

18 Marx, K. (1964) Wages of labor. In *Early Writings* (Bottmore, T.B. and And, trans., eds), McGraw–Hill Paperbacks, pp. 69-84 (op. cit. p. 71)

19 The Syndicate is called a syndicate precisely because the capitalists do not bother with political reform. They simply seize the means of production and dictate the reorganization of society to fit their needs.

20 Lukács, G. (1971) *History and Class Consciousness: Studies in Marxist Dialectics.* The MIT Press, Cambridge, MA, USA, pp. 91–92

21 Karl Marx equates the sale of the labor of women and children with slavery: 'In former days, the worker used to sell his own labor power, being ostensibly, in this respect, a free person. Now he sells his wife and his children. He becomes a slave trader.' In Marx, K. (1990) Capital (Vol. 1), Penguin Books (New York, NY, USA), p. 420. This motif theorizes the experience of many working-class people in the 1920s and 1930s, who were forced to rely on income produced by women's and children's work to meet their basic needs. This was in spite of Henry Ford's declaration that workers' wages 'ought to bear not less than all the worker's outside obligations.' Ford, H. (1922) My Life and Work, Doubleday, Page, and Company (New York, NY, USA). Working class-families interested in purchasing modern consumer goods such as cars, radios and washing machines found themselves the subject of moralizing criticism from the middle-class. These big-ticket items strained household economies and, in hard times, enabled rich people to blame workers for their poverty. Lynd and Lynd report the view of a businessman in 1925: 'An automobile is a luxury, and no one has right to one if he can't afford it. I haven't the slightest sympathy for any one who is out of work if he owns a car' – Lynd, R. and Lynd, H.M. (1929) *Middletown: A Study in Modern American Culture*, Harcourt, Brace, Jovanovich (New York, NY, USA), p. 255. The businessman's logical slip is telling. Somehow owning a car is the reason why a worker is unemployed, when in fact unemployment is the reason why the worker cannot afford the car he already owns. Workers are simply not meant to have such luxury items in this man's view.

22 Gould is quoted in Adamic, L. (1931) *Dynamite: The Story of Class Violence in America.* Jonathan Cape p. 23

23 Michel, J.B. and Wollheim, D. (1937) Mutation or Death. Speech presented to the Third Eastern Science Fiction Convention, Philadelphia, PA, USA. *_A Sense of FAPA_*, Richard Eney (http://fanac.org/fanzines/Sense_of_FAPA).

24 Pohl, F. and Kornbluth, C. (1952) *The Space Merchants.* Del Rey, New York, NY, USA

25 Well-known mystery and SF editor 'Anthony Boucher' was really William Anthony Parker White. This story was written as by Holmes, H.H. (1943) Q.U.R. *Astounding Science Fiction* (March), pp. 79–90

26 Some might argue that Robert A. Heinlein and Arthur C. Clarke, the other two members of the 'Big Three' of the so-called 'Golden Era', should be listed here. But Heinlein was already an adult when he started taking SF seriously, and neither Heinlein nor Clarke were published as fans in the letter columns during the Gernsback era.

27 This idea has its own acronym in fandom: FIAWOL (fandom is a way of life). It has been contested by people who believe that fandom is just a god damned hobby (FIJAGDH).

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