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## One Symptom of Originality: Race and the Management of Labour in the History of the United States

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### Abstract

In the labour-history of the US, the systematised management of workers is widely understood as emerging in the decades after the Civil War, as industrial production and technological innovation changed the pace, nature and organisation of work. Though modern management is seen as predating the contributions of Frederick Taylor, the technique of so-called 'scientific management' is emphasised as the particularly crucial managerial innovation to emerge from the US, prefiguring and setting the stage for Fordism. This article argues that the management of labour in the US has roots in the particularities of a society which racialised its labour-systems – slave and free – and thus made 'racial knowledge' central to managerial knowledge. Rather than transcending the limits of racial knowledge, the authors argue that scientific management relied on experts to know and develop 'the races' not only for the purpose of accumulating capital but also for the organisation of modern production through the first decades of the twentieth century. Such 'knowledge' became central to the export of managerial and engineering knowledge from the US to the world.

### Keywords

Taylorism, race-management, scientific management, industrial slavery, immigration, settler-colonialism, class, Fordism

John R. Commons, the liberal reformer who founded academic labour-history in the US, and Ernest Riebe, the militant cartoonist of the Industrial Workers of the World (IWW), doubtless had little in common politically. Commons supported American Federation of Labor-style unionism, worrying when its limited social goals strayed beyond collective bargaining. Riebe offered to IWW-publications the adventures of Mr. Block, the clueless, conformist anti-hero whose sufferings reflected workers' misplaced faith in the beneficence

of capitalists, politicians and the police. Still, Riebe and Commons shared an understanding of the relationships between race and the management of labour, one that seemed crystal-clear to them as early twentieth-century observers of American workplaces, but that is often lost upon historians today. In 1907, Commons's *Races and Immigrants in America* argued, well after Frederick Winslow Taylor had marketed scientific management, that US-management had shown just one 'symptom of originality', namely 'playing one race against the other'. Six years later, Louisiana lumberjacks struggling for a union would laugh bitterly over a Mr. Block comic wonderfully named 'He Meets Others'. In the strip, a well-dressed manager circulates from one racialised group of workers to another – Anglo-Saxon, Irish, German, Italian, Chinese, Polish and Black. Drawn to resemble Mr. Block, these various others are played off against one another by the manager. The boss threatens and cajoles them to compete by appealing to masculinity, fears of joblessness, and racial and national divisions. The management-by-race of various European groups exists along a continuum shared by Black and Asian workers but, Riebe shows, the threat of joblessness is coupled with threats of total exclusion where workers of colour are concerned. By the last frame, the manager is reclining peacefully, successful in getting the various workers to work frantically while swapping racial slurs.<sup>1</sup>

Managers, so central to the racial functioning of the workplace in the narratives offered by Commons and Riebe, appear too episodically in accounts of the history of white supremacy and class in US history. If we take seriously Marx's observation that capital necessarily implies the capitalist himself, formed into a 'personality' opposing and extracting labour, serious study of how race-thinking informed the capitalist personalities embodied in different levels of management must be carried out. Managers, we argue, were never outside of the US racial system and, in many ways, created that system. Further, the degree to which factory-management understood itself as possessing racial knowledge links it to, rather than distinguishes it from, the management of work under slavery. For us, the separation of slavery from the mainstream of both labour- and economic history leads to impoverished accounts that suppose there was no sustained literature on the management of labour until the 1880s. Yet the outpouring of antebellum-studies on managing slaves, and even on managing

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1. Commons 1907 p. 150. Nyland 1996, pp. 985–1016 provides an account of Commons's relationship to scientific management and to Frederick Winslow Taylor himself, around the issues of trade-unionism and restriction of output. See also Ramstad and Starkey 1995, pp. 1–75. The cartoon is included in Riebe, 1984 edition, unpaginated. For the context of the cartoon, see Roediger 1994, pp. 143–5 and Cohen 2007, pp. 35–58. Research assistance from Martin Smith was indispensable in completing this article. Some passages of this article appeared initially in David Roediger's popularly styled *How Race Survived US History*, 2008.

Figure 1

# MR. BLOCK

HE MEETS OTHERS



slaves ‘scientifically’, reveals how deeply entwined racial and managerial knowledge had already become. However underexplored, the links between race and management are profound. Commons’s striking connection of the cutting-edge of management with the bloody history of race contrasts sharply with the bloodless efficiency of stop-watches and assembly-lines that dominate our thinking, and that often focused the hopes of progressive reformers like Commons himself, who, in a more kind-to-Taylor moment, himself called scientific management ‘the most productive invention in the history of modern industry’.<sup>2</sup>

Marxists have both participated in and challenged the failure to see the ways race shaped and reflected the managerial personality, which functioned in the workplace as the daily representative of capital. Marx himself, of course, far transcended the racial determinisms of his time, seeing social differences, and not biology, as fundamentally producing racial divisions. Riebe’s cartoon exemplifies this contribution from the Marxist tradition. Moreover, Marx generated sharp insights into the role of racial slavery in stultifying class-consciousness within the white US working class and of anti-Irish animus in dividing British workers. The best accounts of the origins of white supremacy, of the relations of the slave-trade and slavery to capitalist development, and of race and labour in Reconstruction after the Civil War, come from the Marxist tradition.<sup>3</sup> Within the industrial history of the US, the uneven but significant Marxist influence on labour-history has helped make available management’s role in structuring the history of race and class in the US. At the same time, however, Marx’s classic descriptions of the working day and the labour-process tended not to discuss racial division. Within labour-history, the work most systematically examining the managerial use of race to divide workers is on the deep and border South in the late nineteenth and early twentieth century. When such division is foregrounded, the emphasis is on the role of race in the undermining of political unity and of trade-union solidarity, especially during strikes. While these regional and thematic emphases treat important issues, they tend to miss the role of race-management in the daily extraction of production.<sup>4</sup> The two most influential studies of the

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2. On dating of the origins of management, see Nelson 1996, p. 50. Compare Breeden 1980, p. 44 and *passim* for ‘scientifically’; and Aufhauser 1973, pp. 811–24. Commons on scientific management is as quoted in Haber 1964, p. 148. For Marx and the capitalist personality, see Marx 2000, p. 118.

3. Lawrence 1976; Esch and Roediger 2006 pp. 6–10; Marx 1870; Rawick 1973; James 1970, pp. 119–64; Rodney 1981; Du Bois 1988. For an important radical account of the disappearance of US slavery from the history of management, see Cooke 2003, pp. 1895–918.

4. Among the best such works within labour-history are Saxton 1975 and M-K Jung 2006. On the new South, see the acute work of Kelly 2001; Jaynes 1986; Arnesen 2002, pp. 5–83; and

innovations and peculiarities of US management by Marxists, follow Marx's own writings on the labour-market and the labour-process, in paying scant attention to racial divisions. In the classic Marxist works on management, race is either little present, as in the case of Harry Braverman's important work, or transcended definitively by capital, as in that of Antonio Gramsci. Even the provocative and neglected sections on management in C.L.R. James's *American Civilization* are silent regarding race.<sup>5</sup>

A searching critique that builds on Marxism while seeking to transcend the tendency of Marxist scholars to divorce labour from the specifically racialised bodies and histories of those performing it, marks the opening chapter of Lisa Lowe's *Immigrant Acts*. Lowe shows the stakes involved in a theoretical challenge to abstractions practised in the name of materialism and even, at times, of inter-racialism. She powerfully demonstrates why Marxism is indispensable for us and why too much Marxist scholarship has been slow to apprehend the 'specific history of the US' where race, capital and class are concerned. Lowe argues that Marxism has too often stopped at allowing for 'race-making' processes like the slave-trade and the seizing of native lands only in an early period of primitive accumulation, though race-making continued to matter greatly in the history of capitalism. She insists that, in the world's most developed capitalist nation, the connection of race and exploitation persisted and ramified, driving the accumulation of capital and shaping subsequent strategies of rule. 'In the history of the US', Lowe writes, 'capital has maximised its profits not through rendering labor abstract but precisely through the social productions of difference... marked by race, nation, geographical origins, and gender'. It will not do, of course, to simply turn things over and make management all about race. But Commons was right that race hovered over and permeated the processes through which US labour was chosen and bossed. 'Race-management' came into being long before scientific management, and the two for a time coexisted as complementary rather than alternative strategies for extracting production.<sup>6</sup>

If anything, Commons's formulation underplays the broad connections between racial knowledge and management. While racial competition functioned as one important moment and motive in linking management and race, the idea of a hierarchically-understood process of 'racial development'

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Trotter 1990. Other debts to labour-history, and particularly to the work of David Montgomery, will appear in the notes below.

5. Marx 1906, pp. 185–330; Braverman 1975 and Gramsci 1971, pp. 279–318. Compare James 1993, pp. 173–9 and pp. 181–5.

6. Lowe 1996, pp. 27 and 28 ('rendering labor abstract'). See also Brodtkin 2000, pp. 238–56 and pp. 239–40.

undergirded slavery, settler-expansion and industrial capitalist growth, making the ability to manage other races a distinctly ‘white’ contribution to civilisation.<sup>7</sup> This article thus offers modest suggestions for how the project of considering such a large and understudied topic might be undertaken. We begin with the relationships of settler-colonialism and especially slavery to the management of work. A second section details the ways in which late nineteenth- and early twentieth-century imperialism sent into the world not only capital and soldiers but also American mining-engineers and other managers whose claims to expertise turned on their supposed knowledge of race and racial development and their experience with exploiting racial divisions among workers. Finally, we return to Commons and to Taylor, considering how race-management and scientific management coexisted well into the twentieth century domestically. In all sections, we deploy the term ‘race-management’ in a manner focused on the workplace and the extraction of production, though we recognise that race also was inextricably and compellingly connected to the management of resistance and of sexuality. While allowing ourselves a few sidelong glances to such connections, we opt for the narrower definition in the interest of focus in what is already a long and full article. Even within this narrower focus, race-management is a complex term, at some moments simply involving competition among races and, at others, involving claims to know the fitness of certain peoples for certain jobs and to develop ‘lower’ races by slotting them into, and disciplining them through, certain types of labour.<sup>8</sup>

### **Settlement, slavery, and the white managerial impulse**

In connecting management and race, Commons betrayed long-standing, even foundational, US traditions. As members of both a white-settler and a slaveholding society, Americans developed a sense of themselves as ‘white’ by casting their race as uniquely fit to manage land and labour, and by judging how other races might come and go in the service of that project. The dispossession of Indians, and the ‘changes in the land’ that it entailed and celebrated, found much justification in the supposed inability of indigenous people to ‘husband’, or manage, the resources at their command.<sup>9</sup> Early American management-decisions centred on what sort (and quickly on what ‘race’) of coerced labour was most economical, skilled, durable, efficient and

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7. Harris 1993, pp. 1709–95. The best Marxist account remains Rawick 1972, pp. 125–60.

8. See Williams 1990.

9. Cronon 1983.

tractable. After a period in which Indian slavery seemed a possibility, the last century of the colonial period featured cycles of favouring white indentured servants or African slaves. Management-by-ethnicity led slave-traders and owners to attempt to discern Africans' putative propensities to survive and to resist, making such matters measurable and marketable according to the 'tribe' of those imported. Likewise in the fur-trade, management was defined in terms of judging the abilities and fostering the willingness of specific Indian tribes and individuals to organise and defend the gathering and transport of vast quantities of furs.<sup>10</sup>

It was clearly in the nineteenth century when 'race-management' became formalised into the modern practices and discourses that Commons had in mind. The factory and plantation coexisted as the most spectacular sites for management of labour in the Americas with, if anything, the latter providing models for the former. As Robin Blackburn has written, '[b]y gathering the workers under one roof, and subordinating them to one discipline, the new industrial employers were... adapting the plantation model'.<sup>11</sup> The words 'overseer', naming the manager responsible for superintending and speeding up the labour of slaves, and 'supervisor', naming the manager performing these same roles in industry, have the same literal meaning. Similarly, the word 'factories' had named the West-African staging areas gathering labouring bodies for the slave-trade, and then for the production of cotton, making possible the textile 'factories' of England and of New England. More broadly, as Karen Brodtkin has memorably written, 'although race was initially invented to justify a brutal regime of slave labor... race making [became] a key process by which the US continues to organize and understand labor and national belonging'.<sup>12</sup>

Antebellum US politics, as well as economics, turned on the relative merits of free versus slave-labour. Such discussions easily devolved into considerations of the (dis)abilities of African-American labour, in the fields and especially in manufacturing, as against those of 'white' labour, or of the 'Irish race'. Far from simply arraying the industrial North versus the agrarian South, the debates on these matters saw capitalists in the two regions study and debate not only the relative merits of slavery and free labour but also the productivity of 'black' versus 'white' workers. In the 1850s, 20% of all manufacturing capital was invested in the South and the slaveholders most inclined toward pro-slavery Southern nationalism often led the highly-theorised and quantified charge for more such investments. A Lowell weaver imported to oversee

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10. Littlefield and Knack 1996; Morrison 2008, p. 52 and Morris 1993.

11. Blackburn 1998, p. 565.

12. Rodney 1981; Brodtkin 2000, p. 245.

production in a Carolina mill, for example, reported that ‘there is full as much work done by the blacks’, who also were supposedly ‘much more attentive to the looms’ than Northern white workers. In 1812, one Virginia iron-works reckoned slave-workers ‘ten times’ better than free ones. When white skilled workers protested to the federal government over their replacement by slaves in the Norfolk Dry Dock in 1830, management’s response showed how thoroughly difference could be quantified and how readily the distinction between slave and free shaded off into that between Black and white. Stones ‘hammered by White Men’ cost precisely \$4.05 more than those ‘hammered by blacks’ in one sample. Ironmasters similarly calculated and reached similar conclusions, despite worries that slaves perhaps wasted more pig-iron and charcoal in the production-process. Even as the Civil War raged, the *Richmond Examiner* found time for disquisitions on race-management, broaching the possibility that the South could rectify its mistake in employing black labour too overwhelmingly in agriculture. It argued that a refurbished system of bondage based on an ‘elaborate... subdivision of labor’, could respond to both the ‘advanced intelligence’ and the ‘thievish propensities’ of African slaves, and therefore constituted the key to ‘the management of the race’.<sup>13</sup>

Calculations leading to the replacement of free Black workers in service and seaports in the North by desperately poor Irish immigrants hinged on the extent to which such desperation made the Irish willing to underbid African-Americans in terms of wages. But the transition from one group to the other, and the threat that other reversals could occur, also featured broad discussions of whether the African or the Irish ‘race’ was more tractable and efficient. When, for example, the wealthy New Yorker and hater of Irish-Americans, George Templeton Strong, maintained that the Irish had ‘prehensile paws’, not hands, his judgement came in the context of extracting labour from immigrant workers at his home and quickly led to comparisons: ‘Southern Cuffee seems of a higher social grade than Northern Paddy’.<sup>14</sup> The antebellum replacement of white American-born ‘helps’ in domestic labour with ‘servants’ of the Irish ‘race’ likewise involved scrutiny and comparison, as did the turn from native-born to Irish women in Northern textile-mills.<sup>15</sup>

The potential for the so-called development of Africans as workers and as a race was a central preoccupation of slaveholders, as a voluminous proslavery

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13. Starobin 1971, pp. 11–14; Bezis-Selfa 1999, p. 679; Rockman 2001, pp. 33–4; Upham-Bornstein, 2007, p. 65; for the iron-industry, see Dew 1994, esp. p. 107; Unsigned, *Scientific American* 1863, p. 386, contains the Richmond quotation in an unsigned-note.

14. Ignatiev 1998; Roediger 1991; and Starobin 1971 pp. 82–99 and Strong 1952, pp. 342, 345.

15. Dublin 1981; Cain 2007, pp. 64–83; Genovese 1974, p. 24.

managerial literature made clear. In the major journals, published work focused at least as frequently on the ‘management of [N]egroes’ as on the ‘management of slaves’. When the titles of the articles referred to slaves, practical issues like housing-rations, supervision, discipline, and diet bulked large. When the subject was proclaimed to be managing ‘[N]egroes’, broad pronouncements on racial-difference more consistently appeared as part of the calculus of how to run an efficient, productive plantation or farm. But the differences were far from absolute, as business-knowledge and racial knowledge were thoroughly mixed and the major plantation-management journals often took the ‘makeup’ of Africans into account. At its most bizarre extreme, masters imagined a serendipitous ‘innate’ characteristic of Africans that utterly deflected abolitionist charges regarding the mistreatment of slaves. They were a people, so this theory argued, ‘whose ethnical element, like the mule, restrict the limits of arbitrary power over [them]’. Thus, the *Southern Cultivator* praised the new owner of a failing plantation for one day shooting many sickly livestock to demonstrate his ruthlessness to the watching workers, while promising to kill 150 underperforming slaves the next day. The master then staged a contrived consultation with an overseer who ‘persuaded’ him to spare the slaves, agreeing to let them live for an eighteen-month probationary period. The *Southern Cultivator* assured its readers that such a feigned stay of execution to produce ‘a new spirit of industry’ among the slaves did not constitute brutality, since ‘the Creator seems to have planted in the negro an innate principle of protection against the abuse of arbitrary power’.<sup>16</sup>

The assumption that a race, as well as a group of individuals, was being managed sometimes shaped the very ways that productivity was organised and measured among slaves. The crude distinction between ‘full hands’ and ‘half hands’ by Louisiana masters suggests some attempt to balance individual and group-productivity, though in parts of the South the ideal was to manage individual slaves in a quantifiable system of tasks. In any case, the formation of workers into a gang that, as many planter-managers boasted, ‘could be driven’ was explicitly seen in racial terms. ‘You could never depend on white men’, the refrain went, ‘and you couldn’t drive them any; they wouldn’t stand

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16. Cartwright 1858, pp. 46–7 and p. 52 (‘like the mule’); Cartwright 1851a, pp. 186–7. (Note that *De Bow’s Review* slightly changed titles over the years but we cite all as *DR* below.) Compare Collins 1854a, pp. 205–6; Agricola 1855, p. 713; Collins 1854b, pp. 421–3 (‘innate principle of protection’); Goodloe 1860a pp. 130–1, 1860b, pp. 279–80 and 1860c, p. 305; Guerry 1860, pp. 176–7; Collins 1862, pp. 154–7; Hurricane 1860, pp. 276–7; Towns 1851 pp. 87–8; Arkansas River 1860, pp. 304–55; Calhoun 1855, pp. 713–9; Pitts 1860, pp. 276–7; A Tennessean 1853, p. 302; Small Farmer 1851, pp. 369–72. See Unsigned 1858b, p. 346 for enthusing over the threat of mass-murder.

it'.<sup>17</sup> Walter Johnson's history of the slave-market in Louisiana has shown that race-management reached even into the understanding of the value of so-called mixed-race slaves. Lighter-skinned women, for reasons situated at the intersection of European standards of beauty and the practice of sexual exploitation by masters, were more highly priced than darker-skinned 'African' women. But, among slaves who were men, a light skin generally decreased value, as managerial 'common sense' dictated that mixed-race slaves could withstand hot and backbreaking labour in sugar-production less well, and that they were more likely to be unmanageable workers prone to running away. Johnson provides accounts of the role of a very sophisticated and modern paternalism designed to produce unmarked slaves who could be traded more lucratively on the market than those whose scars provided evidence of resistance, who faced moments of force centring more on sale than the lash, and who were encouraged to appeal to the master to avoid such sale. Such a view connects paternalism, race-management and race-development profoundly. It reminds us that such management always policed resistance as well as productivity, but that the two were never unconnected.<sup>18</sup> The most celebrated 'scientific' proslavery-thought to emerge from the Deep South came squarely out of the imperatives of management and for the justification of the system in the face of abolitionist attacks. On the latter score, the idea that Southern masters 'knew', and therefore could develop, 'the Negro', loomed large. In describing his own system of management and what he did for slaves, one planter-expert wrote of acting on the conviction 'that man is as much duty bound to improve and cultivate his fellow-men as he is to cultivate and improve the ground...'.<sup>19</sup>

The physician, slaveholder and University of Louisiana professor Dr Samuel Cartwright spoke as a manager of Black labour in famously identifying two major African pathologies while writing in the Southern regional, agricultural and management-journal *De Bow's Review* in 1851. The first condition, the 'disease causing negroes to run away', was termed *drapetomania* by Cartwright, who called the second *dysaesthesia Aethiopica*, an illness whose 'diagnostic' was an inefficient, seemingly 'half-asleep' performance on the job. These symptoms and their cures – 'preventively... whipping the devil' out of

17. Rose, ed. 1999, pp. 337–44; Breeden 1980, pp. 69–74. See also Genovese 1974 p. 61, 310, 361 and 371; Berlin 2004, p. 132, 149, 178 and 212; Reidy 1993, pp. 140–1 and Miller 1993, pp. 164–5. On race and driving, see Fogel and Engerman, 1988, pp. 204–5, including the quotation; Olmsted 1856, pp. 204–6 and Olmsted 1996, pp. 153, 452. See also Smith 1997, pp. 133–50 for dramas eventuating when masters attempted to use clock-time to impose work discipline on slaves holding to 'African' conceptions of time.

18. Johnson 1999, pp. 142–62 and *passim*.

19. Unsigned 1858a, p. 235.

potential *drapetomaniacs*, and avoiding any possibility of ‘negro liberty’ to ward off *dysaesthesia* – make it impossible for us to take Cartwright’s ‘science’ seriously, but antebellum-experts suffered few such qualms. His contradictory combination of emphases on the status of the conditions he invented as individual maladies, if socially produced, and as parts of a complex of inherited ‘racial’ inferiorities, capture a pattern running through race-management. At bottom, the enterprise hinged on both a firm sense of biologically-determined white supremacy and on the malleability that made managing of improvements among the inferior possible. He argued, supposedly on the basis of both biblical and scientific authority, that Africans literally possessed an inherited racial ‘instinct’, housed in the feet and knees, to genuflect before whites. Without productive management, the loss of this instinct produced disease and disaster. Also conveniently ‘innate’ were a ‘love to act as body servant’, a tendency to ‘glory in a close, hot atmosphere, and an ‘ethnological peculiarity’ ensuring that ‘any deserved punishment, inflicted with a switch, cowhide or whip, puts them into a good humor’. Cartwright slid from seeing the conditions he described as curable, preventable ‘diseases’, afflicting only a minority of slaves, to suggesting a more constitutional and obdurate problem by terming the maladies ‘peculiarities of the negro’. Cartwright thus made management the cure for ‘negro peculiarities’. He insisted that ‘[t]he seat of negro consumption is not in the lungs, stomach, liver, or any organ of the body, but in the mind’, and suggested mismanagement or ‘bad government’ on the part of the master as its cause. Cartwright chided Northern scientists for being blind to matters so clear to masters and overseers who were in daily contact with slaves. He claimed that free Blacks in the North displayed *dysaesthetic* symptoms almost universally, but that their ‘masterless’ status made both diagnosis and cure impossible outside the South.<sup>20</sup>

Such connections between racism and managerial knowledge, as W.E.B. Du Bois long ago observed, had an impact on the development of white-supremacist thought far beyond the South. To the ‘watching world’, a racism designed to supervise what Du Bois called ‘slave industry’ seemed ‘the carefully thought-out result of experience and reason’. In other, and even more unlikely, areas as well, the seminal, bizarre intellectual work of Professor Cartwright betrayed notions born of race-management. His tortured forays into theology developed the minority proslavery racist position that Africans were a pre-Adamic separate race who profited by enslavement under superior Caucasians, because Cartwright read plantation-management back into the Bible’s earliest pages, reinterpreting Ham not as the father of Cush but instead

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20. Cartwright undated, pp. 6, 9 and 14. On consumption see Cartwright 1851b, p. 212 and Cartwright 1851c, pp. 331–5; see also Cartwright 1861, pp. 648–59.

their ‘head man’, the ‘manager, or overseer of the nacash [Negro] race’. Thus the Bible, Cartwright wrote in 1860, ‘tells us certain facts about negroes which none but the best informed planters and overseers know at the present day’. Similarly, Cartwright premised his scholarship squarely on the needs of managers of slaves for racial knowledge. Those lacking such ethnological knowledge, he maintained, ‘have great trouble in managing [N]egroes’. He continued, ‘[i]f [the] ethnology [of the slaves] were better understood, their value would be greatly increased...’.<sup>21</sup>

Cartwright’s work is widely cited as foundational in scientific racism, but its place as a central text in the history of American management should be more widely acknowledged. Indeed, his simple treatment for the slow-working ‘hebetude’ accompanying *dysaesthesia Aethiopica* was to make slaves work harder, therefore sending more oxygen to their brains. Management compelled Africans to work, to ‘inhale vital air’, and thus to be transformed from the ‘*bipedum nequissimus* or arrant rascal that he was supposed to be’ to a healthy ‘good negro that can handle hoe or plow’. Thus transformed and driven, the slave could produce effectively, accomplishing ‘about a third less than what the white man voluntarily imposes on himself’ and not rebelling as whites ‘naturally’ would. Such an oxygenating prescription (it turned out that the lungs accounted for much of the problem) and pseudo-quantified, racial ratio-making science of work, captured much of the sense, nonsense and circularity of race-managements to come.<sup>22</sup>

The white Southern practice of claiming racial knowledge in order to manage, while emerging in slavery, quite outlived emancipation. The boom in railroad-construction in the postbellum South saw the notorious Civil War general and Ku Klux Klan (KKK) leader, Nathan Bedford Forrest, calling on his prewar expertise in managing and trading slaves to assemble and discipline a labour-force laying track. Forrest typified a layer of leaders combining race-management and political violence. In the early 1870s, federal action against Klan violence in the Piedmont discovered a pattern of railway-contractors, who had worked for the Confederacy as construction-engineers, doubling as KKK terrorists. The notorious postwar convict lease-system featured race-specific targeting of Black workers, typically managed in gangs and under the lash, all in accordance with theories inherited from slave-management practices and ideas regarding how Africans best produced and developed. At

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21. Du Bois 1988, p. 39. Cartwright’s views on race and the Bible are laid out in Cartwright 1860, p. 131 and pp. 129–36; see also Cartwright undated, pp. 6–14 and Fredrickson 1987, pp. 87–8.

22. On his use of work as a cure and on his managerial impulses for ethnology, see Cartwright 1851c, pp. 333–5 and *passim*.

one mine worked by convict-labour, the leather strap for whipping those not keeping pace was called the ‘negro regulator’. It was not the convict, but ‘the negro’, who was seen by state officials as unable to ‘get along’ without the whip.<sup>23</sup>

In the New South’s ‘free world’, race-management also persisted and ramified, as the work of Brian Kelly and others makes clear. In a revealing 1901 article in the Cleveland-based iron-and-steel journal *The Foundry*, an observer revisited Southern stove-works he had observed sixteen years earlier. The visitor initially found that the slavery-era practice of using African-American craft-workers produced a postwar work-force of moulders centrally including skilled, and prized, Black workers. In one factory, a manager rhapsodised regarding the unique racial fit of ‘the negro’ and moulding, which he saw as requiring the worker to be ‘an artist’ rather than ‘a mechanic’. On this romantic-racialist view, the same knack that made the African ‘pick up music’ made his craft-work as a moulder intuitive, delicate and deft. On the return to the same plant at the turn of the century, the observer found a different manager reflecting the heritage of another strain in slave-management, and the ripening logic of Jim Crow. This manager found Black moulders to be thieving (a ‘race trait’), ‘unsteady’, destructive of equipment, and unable to judge ‘the proper heat at which to pour’. His ideal factory would ‘not have [had] a nigger about the place at any price’. Characteristically, he produced numbers to make the case: the Black moulder was paid only 4% less but supposedly produced 10% to 15% less. To the manager’s chagrin, African-American moulders persisted in the foundry. As he explained, ‘[t]his is an open shop, and some of our people think it is good policy to keep enough negroes to show that we could fill up with them’ if unionisation threatened. Indeed, from day-to-day, even the manager advocating a colour-bar saw the attractions of ‘playing one race against the other’. He concluded: ‘If a white man gets cocky, it does seem good to ask how he would like to see a nigger get his job’.<sup>24</sup>

### **Exporting and transnationalising race-management**

In the 1850s, a decade when calls to reopen the African slave-trade became insistent and Irish-American labour unprecedentedly important, the world

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23. On Forrest and the KKK in the Piedmont, see Ashdown and Gaudill 2006, pp. 62–3 and Nelson 1999, pp. 135–7. On convict-leasing, see Lichtenstein 1996, p. 134 (for the quoted material). See also pp. 52, 184 and Mancini 1996, pp. 40–1; and Blackmon 2008, pp. 55, 107.

24. Inspector 1901, pp. 17–18. Thanks go to Zach Sell for this source. See also, for example, Kelly 2001, pp. 123–209.

labour-market enlivened debates on race-management. By then, as Moon-Ho Jung demonstrates, the ‘coolie trade’ from Asia to the Caribbean and elsewhere already framed discussions of slavery and labour, and the ways workers might be pitted against each other, in the US. During Reconstruction, pro-‘coolie’ planters and supporters, betraying what Jung calls an ‘unyielding fascination with race’, saw importation of Chinese labour as a way to break ‘Sambo’ from the sense that he was ‘master of the southern situation’. One newspaper editorialised that most planters sought Chinese labour because they believed it to be ‘more easily managed, and do better work, although much slower’. The writer praised racial competition as much as the virtues of any race, promising that the entry of 100,000 Chinese workers would ‘make the negro a much more reliable labourer’. Bedford Forrest, as white supremacist and manager, alternated between proclaiming African labour the world’s best, and therefore seeking new importations of African guestworkers, and encouraging schemes to import Chinese labour, in both cases to compete with existing local labour-supplies, including Black convict-labour.<sup>25</sup> Race-management also opened the West, with competition between gangs in the historic 1860s construction of the transcontinental-railroad frankly structured as a contest, sometimes spilling over into violence, of Irish versus Chinese gangs on unspeakably dangerous jobs. The relatively cheap labour, and the vulnerability, of the former group, influenced even how the road was engineered, with inexpensive, imperilled labour substituting for wooden support-structures. As with racialised gang-labour elsewhere, the whole gang was paid a sum, with management in one instance declaring that because Chinese were indistinguishable from each other, individual wage-payments would have opened possibilities of the same worker drawing double pay.<sup>26</sup>

Race was ultimately central to both industrial management at home and to imperial expansion, continentally and overseas. After the 1848 Treaty of Guadalupe Hidalgo added much of Mexico to the US, one US editor summed up what Ron Takaki has called the ‘metaphysics of Mexican-hating’ within a white managerial ethos: ‘The nation that makes no outward progress... that cherishes not its resources – such a nation will burn out [and] become the prey of the more adventurous enemy’.<sup>27</sup> The old argument that the ‘English-speaking race’ specifically embodied wise management continued to play its part in

25. M-H Jung 2006, pp. 202–3 (‘unyielding fascination’); Unsigned 1860, pp. 729–38 (‘more easily managed’). Compare Cohen 1984 p. 53. Ashdown and Gaudill 2006, pp. 61–4; Mancini 1996, p. 73 and pp. 133–4.

26. Ambrose 2000, p. 153, 327 and *passim*; White 1985, pp. 266–7. See Stromquist 2006, pp. 623–48 for provocative observations on the affinities on railroad-construction in the US West and in colonial countries.

27. Takaki 2000, p. 161.

empire-building. In 1896, Andrew Carnegie, commenting on British actions in Venezuela, would acknowledge the ‘dubious’ ways that indigenous land had been seized, but concluded nonetheless that ‘upon the whole the management of the land acquired by our race has been for the higher interests of humanity’. Further, it was ‘well that the Maori should fade away, and give way to the intelligent, industrious citizen, a member of our race’.<sup>28</sup> Well before the 1898 push for a formal overseas US empire, a striking number of former slaveowning or slavetrading Southerners found work by claiming expertise in the capture and management of Pacific Islander forced-labour being brought into Fiji and Queensland.<sup>29</sup>

In large measure, the cohabitation of race-management and management-science matured in US managerial discourse outside the country before it became so highly elaborated in factories at home. Arguably the greatest US export in the quarter of a century after 1890 was the mining engineer, and, with him US capital-goods, technically well-trained, such engineers replaced European experts in Asian, Mexican, South-American, Australian and African mines partly because they could proclaim a knowledge gained at the intersection of race and management. Such engineers often gained experience in western US mines where varying decisions regarding which ‘races’ – the term then marked differences of European nationality as well as broad ‘colour’ divisions – could live in the ‘white man’s camp’ were central to management. In Columbia University’s ambitious 1950s project interviewing mining engineers with far-flung careers, Ira Joralemon was one interviewee who learned race- (and gender-) management in the Southwest and took it into wider worlds. In Arizona’s Ajo mine, he recalled, ‘a lot of Papago Indians’ did the dangerous and hard work of sinking the pit. Quickly, Swedes from Minnesota, typed as ‘jackpine savages’ when they mined in proximity to Indians in that state, joined the ranks of the mine’s drill-men. The Swedes, according to Joralemon’s useful-to-management observations, were so tough that the ‘squaw men’ around Ajo, who lived with their families out in the desert, called the new drillers ‘the savages’. Biographies of mining engineers sometimes took the form of western adventure stories writ transnationally.<sup>30</sup>

Trained at top schools in a frankly élitist way, eschewing hands-on shop-based curricula, and reflecting the explicit influence of social Darwinism,

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28. Carnegie 1896, p. 133.

29. Horne 2006.

30. Spence 1970, p. 165–87 and 278–317; Calvert 1967, p. 211. Marks and Trapido 1979, p. 61; Huginnie 1994; Roediger 2005, pp. 74–5. Carlisle 1959; See also Vick 2002, p. 342; See Nkosi 1987, p. 69 on training in mines in the western US. For a vivid example of larger patterns, with important and precocious South-African ties, see the biography of John Hays Hammond in *Cyclopaedia of American Biography* 1915, pp. 56–61 and 249–50.

men like Joralemen claimed to know how to boss ‘native’ and racially-divided labour worldwide. South-African mines saw the most spectacular influx of US management, which ran fully half of new gold-mines there by 1895, William Honnold being among the most powerful of the Yankee engineers. Holding that ‘some employers are unqualified or temperamentally unfit to manage crude labour’, he argued in 1908 that ‘to recall American experience’ with the ‘efficiency of negroes’ could clarify much in South-African mines. (He nevertheless resisted proposals to bring actual African-American miners to South-African mines with the judgement that ‘American niggers . . . would be the very worst thing that could be introduced’.) US western mines also produced James Hennen Jennings, who helped produce South-African studies of what racial lessons could be learned from mining in Venezuela, where he had also worked.<sup>31</sup> US export of engineering expertise, leavened by putative racial knowledge, was far from being confined to mining. The celebrated ‘Test Course’ used in the training of engineers at General Electric (GE) could boast, according to a 1919 survey, that its graduates had ‘scattered over the four quarters of the globe, doing their share in the fascinating work of electrifying China, harnessing the waterfalls in India . . . substituting electricity for steam or hand labor in the mines of Alaska and South Africa, building railways in Australia and refrigerating plants in the Philippine Islands’. Much given to emphasising a racial mix were chief engineers constructing the Panama Canal, who scoured the earth for cheap labour, paying on two tracks, the far-less favoured one in silver and the more beneficent one in gold. Crosscut by skill and citizenship, the system was increasingly shaped by race after 1905, becoming, as Julie Greene’s fine history observes, ‘more emphatically – but never exclusively – a racial hierarchy’.<sup>32</sup>

The central figure in the cult of the US mining engineer, though more well-remembered for other crimes, was the future US president Herbert Hoover. Hoover was effectively press-agented as the nation’s ‘highest-salaried man’ for his work as a transnational engineer whose most spectacular adventure-capitalist exploits brought ideas of efficiency to Africa, China and isolated areas of Australia. He might just as easily deserve the simpler title of ‘race-manager’. In Australia, he thought that the ‘saucy independence’ and ‘loafing proclivities’ of local white miners required a counterweight. Hoover

31. Honnold as quoted in Higginson 2007, pp. 10, 15. On Jennings, see Nkosi 1987, pp. 69–74 and 75. On social Darwinism and competing theories of engineering education, see Brittain and McMath Jr. 1997, p. 177.

32. The survey is quoted in Noble 1979, p. 172, which is also acute on management and nationality, at pp. 57–8. See Adams, Jr. 1966, p. 228 for the line (quoted by Noble at 57) of immigration and ‘developing management techniques’. On the canal, see Greene 2009, p. 64 and pp. 37–158.

ranked groups of indigenous Australians eagerly, but called all of them ‘niggers’, and judged even ‘superior’ ones as having ‘too little intelligence to work very much’. He therefore pitted the ‘races’ against each other by importing crews of Italian immigrants and keeping them ‘in reserve’ in order to ‘hold the property’ against the possibility of a general strike. In the context of an inquiry into the use of Italian labour, Hoover’s associate gave the fuller logic of the choice. Italians, he reckoned, were more ‘servile’, ‘peaceable’ and productive. Hoover himself put the advantage in productivity of Italian labour at a ratio of 26:15 on one work-gang, but the real benefit lay in the racial competition itself. Management would be ‘in a mess if they had all aliens or all British’. It was ‘mixed labour’ that provided the real payoffs.<sup>33</sup>

An eager producer of reports judging the relative efficiency of African, Chinese and white miners on the Rand in South Africa, Hoover was accustomed to calculating productivity by weighing ‘coloured shifts’ and ‘coloured wages’ against the white. His own most extensive pretences of calculations on race and management often involved Chinese workers. Hoover, who once extravagantly wrote that he had strongly supported the restriction of ‘Asiatic immigration’ to the US ever since he could ‘think and talk’, did not let borders keep him from making his early career as an engineer in North China. He continually commented on race and productivity there, at times spinning the data rosily to attract investment and at others gloomily to explain why dramatic gains in efficiency had not been made under his watch. In an early prominent appearance before an international congress of engineers in London in 1902, for example, he wrote of ‘mulish’ Chinese miners and their ‘capacity for thieving’. However, he cheerily concluded, money could be saved on timbers supporting mines, because tragedies only had to be compensated at thirty dollars per death, given what he perversely saw as ‘the disregard for human life’ *among the Chinese*.<sup>34</sup>

Hoover mixed impressions and calculations regarding the Chinese worker, always dissembling knowledge, even if seldom consistent. Thus Chinese ‘thieving’ was epidemic, but at other junctures judged as no worse than the world’s norm. Hoover could credit charges that Chinese cultural baggage regarding mining fatally interfered with operations and then turn on a dime to offer the more plausible view that to dwell on ‘superstition’ among the Chinese was a ‘great mistake’. He once held that the ‘the Chinese mine as fast as anyone if they believe that there is anything in it for them. The main reason

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33. Spence, 1970, p. 278; Nash 1983, pp. 72–3 and 330–3; Wilson 1975, pp. 33–7; Hoover 1897?.

34. See, for example, Unsigned 1903 and Unsigned 1907, pp. 161–65; Hoover 1909, pp. 161–5; ‘Hoover 1924; Hoover 1902, pp. 419 and 426–7.

for the riots against our mines and miners was the Chinese dislike of seeing foreigners make capital out of their soil'.<sup>35</sup> The ratios of race and productivity that Hoover fabricated for international conferences similarly varied wildly. In 1900, he supposed that Chinese in mining produced a fifth of that of white workers, since for the former group 'to work, in the sense of Western miners, is an unheard-of exaction'. Two years later, the Chinese worker had 'no equal' in the world for crude labour, though an accompanying chart counted him only a quarter as productive as the 'American' in such work, for a twelfth of the pay. For miners, the newly calculated ratio was 1:8.<sup>36</sup> When he published *Principles of Mining* in 1909, Hoover produced a chart on South-African mines, amalgamating data on African and Chinese workers there, but also purportedly reflecting data from the Chinese in China. Ratios abounded. He concluded that, in simple tasks like shovelling, 'one white man equals from two to three of the coloured races'. In more highly skilled work, 'the average ratio is... one to seven, or... even eleven'. Hoover's memoirs explained the productivity-differences in racial terms, though all of his writings offer the possibility, common in progressive (and specifically managerial) thought, that enduring cultural habits mattered as much as biology when it comes to racial differences. 'Our inventions and machinery came out of our racial instincts and qualities', he held. 'Our people learn easily how to make them work efficiently'. The Chinese, 'a less mechanical-minded people than the European-descended races... require many times more men to operate our intricate machines'.<sup>37</sup>

Hoover thus sometimes departed substantially from the editorial view of the influential *Engineering and Mining Journal*, which maintained that 'mine operators find it economical to make the best of whatever native labour may be available', training it up to 'American or European' standards, rather than dealing with sickly, entitled, imported white miners. However, he never argued that non-white labour must be barred from unskilled work, only that wages, opportunities, expectations and conditions of competition be adjusted by knowledgeable race-managers with the ability to calculate advantages of racial choices. In South Africa, he closely associated with Honnold, with John Higginson's wonderful account terming the pair 'formidable enemies of South Africa's black and white workers'. Indeed, for all of his doubts as to their efficiency, Hoover played an active role with the Chinese Engineering and

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35. See Hoover 1902, Hoover 1900, and Hoover undated for the defence of Chinese miners.

36. Compare the Hoover 1900 and Hoover 1902 and note the comment appended to the 1902 paper at p. 427.

37. Hoover 1951, pp. 69–71 and Hoover 1909, pp. 161–5.

Mining Company in recruiting over 60,000 indentured Chinese to work South-African mines, after the costs of possible Cypriot, Hungarian and Italian labour-forces had been assayed. At a time when African miners were massively withdrawing their labour from jobs in which wages had decreased and the danger of accidents was rising, and when organised, skilled white miners commanded great social power in the industry, the Chinese seemed to offer great opportunities to play races off against each other. The particular task of sinking ever-deeper mines rested on new technologies for the recovery of less rich ore, but it also hinged on ‘concealing death’, and on hiding, especially, management’s role in producing it. Chinese and African miners were made to perilously drill into hanging walls in insufficiently-supported shafts. They were regularly blamed for the resulting cave-ins.<sup>38</sup>

When employing non-white labour, Hoover also indulged in paternal fantasies of generalised racial uplift. He balanced racial competition with what was called ‘race development’ by the early twentieth century. Such alternating currents of race-management and race-development helped give rise to a thoroughly modern US imperialism. That the flagship journal of modern US empire, *Foreign Affairs*, evolved from the tellingly-titled *Journal of Race Development* suggests that few architects of US empire did their work outside a racial framework. Perhaps the firm that most practised race-management in part via race-development, home and away, was that emblem of US management, the Ford Motor Company. Hoover’s approach was mirrored by that of Ford, whose managers set immigrant ‘races’ against each other even as company-paid social workers could claim to develop ‘the race’ as a whole through education in Americanism and intrusive home visits from company ‘sociologists’.<sup>39</sup> African-American workers at Ford outnumbered those in all other auto-factories combined, yet rather than suggesting a lack of concern with race in its plants, Ford’s hiring of African Americans reveals a sophisticated – if contradictory – approach to management via race; once it, in turn, exported, adapted and trumpeted in theorising management and race in its operations in Brazil and South Africa, for example.<sup>40</sup>

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38. Rickard 1905, p. 388 reprints material from the *Journal*; Higginson 2007, pp. 16 and 12–26. See also Nkosi 1987, p. 76.

39. Wilson 1992, pp. 32–3; Hoover 1951, p. 71; on Ford, see Meyer III 1981, pp. 156–92. See also Esch 2002, pp. 76–9.

40. Blatt 2004, pp. 691–708 and Bender 2006, p. 210. The publication became the *Journal of International Relations* in 1919 and *Foreign Affairs* three years after that. On Ford and Hoover, see Lewis 1987, p. 222.

### **Scientific management, racist science, and the studied unstudiedness of race-management**

The ways in which race-management coexisted with scientific management at home deserve our attention as the clearest examples of how fully compatible with the innovations of industrial capitalism were the atavisms of race. The brutalities of racism seem to intersect only obliquely with the cold science of management that Frederick Winslow Taylor is credited with inventing in the late nineteenth-century US. Yet Commons was able to maintain otherwise, in part because Taylor's ideas existed alongside crude practices of race-management. Indeed, even the famous example that Taylor himself used to educate the public regarding his system's ability to create 'high-priced men' by selecting them studiously and regimenting their motions scientifically suggests an overlap between managerial science and race-management. In the example, even as he insisted that the key to effective management was to remake individuals, Taylor chose 'Schmidt' as the exemplar of a new regimen for labour. In moving an abandoned stock of pig-iron suddenly made valuable by the Spanish-American-Cuban-Philippines War, Taylor urged an almost fourfold increase in productivity and made Schmidt the human face, and pseudonym, for such an advance. The model worker's name was actually the less stereotypically German 'Noll', and the switch reflected a penchant for ethnic typing that elsewhere had Taylor discoursing on the 'Patrick' type for Irish-American workers. In the famous pig-iron example, Taylor adjusted rhetoric and practice with 'racial' attributes in mind. After first experimenting with 'large, powerful Hungarians' to effect the speed-up, Taylor turned to a 'racial' image of doggedness rather than brute force. The name Schmidt, and Taylor's description, emphasised that the workers' agreement to submit to the new system, and his ability to produce, flowed in part from his membership of the German 'race'. Schmidt embodied the strength, persistence, and love of savings thought by Taylor to be peculiarly concentrated in the Pennsylvania Dutch, as Germans in the area were called.<sup>41</sup>

In other ways, too, Taylor engaged race as he revolutionised management. In replying to the socialist-novelist Upton Sinclair's critique of his celebrated 'The Principles of Scientific Management' article in 1911, Taylor cast matters globally in a way that suggested familiarity with Hoover's articles, and ratios, on transnational engineering: 'the one element more than any other which differentiates civilised from uncivilised countries... is that the average man in one is five or six times as productive as [in] the other'. More incredibly still,

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41. Taylor 1967, pp. 41–7; Kanigel 1997, p. 319 on 'Hungarians' and 316–22; Haber 1964, p. 23, n. 12 on 'Patrick'.

Taylor's use of race-management found its way (well, almost) into the classic work of African-American sociology of the early twentieth century, W.E.B. Du Bois *The Philadelphia Negro*. Du Bois mentions Midvale Steel, ground-zero for the development of Taylor's managerial techniques, as one rare Philadelphia industrial workplaces in which African Americans could work in large numbers at the turn of the nineteenth to the twentieth century. Du Bois credited a manager 'whom many dubbed a crank', for the opportunities at Midvale. The sociologist E. Digby Baltzell identified that crank as Taylor decades later. The social historians Walter Licht and Jacqueline Jones later added their own brief accounts, emphasising that Taylor's hatred of ethnic solidarity and of on-the-job drinking at Midvale had led him to introduce African-American workers into gangs across the plant, hoping to undermine unity within work-gangs. Apparently, even as Midvale workers called him a 'nigger driver' for his speeding up of work, Taylor integrated the labour-force significantly. Subsequent managers segregated Midvale, with Black workers remaining but confined to certain departments.<sup>42</sup>

Taylor's racial logic in the Schmidt example, and his use of Black workers at Midvale, did not run through the whole of his writing. It is true that, despite his abolitionist upbringing, he occasionally professed a belief in Black inferiority and that he was capable of glorying that when 'American' labourers moved up to operate machines, 'the dirt handling is done by Italians and Hungarians'.<sup>43</sup> But, more frequently, his desire to uproot the arbitrary power of foremen placed Taylor among those management-experts whose formal system left the least room for day-to-day uses of stormy racial competition to extract production. Like Hoover, he increasingly marketed his management-style as based on scientific expertise in manipulating processes and not racialised bodies.<sup>44</sup> But, more broadly, the race-thinking that informed Taylor's presentation of his new system by introducing listeners and readers to Schmidt did comport somewhat with larger patterns that saw race-management survive, and even expand, in the early years of the era of scientific management. In short, and tellingly, race was much discussed, but seldom systematically investigated, in the higher reaches of management-theory, even as race-management was practised daily by foremen

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42. Du Bois 1967, pp. 129–31 and xxxvii–xxxviii. Taylor 1911; on drinking and ethnicity see Taylor 1914. On Midvale, Du Bois and Taylor, see Jones 1998, pp. 108–9 and Licht 2000, pp. 46–7. On 'nigger driver' see Taylor as extracted in Copley 1969, pp. 1, 163.

43. Haber 1964 p. 23, n. 12 including the quotation. Kanigel 1997, pp. 35–44 treats Taylor's abolitionist upbringing and adult suspicion of antislavery-motives.

44. For a particularly vivid example of Taylor undermining foremen's day-to-day control over individual workers see Taylor 1907, in which he valorises having an individual worker 'taught' by eight different foremen.

with little recourse to theory. As David Montgomery has written of the period in which scientific management flowered, ‘all managers seem[ed] to agree’ with International Harvesters’ H.A. Worman, who held that ‘each race has aptitude for certain kinds of work’; though Montgomery, slyly – and as we shall see, weightily – adds that they could disagree utterly about ‘which race was best for what’. Montgomery further observed that the trend toward personnel-management as a complement to Taylorism specifically ‘extended the purview of scientific management from the factory itself to the surrounding community’, a development that ‘flowed directly from the concern with recruiting from specific ethnic groups’.<sup>45</sup>

Montgomery was right about the ubiquity and durability of race-management and its haphazardness regarding which races performed best in what jobs. Race was said to matter enormously in slotting workers into jobs, but the evidence on this decisive managerial decision was fully off-hand, describing rather than studying practices. In 1915, an iron-industry journal went so far as to challenge the adequacy of the very term ‘common labour’ on the grounds that ‘such labour is racial’. It continued, ‘Immigrants of some races turn chiefly to agriculture, some to the vending of fruit, others to the making of clothing, and others seek the coke works, blast furnaces and steel mills’. At rare times, management-literature specified which races should be slotted into jobs. The psychologist Elliott Frost declared race and nationality to be the centrepieces of personnel management, and added this seat-of-the-pants science:

The Jew, for instance, demands an arrangement in which he can bargain. He is continually thinking of how much he is receiving for his labour... The Italians’ highly emotional nature lends itself readily to directions by the organisers. It is the testimony of the executives that he cannot be trusted without reservations, and that he is apt to be sullen and moody. The German workman is of placid disposition, loves detail, [and] is particularly effective on precision work. The Pole and Croat usually do the dirty work.<sup>46</sup>

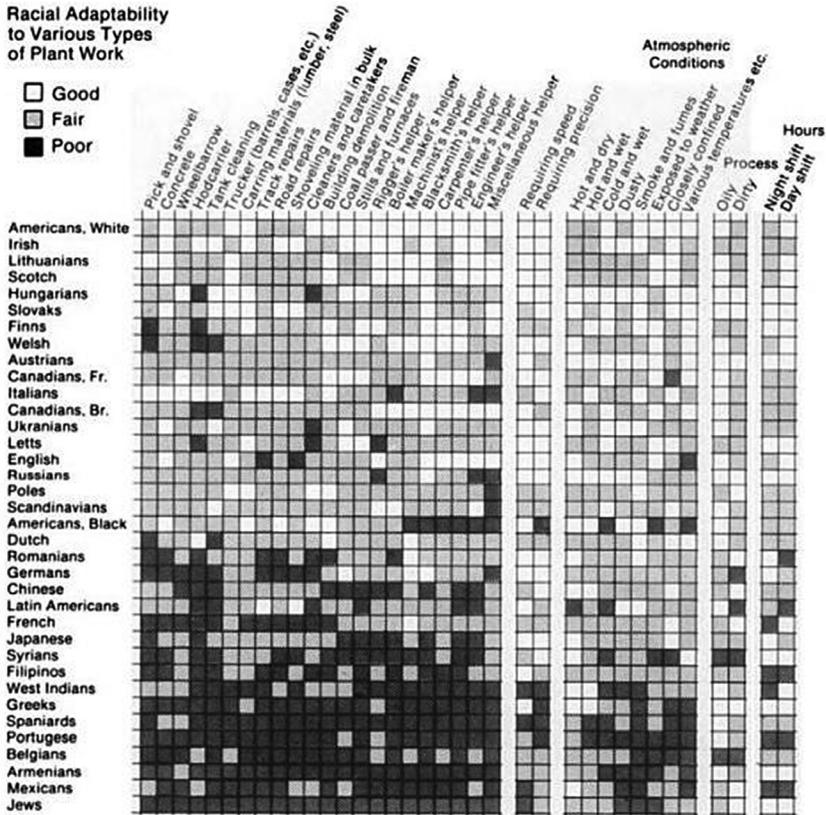
The elaborate chart, ranking three-dozen immigrant ‘races’ according to their fitness for three-dozen job-types and conditions, posted at Pittsburgh Central Tube in 1925, assembled a much more impressive number of opinions, but only opinions, systematising a huge factory and the peoples in it in upwards of a thousand multicoloured squares.

Again, judgements were crude, gathering up managerial prejudices and practices. Italians, according to the Pittsburgh chart, allegedly excelled with pick and shovel but could not handle serving as helpers for engineers.

45. Montgomery 1987, pp. 242–3. See also Jacoby 2003, pp. 148–50.

46. Unsigned 1915, p. 91; Williams 1917, p. 64; Frost 1920, pp. 21–2.

Figure 2



Employment Chart of the Central Tube Company, Pittsburgh, 1925

SOURCE. Adapted from the three-color chart located in the archives of the Pittsburgh branch of The National Urban League (uncatalogued boxes, located in the basement of the office).

Armenians ranked ‘good’ in none of the 22 job categories listed and rose to ‘fair’ only once: wheelbarrow. ‘Americans, White’ could do any job fairly well and excelled in most. Jews supposedly did not fit well into any industrial jobs. Portuguese workers were rated as ‘poor’ in seven of eight ‘atmospheric conditions’ and joined Mexicans in lacking the capacity to work on the night-shift, or the day one. Greeks and West Indians rose beyond ‘fair’ only in surviving heat and humidity, according to the Pittsburgh chart.<sup>47</sup>

The contradictory conclusions of managers regarding race also underline Montgomery’s point in that constant and even passionate (if glancing) attention to race in the management-literature did not require close *empirical* investigation of race and productivity. The Immigration Commission report of 1911 posited virtual unanimity among employers on the judgement that Southern Italians were ‘the most inefficient of races’. Nonetheless, Pittsburgh Steel management placed Italians in the most efficient third, above Canadians, of all ‘racial’ groups shortly thereafter. Nor did the fact that one steel-manager might prefer ‘two Negroes’ to ‘three Macedonians’, while most ranked the ‘alien white races’ above African-Americans in making ratios of productivity, provoke any urgent desire to systematically settle the issue. Not only the basic question of who was white, but even that of who was black, remained unanswered by managers otherwise fixated on race. ‘The black races cannot do the work in three days that a white man can do in one’, an Iron Range mine-superintendent told a government-investigator, using the former term to connote Montenegrins, Serbs, South Italians, Greeks and Croats. When rankings were hazarded, they reflected collections of existing prejudices of managers, not investigation of production. Thus, a 1911 article placed the ‘races’ in ‘about the following order: Slovaks, Poles, Magyars, Croatians, Italians’, ranked according to ‘preferences of the employers’.<sup>48</sup>

Even the most noteworthy efforts to provide social-science and economic justifications for employing more African-American workers in industry showed how the anecdotal stood in for data and how post-hoc reasoning combined with wishful thinking in writings on race directed to managers. The best compilation of pro-Black-worker managerial opinion, a 1927 article by the eminent African-American sociologist Charles Johnson, remained sufficiently wedded to gathering managerial opinions that Johnson ultimately acknowledged the limits set on his work as an instrument of reform. The litany of favourable opinions Johnson found among at least some managers

47. Bodnar, Simon and Weber 1983, p. 240 reprints the chart.

48. Roediger 2005, pp. 75–7; for the Iron Range, United States Industrial Commission 1911, pp. 339–41, with thanks to Thomas Mackaman; Lauck 1911, p. 899; For Commons’s blithe ranking of European immigrants see Commons 1905, pp. 332–3.

of Blacks was useful: ‘loyalty’, ‘they follow instructions’, ‘can stand heat’, ‘can do hard work’, ‘possess physical strength’ and ‘are trustworthy’. But the litany carried its own limits. Black workers were, Johnson wrote,

wanted for rough work because they are husky and cheerful, and fitting satisfactorily into this, it follows in reasoning that in the division of work they are best fitted for rough work, and frequently are held to it by a carefully reasoned process. Their success in one field thus limits prospects for advancement into others.<sup>49</sup>

Dwight Thompson Farnam’s long, hands-on 1918 *Industrial Management* article, ‘Negroes as a Source of Industrial Labor’, saw a leading supervising engineer develop some new evidence beyond managerial common sense, but he was as trapped as Johnson by his assumptions. While Johnson entered the terrain of managerial opinion to push for racial justice, Farnam stressed profit. He made the case that the supply of Black labour doubled that of immigrant-labour and urged that it be ‘properly allocated’. The context of wartime labour-shortages and the stirrings of immigrant labour-rebellions made Farnam’s article well-timed. Farnam moved, perhaps more than any other expert, towards an empirical framework to investigate race and labour. He generated a plethora of graphs, and avoided naked white supremacy by describing the ‘inherited’ differences of African Americans as based on climate in Africa and thus subject to gradual amelioration given proper white managerial leadership. Still, the article compiled rather than investigated managerial white-lore regarding race on the job and echoed racist assumptions. Describing the Great Migration to the North for war-work as ‘trainloads of negro mummies, pickaninnies [with their]... pathetic paraphernalia of mysterious bundles and protesting household pets’, Farnam compared Black and immigrant-workers at every turn – their relative progress toward literacy, their rates of incarceration and their reputations among foremen.

Farnam also developed a fanciful history and natural history of Africa as one ‘country’, without ‘letters, art or science’, with venomous snakes and diseases preventing herding everywhere, and above all with ‘luxuriant’ food there for the picking. Such misinformation became an explanation for the absence of any ‘feverish desire to work’ among those more than a century removed from Africa. What plenty could not establish in blunting a work-ethic was accounted for by the ‘humid heat [that is] depressing and exhausting’, with Farnam believing that all of West Africa somehow lay below the equator.<sup>50</sup>

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49. Johnson 1926, p. 408. Thanks to Zach Sell for directing us to Johnson’s article.

50. Farnam 1918, pp. 123–9.

Thus, as a sub-heading from Farnam put it, ‘THE NEGRO IS DIFFERENT’ as a subject of management – childlike and needing a boss to ‘think for’ him or her. The article reprised literature on slave-management, pronouncing on the whole ‘negro race’ and urging the individual selection of loyal and exemplary Black workers. The foreman was described much as an overseer, needing a combination of ‘absolute firmness’ and an ability to see the African American workers ‘antics at first with assumed toleration’. Such talents were themselves racialised. The Irish, with their ‘cheeriness coupled with an occasional terrifying outburst of authority . . . ma[d]e good negro bosses’. One anecdote suggested that an Irish foreman could extract as much production from ‘an engine room full of negroes’ as from one ‘full of German square-heads’. The ‘New Englander who has no patience with any except those thrifty souls who work unwatched from a strong sense of duty, has no business trying to handle [N]egroes’.<sup>51</sup> Farnam wisely kept his articles’ ill-described charts at some distance from his textual explanations of their contents. Four of the nine charts purport to quantify ‘[N]egro’ productivity under various types of foremen. Charts had a sample size of one; thus one foreman studied was Irish, lending the most slender support to Farnam’s thesis on nationality and foremanship.<sup>52</sup>

Thus, purportedly scientific connections of race and productivity remained very crude. This crudeness turns out to be vital for understanding how race-management worked. Solid studies of immigrant-workers surveyed their conditions off the job: readers in 1921 learned, for example, that only one Greek male immigrant in five and one Spanish immigrant in seven brought family members to the US; the study also tabulated their naturalisation-rates. The weightiest research on productivity and race tended to be assembled by investigators writing in the government journal *Monthly Labor Review*, and often focused on demonstrating the falsity of negative stereotypes regarding Black workers. This data seems to have made scant impact against such stereotypes, while the repetition of anti-Black and xenophobic folklore took scholars to great academic heights. When the towering figure in American sociology, E.A. Ross, urged slotting the Slavic ‘race’ into filthy jobs because they were ‘immune’ to dirt, he offered a stereotype, not a study. Likewise with Commons’s assessment that ‘The Negro . . . works three days and loaf[s] three [while the] Chinaman, Italian, or Jewish immigrant works six days and saves the wages of three’. Such chatter left on-the-ground race-management, mostly carried out by foremen, free to proceed unchecked. When the sociologist

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51. Ibid. See also Taylor 1922, pp. 375–402; Garth 1920, pp. 235–44 and Garth 1921, pp. 14; 23–5.

52. Ibid. See also Jones 2005.

Jerome Davis researched his extraordinary 1922 study *The Russian Immigrant*, he had to drop plans for a questionnaire regarding Russian immigrant-workers as one personnel-department after another reported utter lack of basic statistical information on how many Russian immigrants they employed and an inability to distinguish them from Jews, Poles, Finns, and others often listed as ‘Russian’. This lack of data coexisted with both a high tide in pronouncing racial judgements on workers and a professed desire to limit the hiring of Russians as potential Bolsheviks.<sup>53</sup>

Some experts criticised this pattern. As early as 1913, Hugo Münsterberg’s classic *Psychology and Industrial Efficiency* identified the discontinuity between precise studies of workers’ motions and seat-of-the-pants assumptions on ‘race’ and productivity. Münsterberg set out to assess how far scientific management had gone, and could go, and staked out a place for ‘scientific psychology’ as congruent with the ‘revolutionary’, but incomplete, innovations of Taylor. Race initially seemed to Münsterberg to present little difficulty in achieving such a synthesis. ‘If a man applies for a position’, he wrote, ‘he is considered [for] the totality of his qualities, and at first nobody cares whether the particular feature is inherited or acquired, whether it is an individual chance variation or... common... to all members of a certain nationality or race’. Crude reliance on ‘race’ in the search for the ‘best possible man’ for the job would be checked because, even when the ‘combination of mental traits’ required occurred in specific races, ‘psychical qualities may vary strongly in the midst of the group’.<sup>54</sup> But, later, Münsterberg acknowledged that the search for the best man for the job did indeed often devolve into unexamined racial assumptions. That management at the plant-level cared about race was not necessarily bad, in his view; that they cared so *unscientifically* was what was troubling. At one factory with ‘twenty different nationalities’, the employment-office might declare the Italians best for one job, the Irish for another and the Hungarians for a third. At the next factory, he added, completely different conclusions would be reached. In one workplace, managerial race-lore had the ‘hasty and careless’ Italians and Greeks as undesirable in risky jobs, which went to the Irish. In the next, it was the Irish who allegedly courted danger. Münsterberg himself was no critic of race-thinking – he tended to credit the stereotype of carelessness as applying to Italians, Greeks and Irishmen. But he abhorred the

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53. Reid 1921, p. 31; Burlingame 1917, pp. 385–92; Unsigned 1924, pp. 41–4; Unsigned 1921, pp. 853–8; Unsigned 1925, pp. 10–13 and Unsigned 1926, pp. 48–51; Ross as quoted in Lieberson 1980, p. 25; Roediger 2005, p. 54. Commons 1904b, pp. 18 and 13–22; Ramstad and Starkey, 1995 pp. 16–17 and 63–4.; on Russians, see Davis 1922, pp. 23–5.

54. Münsterberg 1913, pp. 50, 27–8 and 69. On the origins of industrial psychology, see Baritz 1965, pp. 21–41.

lack of *system* in studying race and management. ‘American industrial centers’, he argued, offered ‘extremely favorable conditions for the comparative study of nationality’, but the opportunity was not being seized. ‘Much more thorough statistical inquiries’ were needed to ground ‘race psychological statements’.<sup>55</sup> Münsterberg was joined in this lament by practically all of the small number of writers attempting to study race, management, and labour. Farnam noted in 1918 that ‘[t]he racial tendencies of different classes of labour have so far been insufficiently studied in America’. A year later, the industrial psychologist Elliott Frost likewise thought that he was starting anew in developing an ‘analysis of racial psychology’ for industrial education and management. As one early 1920s management-handbook phrased Montgomery’s point on race and personnel-management, the task of employment-managers was to ‘follow internal migrations of different races and nationalities . . . movements of [N]egroes and Spanish-Americans’, and to hire the ‘type of worker most desirable for [the] task: American or foreign, white or black’. Management-literature remained close-mouthed on how to do so.<sup>56</sup>

The fit among the immigrants’ attributes, their potential for race-development, and the needs of industry, was at other junctures more rapturously described, in often fanciful ways that hard data comparing immigrant ‘races’ would have almost certainly undermined. The management- and industry-journal *Iron Age* linked immigrants from eastern and southern Europe not only to the ability to withstand heat, but to an ‘attraction’ to ‘hot and heavy work’ – in contrast to the Northern-European ‘aversion’ to such conditions. Mexicans, according to a 1930 account in *Nation’s Business*, ‘are fond of outdoor life [and] easily enter a nomadic mode of living’, making them ‘natural’ farm-workers. Other serendipities that management-publications posited included Slavs having a ‘temperamental tendency toward being easily managed’, toward being anti-union, and toward preferring ‘the lowest wage scale’ to any extra effort. At least that was the story until Slavic-American militancy in the post-World War One strikes strained such assumptions.<sup>57</sup> Ford English School’s graduation-ceremony paraded evidence of the easy path to race-development imagined, alongside nativist fears, in the hopeful moments before World War One and the strike-wave that followed changed matters. The ceremony saw immigrant-workers in ‘shabby rags’ walk down a gangplank

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55. Münsterberg, 1913, pp. 129–31.

56. Farnam 1918, p. 128; Frost 1920; Alford 1924, pp. 1462–3, first familiar to us through, Sell 2009.

57. Unsigned 1923, p. 163; Minich 1913, p. 6. See also Bridge 1903, p. 81; De Laittre 1930, p. 44ff.; compare Unsigned 1930, pp. 73–4; Colcord 1930, pp. 32–4 and 170–1.

connected to the image of an ocean-liner and into a huge cauldron. The script labelled them with the racial slur ‘hunkie’ as they entered the cauldron to ‘see what the melting pot will do for them’. After teachers from the school ladled, graduates emerged, in ‘neat suits’, as Americans.<sup>58</sup>

At its almost providential extremes, even after the race-based immigration-restrictions of 1924, faith in immigrant race-development by American workplaces was one factor obviating any need for close investigation of immigrants in production. Thus, in a 1930 article, the steel-industry became ‘The Beast That Nurtures Children’. The ‘fabrication of metal’, it argued, pushed up successive waves of Irishmen, ‘dark Sicilians’, and Slavic ‘hunkies’, both ‘spiritually’ and ‘materially’, quickly freeing them from hard mill-work, so that even Slavs were supposedly gone from the plants by the time the article was written, all of them ‘foremen or assistant superintendents’, or self-employed. On this fanciful view, which reminds us how thoroughly race-development coexisted with ‘playing one race against the other’, it was time for the ‘uplifting forces of steel’ to work its magic upon ‘the last of the steel immigrants – southern [N]egroes and Mexicans’. In steel, management’s institution of what Katherine Stone calls ‘minutely graded job ladders’, enabled experts to point to acquisition of skills – albeit skills easily learned in a few weeks – to make a case for the racial development of new white immigrants. One industry-leader connected the rise of the semi-skilled machine-tender to the development of white-independence, using the language of an older labour-system. Writing in *Iron Age*, the rubber-manufacturing executive Charles R. Flint held that ‘[t]he American wage earner is raised to the dignity of an overseer, not over degraded humanity, but over a more reliable and effective slave – machinery’. Since African Americans, immigrants of colour and Jews were often excluded from working with machines, their slavishness was reiterated.<sup>59</sup>

Race mattered, but largely unreflectively, in postwar management-theory. Ordway Tead, the coauthor in 1920 of the first textbook in the new field of personnel-management, introduced his *Instincts in Industry* with the remark that ‘differences in race, climate and civilization... may so modify human organisms as to cause radical differences in what is the substance of our... human nature’. Tead wrote of ‘employers who have a definite policy of hiring several different nationalities in one department of a factory in order

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58. On Ford English School, see Graff 1991, p. 98 and (for the quote) 99. For ‘hunkie’ (or ‘hunky’), see Roediger 2005, pp. 37–45. On the melting-pot and Ford see Esch 2004.

59. Warne and Commons 1905, p. 346. Compare Pittenger 2003, p. 153. On steel, see Stone 1975, p. 49. Flint is quoted in Rosenow 2008, p. 26; on occupational colour-bars and machinery see 1994, pp. 154 and 162–3.

that workers may be less able to communicate effectively and therefore less able to cause trouble'. For Tead, that deliberate divisiveness focused, as in the Mr Block cartoon, on keeping out unions. But he offered neither an investigation of how or whether such a strategy worked, nor of his contention that the Southern- and Eastern-European immigrants commonly exhibited an 'instinct' to be submissive. In 1920, when the Social Science Research Council (SSRC) 'mapped the field of industrial relations', enumerating well over a hundred disciplines poised to contribute to the new field, it set for anthropologists the task of investigating 'inherited racial characteristics' capable of 'effecting work', offering the 'alleged laziness of the negro' as an example. But the SSRC avoided the problem of – to use Montgomery's phrasing – 'which race was best for what'.<sup>60</sup>

Thus, even as much as we describe the outlines of a literature on race- and industrial management, we are still left with the need to describe – and ultimately to explain – the empirical gaps in such a literature. After the start of immigration-restriction, more social scientists joined Münsterberg in ridiculing the lack of system regarding the productivity of various 'races'. They saw such imprecision as the irrational underside of an avowedly rational-industrial society. As the old opportunities to manage by race and nationality gave way in the face of the World War and the immigration-restriction legislation of 1921 and 1924, retaining immigrant-workers came to be seen as more critical than dividing them. Commons's remark that 'when immigration suddenly stops we see a human being in those who are here and begin to ask them what they want' overstated the change grossly. Even so, the postwar race-riots in industrial districts reminded industry that managing racial competition could be a tricky business. The competition depicted in the final panel of the Mr. Block cartoon that began this paper has to stop short of destructive conflict. What Chad Pearson has written of as the open-shop Worcester, Massachusetts model gained sway. There, and well beyond, engineers, open-shoppers, and Americanisers were chiefly interested in reducing workplace-discord and overseeing 'friendly, spirited workplaces'.<sup>61</sup> But discord was far from simply abjured. To the extent that the unevenly-developing trend toward personnel-management identified the problem of labour-turnover with what Sanford Jacoby calls 'the foremen's hire and fire approach', it did undermine the most potent, material way in which the races were set against each other in daily managerial practice. However, since Jacoby adds that 'the

60. Tead 1918 ('differences'), pp. 13, 89–90 ('definite policy') and 143; the 'map' is reproduced in Kaufman 1993, pp. 14–17 (all other quoted passages).

61. Baritz 1965, p. 13; Jacoby 2003, pp. 149, 154 and 148–55; Roediger 2005, pp. 76 and 216–20; Commons 1920, p. xix.

vast majority' of workplaces retained the 'foremen's drive system' throughout the 1920s, and since the 'tight labor markets' lasted only five years after 1924, the extent and pace of change prior to the coming of industrial unionism should not be exaggerated.<sup>62</sup>

The decline of immigration certainly did open further space for questioning race-management's basis in science and considering its contours and staying-power in a post-1924 labour-market. By 1926, questions of race and management were already being cast by the pioneering personnel-management textbook as likely to devolve in future into a focus on African-American and Mexican workers. Commenting on the 1920s and 30s, the management-experts Herman Feldman and T.J. Woofter rued the fact that manufacturers, so scrupulously careful in choosing raw materials, 'rely on hearsay and rumor as to the grades of labor hired'. Everett C. Hughes and Helen M. Hughes observed that off-the-cuff opinions on racial difference so pervaded managerial choices and language, while hard data comparing racial performance remained so rare, that it was worth questioning whether 'modern society is really guided by the impersonal concepts... of efficiency in choosing... its labor force'. Taylor had written: 'Under scientific management arbitrary power... ceases; and every single subject... becomes the question for scientific investigation'. Where race was concerned, post-1924 experts rightly observed, such a shift did not happen.<sup>63</sup>

The Schmidt and Hoover examples, with Montgomery's commentary and the broader evidence before us, show that scientific management and race-management coexisted because they were not so utterly different after all. Scientific management, like Hoover's race-management in the mines, was, as Bernard Doray wrote, a 'science' that could not escape 'bear[ing] the scars of the social violence that characterised the society that gave birth to it'. Replete with pro-management assumptions, it selectively drew on folk-knowledge and crude observations of existing work-patterns in ways mercilessly unearthed in Harry Braverman's dissection of Taylor's methods. Scientific management was broadly compatible with that other great scar-bearing, scar-causing science of the early twentieth century – the elaboration of racial hierarchies.<sup>64</sup> Even attempts like those of Woofter and Feldman to cast race-management as the exception to the general rationality of industry underlined the staying-power of supposedly unscientific systems. Critics vacillated between ridiculing

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62. Jacoby 2003, pp. 154 and 148–55; Pearson 2004, pp. 26 and 9–36.

63. For the textbook, see Tead and Metcalf 1926, p. 48; Hughes and Hughes 1952, p. 67; Woofter Jr. 1933, p. 144; Bendix 2001, pp. 273, 278; Nyland 1996, p. 986; Nelson 1996, pp. 80–3.

64. Doray 1988, pp. 83–4 ('scars') and Braverman 1975, pp. 104–23.

race-management and calling for making its race-based distinctions more systematic. The roots of race-management, as detailed above, go some distance toward explaining its impressive durability. But to emphasise only such history leaves us in danger of seeing management by race as residual, even pre-modern, and therefore at odds with the rational logic of capitalism. Rather, it remained central to such logic.

The staying-power of what has been called the ‘foreman’s’ empire’ in the face of scientific management might be considered as a triumph of one form of capitalist rationality intimately linked to deploying the irrationalities of race in order to manage labour. It is in this specific realm that Commons’s remarks again become critical. As early as 1904, Commons heard from an employment-agent at Swift and Company that the ‘playing’ of races against each other had been ‘systematised’ in his factory, which rotated favoured ‘racial’ groups week-by-week. Commons worried that such ‘competition of races’, especially when it included workers from the ‘non-industrial’ Negro race and too many immigrants from the ‘backwards, shiftless and unintelligent races’ of Southern and Eastern Europe, would cause catastrophe. But he recognised that competition extracted productivity and exerted a downward pressure on wages. Commons regarded these same packinghouses as also among the most efficient workplaces where labour-processes were concerned. Even ‘the animal was laid off and surveyed like a map’, he wrote. Systems of modern management and race-management coexisted cheek by jowl in the most advanced factories.<sup>65</sup>

Such a system of racial competition rested not on the fixing of a scientific chart of hierarchy, but on the production of a series of contradictory, volatile, hierarchical managerial opinions. The sociologist Niles Carpenter found immigrant-workers thinking that lower management’s racial prejudices and slights often weighed heaviest on them, and Feldman’s research suggested that they were exactly right. Farnam likewise identified the foreman as the key figure on whose personality, racial knowledge, prejudices, style and nationality all attempts to thus open the workplace turned. In his credentials at the outset of the article, Farnam’s early experience as a foreman is duly noted. Since foremen tended to retain the ability to hire and fire in the 1920s, in the face of challenges from personnel managers, great weight lay behind their prejudices, which could keep racialised workers productively on edge. Indeed,

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65. Nelson 1996, p. 35 (‘foremen’s empire’); Commons and Others 1918–35, Volume 3: xxv and 322–33, 328; Ramstad and Starkey 1995, pp. 16–18, quote Commons on the ‘competition of races’ and possible ‘catastrophe’. See also Commons 1904b, pp. 533–43 and Commons, 1904a (‘physical exertion’), pp. 19 and 17–22; Baron 1971. For the last Commons-quote, and on the labour-process in packing, see Barrett 1983, pp. 106 and 105–9; see also Halpern 1997, pp. 23–4.

on the rare occasions when the racial knowledge possessed by foremen was directly questioned by management-experts, the framing of the issue was around the fear that the races were being too much pitted against each other, with the fear, especially after the wave of racial terror during and after World War One, that lower management would appear ‘unsympathetic’ and foster racial hatreds and riots.<sup>66</sup> Management long deployed the irrationalities of race in a calculating manner. Sometimes it did so by fixing categories and hierarchies, but, more often, by leaving races not fixed in set and studied rankings and thus permanently in competition and flux, at lower management’s whim. A brutally logical system kept immigrants’ positions in play, and in the case of African Americans often kept them out of jobs via colour-bars and judging their fitness as a reserve-army of labour. Historians have long known that Taylorism and other revolutionary changes in management-theory often supplemented, rather than supplanted, the ‘drive system’ tactics in which lower management bullied and threatened workers.<sup>67</sup> But we have too often forgotten Commons’s suggestion that the hurrying and pushing could be chronically inflected by playing races off against each other.

The great revolutionary optimism that Riebe exhibited in the ‘Mr Block’ cartoon beginning this essay hinged on trusting that effective organisation could overcome management’s divisive racial games. But his comic-strip also showed the formidable extent to which race-thinking powerfully contributed to management, both by creating competition for jobs and thereby lowering wages, and also by setting workers against each other every hour they were on the job. When the Irish worker responded to the boss by affirming, ‘I can lick the whole bunch and I can make them work too’, he showed at once the ways in which race-management encouraged labourers to bring their cultural differences and stereotypes to work; the extent to which employers’ appeals to race often overlapped with appeals to masculinity; and the desire of some immigrant-workers to ascend into the lower ranks of race-management. Race-management’s powerful appeals dragged workers towards narrow ‘caste and craft unionism’, which united union-members as whites and as ‘citizens’, but less frequently challenged race-thinking. Far from reducing labour to abstract and raceless inputs into the labour-process, capital and management helped to reproduce racial differences over long stretches of US history, and to divide workers in ways that compromised labour’s efforts to address race- or class-inequalities. Finally, when so much of US production is again – in some

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66. Feldman 1931, p. 147; Carpenter 1970, pp. 118–30; Farnam 1918, pp. 123, 125, and 127–8; Rindge, Jr. 1917, pp. 511–12; Kaufman 1993, p. 15, 17 and Tead and Metcalf 1926 p. 48.

67. See Horowitz 1997, pp. 24–5, 66 and Halpern 1997, pp. 41–2 and 88–90.

ways still – predicated on ‘playing one race against the other’ in order to extract production in degrading and dangerous jobs, ranging from meatpacking to hotel- and restaurant-labour, from sex-work to picking fruits and vegetables, and from sweatshops to supplying the US army, this is a past very much with us.

## References

- Adams, Jr., Graham 1966, *Age of Industrial Violence, 1910–1915: The Activities and Findings of the US Commission on Industrial Relations*, New York: Columbia University Press.
- Agricola 1855, ‘Management of Slaves’, *Southern Cultivator*, 13, 6: 171–4.
- Alford, Leon Pratt 1924, *Management’s Handbook By a Staff of Specialists*, New York: The Ronald Press.
- Allen, Theodore 1994, *The Invention of the White Race: Racial Oppression and Social Control*, London: Verso.
- Ambrose, Stephen 2000, *Nothing Like It in the World: The Men Who Built the Transcontinental Railroad*, New York: Simon and Schuster.
- Arkansas River 1860, ‘Dickson’s Planting – Overseers – Negroes Etc.’, *Southern Cultivator*, 18, 10: 304–5.
- Arnesen, Eric 2002, *Black Railroad Workers and the Struggle for Equality*, Cambridge, MA.: Harvard University Press.
- Ashdown, Paul and Edward Gaudill 2006, *The Myth of Nathan Bedford Forrest*, Lanham: Rowman & Littlefield.
- A Tennessean 1853, ‘Management of Negroes – Bathing Feet’, *Southern Cultivator*, 11, 10: 302.
- Aufhauser, Keith R. 1973, ‘Slavery and Scientific Management’, *Journal of Economic History*, 33, 4: 811–24.
- Baritz, Loren 1965, *The Servants of Power: A History of the Use of Social Science in American Industry*, New York: John Wiley & Sons.
- Baron, Harold M. 1971, *The Demand for Black Labor: Historical Notes on the Political Economy of Racism*, Somerville: New England Free Press.
- Barrett, James 1983, ‘Immigrant Workers in Early Mass Production Industry: Work Rationalization and Job Control Conflicts in Chicago’s Packinghouses, 1900–1904’, in *German Workers in Industrial Chicago*, edited by Hartmut Keil and John Jentz, DeKalb: Northern Illinois University Press.
- Bender, Thomas 2006, *A Nation among Nations: America’s Place in World History*, New York: Hill and Wang.
- Bendix, Reinhard 2001 [1974], *Work and Authority in Industry: Ideologies of Management in the Course of Industrialization*, Edison: Transaction Publishers.
- Berlin, Ira 2004, *Generations of Captivity: A History of African-American Slaves*, Cambridge, MA.: Belknap Press.
- Bezis-Selfa, John 1999, ‘A Tale of Two Ironworks: Slavery, Free Labor, Work, and Resistance in the Early Republic’, *William and Mary Quarterly*, III, 56, 4: 677–700.
- Blackburn, Robin 1998, *The Making of New World Slavery: From the Baroque to the Modern 1492–1800*, London: Verso Books.
- Blackmon, Douglas A. 2008, *Slavery by Another Name: The Re-Enslavement of Black People in America from the Civil War to World War II*, New York: Doubleday.
- Blatt, Jessica 2004, ‘“To Bring out the Best That Is in Their Blood”: Race, Reform, Civilization, and the *Journal of Race Development*’, *Ethnic and Racial Studies*, 27, 5: 691–709.

- Bodnar, John, Roger Simon, and Michael Weber 1983, *Lives of Their Own: Blacks, Italians, and Poles in Pittsburgh, 1900–1960*, Urbana: University of Illinois Press.
- Braverman, Harry 1975, *Labor and Monopoly Capital: The Degradation of Work in the 20th Century*, New York: Monthly Review Press.
- Breeden, James O. (ed.) 1980, *Advice among Masters: The Ideal in Slave Management in the Old South*, Westport: Greenwood.
- Bridge, James Howard 1903, *The Inside History of the Carnegie Steel Company: A Romance of the Millions*, New York: Aldine.
- Brittain, James and Robert McMath, Jr. 1997, 'Engineers and the New South Creed: The Formation and Early Development of Georgia Tech', *Technology and Culture*, 18, 2: 175–201.
- Brodin, Karen 2000, 'Global Capitalism: What's Race Got to Do with It?', *American Ethnologist*, 27, 2: 237–56.
- Burlingame, Luther D. 1917, 'Americanizing a Thousand Men', *Industrial Management*, 53, 3: 385–92.
- Cain, Mary 2007, 'Race, Republicanism and Domestic Service in the Antebellum US', *Left History*, 12, 2: 64–83.
- Calhoun, John A. 1855, 'Management of Slaves', *De Bow's Review*, 18, 6: 713–19.
- Calvert, Monte A. 1967, *The Mechanical Engineer in America, 1830–1910: Professional Cultures in Conflict*, Baltimore: John Hopkins University Press.
- Carlisle, Henry 1959, 'Arizona Characters and the Ajo Mine' with Ira Joralemon interview, included in the Mining Engineer Project, Volume One, Part One, in the Columbia University Oral History Project, Butler Library, Columbia University.
- Carnegie, Andrew 1896, 'The Venezuelan Question', *North American Review*, 162, 471: 133–44.
- Carpenter, Niles 1970 [1927], *Nationality, Color, and Economic Opportunity in the City of Buffalo*, Westport: Negro Universities Press.
- Cartwright, Samuel 1851a, 'How to Save the Republic, and the Position of the South in the Union', *De Bow's Southern and Western Review*, 11, 2: 184–97.
- 1851b, 'The Diseases of Negroes – Pulmonary Congestions, Pneumonia, &c.', *De Bow's Southern and Western Review*, 11, 2: 209–13.
- 1851c, 'Diseases and Peculiarities of the Negro Race', *De Bow's Southern and Western Review*, 11, 3: 331–6.
- 1858, 'Dr. Cartwright on the Caucasians and the Africans', *De Bow's Review and Industrial Resources, Statistics, etc., Devoted to Commerce*, 25, 1: 45–56.
- 1860, 'Unity of the Human Race Disproved by the Hebrew Bible', *De Bow's Review*, 29, 2: 129–36.
- 1861, 'Negro Freedom an Impossibility under Nature's Laws', *DeBow's Review*, 30, 5: 648–59.
- Undated, 'Ethnology of the Negro or Prognathous Race: A Lecture Given November 30, 1857, Before the New Orleans Academy of Science', Samuel A Cartwright and Family Papers, Printed Pamphlets, Special Collections, Louisiana State University Library.
- Cohen, Lucy M. 1984, *The Chinese in the Post-Civil War South*, Baton Rouge: Louisiana State University Press.
- Cohen, Michael 2007, "'Cartooning Capitalism': Radical Cartooning and the Making of American Popular Radicalism in the Early Twentieth Century', *International Review of Social History*, 52, S15: 35–58.
- Colcord, David 1930, 'A Beast That Nurtures Children', *Nation's Business*, 18, 12: 32–6.
- Collins, Robert 1854a, 'Essay on the Management of Slaves', *Southern Cultivator*, 12, 7: 205–6.
- 1854b, 'Essay on the Management of Slaves', *De Bow's Review*, 17, 4.
- 1862, 'Essay on the Management of Slaves', *De Bow's Review*, 32, 1/2: 154–7.
- Commons, John R. 1904a, 'Industry', *The Chautauquan*, 38, 6: 533–43.

- 1904b, 'Social and Industrial Problems', *The Chautauquan*, 39, 1: 13–22.
- 1905, 'The Sweating System in the Clothing Trade', in *Trade Unionism and Labor Problems*, edited by John R. Commons, Boston: Ginn and Company.
- 1907, *Races and Immigrants in America*, New York: Macmillan Co.
- 1920, 'Introduction to the Edition of 1920', in *Races and Immigrants in America*, New York: Macmillan.
- Commons, John R. and Others 1918–35, *History of the Labor Movement in the United States*, (4 volumes), New York: Macmillan.
- Cooke, Bill 2003, 'The Denial of Slavery in Management Studies', *Journal of Management Studies*, 40, 8: 1895–918.
- Copley, Frank Barkley 1969 [1923], *Frederick W. Taylor: Father of Scientific Management*, (2 volumes), New York: Augustus Kelley.
- Cronon, William 1983, *Changes in the Land: Indians, Colonists, and the Ecology of New England*, New York: Hill and Wang.
- Davis, Jerome 1922, *The Russian Immigrant*, New York: Macmillan.
- De Laittre, Karl 1930, 'The Mexican Laborer and You', *Nation's Business*, 18, 12: 44–8.
- Dew, Charles 1994, *Bond of Iron: Master and Slave at Buffalo Forge*, New York: Norton.
- Doray, Bernard 1988, *From Taylorism to Fordism: A Rational Madness*, London: Free Association Books.
- Du Bois, W.E.B. 1967 [1899], *The Philadelphia Negro: A Social Study*, edited by E. Digby Baltzell, New York: Schocken Books.
- 1988 [1935], *Black Reconstruction in America, 1860–1880*, New York: Free Press.
- Dublin, Thomas 1981, *Women at Work: The Transformation of Work and Community in Lowell, Massachusetts, 1826–1869*, New York: Columbia University Press.
- Esch, Elizabeth 2002, 'Shades of Tarzan! Ford on the Amazon', *Cabinet: A Quarterly Journal of Art and Culture*, 7, Summer: 76–9.
- 2004, 'Fordtown: Managing Race and Nation in the American Empire, 1925–1945', unpublished Ph.D. dissertation, New York University.
- Esch, Elizabeth and David R. Roediger 2006, 'Nonracialism through Race (and Class)', *New Socialist* (Canada), 56, April–June: 6–10.
- Feldman, Herman 1931, *Racial Factors in American Industry*, New York: Harper and Brothers.
- Farnam, Dwight Thompson 1918, 'Negroes as a Source of Industrial Labor', *Industrial Management*, 56, 2: 123–29.
- Fogel, Robert and Stanley Engerman 1989 [1974], *Time on the Cross: The Economics of American Slavery*, New York: Norton.
- Fredrickson, George 1987, *The Black Image in the White Mind*, Middletown: Wesleyan University Press.
- Frost, Elliott 1920, 'What Industry Does and Does Not Want From the Psychologist', *Journal of Applied Psychology*, 4, 1: 18–24.
- Garth, Thomas R. 1920, 'Racial Differences in Mental Fatigue', *Journal of Applied Psychology*, 4, 2: 235–44.
- 1921, 'White, Indian and Negro Work Curves', *Journal of Applied Psychology*, 5, 1: 14–25.
- Genovese, Eugene D. 1974, *Roll, Jordan, Roll: The World the Slaves Made*, New York: Pantheon.
- Goodloe, A.T. 1860a, 'Management of Negroes', *Southern Cultivator*, 18, 4: 130–1.
- 1860b, 'Management of the Negro – Again', *Southern Cultivator*, 18, 8: 239–40.
- 1860c, 'Management of Negroes – Caution!', *Southern Cultivator*, 18, 10: 305.
- Graff, Daniel M.G. 1991, 'Ford Welfare Capitalism in Its Economic Context', in *Masters to Managers: Historical and Comparative Perspectives on American Employers*, edited by Sanford G. Jacoby, New York: Columbia University Press.

- Gramsci, Antonio 1971, 'Americanism and Fordism', in *Selections from the Prison Notebooks*, edited by Quintin Hoare and Geoffrey Nowell Smith, New York: International Publishers.
- Greene, Julie 2009, *The Canal Builders: Making America's Empire in the Panama Canal*, New York: The Penguin Press.
- Guerry, N.D. 1860, 'Management of Negroes – Duties of Masters', *Southern Cultivator*, 28, 6: 176–7.
- Haber, Samuel 1964, *Efficiency and Uplift: Scientific Management in the Progressive Era, 1890–1920*, Chicago: University of Chicago Press.
- Halpern, Rick 1997, *Down on the Killing Floor: Black and White Workers in Chicago's Packinghouses, 1904–54*, Urbana: University of Illinois Press.
- Harris, Cheryl 1993, 'Whiteness as Property', *Harvard Law Review*, 106, 8: 1707–91.
- Higginson, John 2007, 'Privileging the Machine: American Engineers, Indentured Chinese and White Workers in South Africa's Deep-Level Mines, 1902–1907', *International Review of Social History*, 52, 1: 1–34.
- Hoover, Herbert 1897?, 'Extracts from Letters Home (Western Australia)', Hoover Scrapbooks, Pre-Commerce Papers, Box 50, Hoover Presidential Library, West Branch, IA.
- 1900, 'Metal Mining in the Provinces of Chi-lid and Shantung, China', printed in the proceedings of the Sixth Ordinary Meeting of the Institute of Mining and Metallurgy (London), Pre-Commerce Papers, Box 50, Hoover Presidential Library, West Branch, IA.
- 1902, 'The Keeping Coal Mines and Coal Field, Chile Province, North China', in 'Eighth Ordinary Meeting', proceedings of the Institute of Mining and Metallurgy (London), 419 and 426–7 Pre-Commerce Papers, Box 50, Hoover Presidential Library, West Branch, IA.
- 1909, *Principles of Mining: Valuation, Organization and Administration*, New York: McGraw-Hill Book Company.
- 1924, 'Hoover to Dear Mr. Congressman [John Baker]', (letters) February 13 and 19, 1924, Commerce Papers, Box 289, Hoover Presidential Library, West Branch, IA.
- 1951, *The Memoirs of Herbert Hoover: Years of Adventure, 1874–1920*, New York: Macmillan.
- undated, 'Unidentified Clipping on Chinese Miners', Pre-Commerce Papers, Box 56, Hoover Presidential Library, West Branch, IA.
- Horne, Gerald 2006, *The White Pacific: U.S. Imperialism and Black Slavery in the South Seas after the Civil War*, Honolulu: University of Hawaii Press.
- Horowitz, Roger 1997, *Negro and White, Unite and Fight: A Social History of Industrial Unionism in Meatpacking, 1930–1990*, Urbana: University of Illinois Press.
- Hughes, Everett Cherrington and Helen Macgill Hughes 1952, *Where Peoples Meet: Ethnic and Racial Frontiers*, Glencoe: Free Press.
- Huginnie, Yvette 1994, 'A New Hero Comes to Town: The Anglo Mining Engineer and "Mexican Labor" as Contested Terrain in Southeastern Arizona, 1880–1920', *New Mexico Historical Review* 69, 4: 323–44.
- Hurricane 1860, 'The Negro and His Management', *Southern Cultivator*, 17, 9: 276–7.
- Ignatiev, Noel 1998, *How the Irish Became White*, New York: Routledge.
- Inspector 1901, 'The Negro as a Molder', *The Foundry*, 19, 109: 17–18.
- Jacoby, Sanford M. 2003, 'A Century of Human Resource Management', in *Industrial Relations to Human Resources and Beyond: The Evolving Process of Employee Relations Management*, edited by Bruce E. Kaufman, Richard A. Beaumont, and Roy B. Helfgott, New York: M.E. Sharpe.
- James, C.L.R. 1970, 'The Atlantic Slave Trade and Slavery: Some Interpretations of Their Significance in the Development of the United States and the Western World', in *Amistad 1: Writings on Black History and Culture*, edited by John A. Williams and Charles F. Harris, New York: Random House.

- 1993, *American Civilization*, edited by Anna Grimshaw and Keith Hart, Oxford: Blackwell.
- Jaynes, Gerald David 1986, *Branches without Roots: Genesis of the Black Working Class in the American South, 1862–1882*, Oxford: Oxford University Press.
- Johnson, Charles S. 1926, 'How the Negro Fits in Northern Industries', *Industrial Psychology*, 1, 6: 399–412.
- Johnson, Walter 1999, *Soul by Soul: Life in the Antebellum Slave Market*, Cambridge, MA.: Harvard University Press.
- Jones, Jacqueline 1998, "Lifework" and Its Limits: The Problem of Labor in *The Philadelphia Negro*', in *W.E.B. DuBois, Race, and the City: 'The Philadelphia Negro' and Its Legacy*, edited by Michael B. Katz and Thomas J. Sugrue, Philadelphia: University of Pennsylvania Press.
- Jones, William P. 2005, *The Tribe of the Black Ulysses: African American Lumber Workers in the Jim Crow South*, Urbana: University of Illinois Press.
- Jung, Moon-Ho 2006, *Coolies and Cane: Race, Labor, and Sugar in the Age of Emancipation*, Baltimore: John Hopkins University Press.
- Jung, Moon-Kie 2006, *Reworking Race: The Making of Hawaii's Interracial Labor Movement*, New York: Columbia University Press.
- Kanigel, Robert 1997, *The One Best Way: Frederick Winslow Taylor and the Enigma of Efficiency*, New York: Viking.
- Kaufman, Bruce E. 1993, *The Origins & Evolution of the Field of Industrial Relations in the United States*, Ithaca: ILR Press.
- Kelly, Brian 2001, *Race, Class, and Power in the Alabama Coalfields, 1908–21*, Urbana: University of Illinois Press.
- Lauck, W.J. 1911, 'Recent Immigration: Its Significant Aspects to the Iron and Steel Industry', *Iron Age*, 87: 899.
- Lawrence, Ken 1976, 'Karl Marx on American Slavery', available at: <<http://www.sojournertruth.net/marxslavery.pdf>>.
- Lewis, David Lanier 1987, *The Public Image of Henry Ford*, Detroit: Wayne State University Press.
- Licht, Walter 2000, *Getting Work: Philadelphia, 1840–1950*, Philadelphia: University of Pennsylvania Press.
- Lichtenstein, Alex 1996, *Twice the Work of Free Labor: The Political Economy of Convict Labor in the New South*, London: Verso.
- Liebersohn, Stanley 1980, *A Piece of the Pie: Black and White Immigrants since 1880*, Berkeley: University of California Press.
- Littlefield, Alice & Martha C. Knack 1996, *Native Americans and Wage Labor: Ethnohistorical Perspectives*, Norman: University of Oklahoma Press.
- Lowe, Lisa 1996, *Immigrant Acts: On Asian American Cultural Politics*, Durham, NC.: Duke University Press.
- Mancini, Matthew J. 1996, *One Dies, Get Another: Convict Leasing in the American South, 1866–1928*, Columbia: University of South Carolina Press.
- Marks, Shula and Stanley Trapido 1979, 'Lord Milner and the South African State', *History Workshop Journal*, 8, 1: 50–81.
- Marx, Karl 1870, 'Marx to Sigfrid Meyer and August Vogt in New York', April 9, 1870, available at: <[http://www.marxists.org/archive/marx/works/1870/letters/70\\_04\\_09.htm](http://www.marxists.org/archive/marx/works/1870/letters/70_04_09.htm)>.
- 1906 [1867], *Capital: A Critique of Political Economy, Volume I*, Chicago: Charles H. Kerr & Company.
- 2000 [1964], *Pre-Capitalist Economic Formations*, New York: International Publishers.
- Meyer III, Stephen 1981, *The Five-Dollar Day: Labor Management and Social Control in the Ford Motor Company, 1908–1921*, Albany: State University of New York Press.

- Miller, Steven F. 1993, 'Plantation Labor Organization and Slave Life on the Cotton Frontier: The Alabama-Mississippi Black Belt, 1815–1840', in *Cultivation and Culture: Labor and the Shaping of Slave Life in the America*, edited by Ira Berlin and Philip D. Morgan, Charlottesville: University of Virginia Press.
- Minich, H.D., 1913, 'The Value of Time Study', *100%: The Practical Magazine of Efficient Management*, 1 November: unpaginated.
- Montgomery, David 1987, *The Fall of the House of Labor: The Workplace, the State, and American Labor Activism, 1865–1925*, Cambridge: Cambridge University Press.
- Morris, John 1993, 'Capitalism into the Wilderness: Mountain Men and the Expansion of Capitalism into the Northern Rockies, 1807–1843', unpublished PhD dissertation, University of Missouri.
- Morrison, Toni 2008, *A Mercy*, New York: Knopf.
- Münsterberg, Hugo 1913, *Psychology and Industrial Efficiency*, Boston and New York: Houghton Mifflin Company.
- Nash, George H. 1983, *The Life of Herbert Hoover: The Engineer, 1874–1914*, New York: W.W. Norton.
- Nelson, Daniel 1996, *Managers and Workers: Origins of the Twentieth-Century Factory System in the United States, 1880–1920*, Madison: University of Wisconsin Press.
- Nelson, Scott Reynolds 1999, *Iron Confederacies: Southern Railways, Klan Violence, and Reconstruction*, Chapel Hill: University of North Carolina Press.
- Nkosi, N.K. 1987, 'American Mining Engineers and the Labor Structure in the South African Gold Mines', *African Journal of Political Economy*, 1, 2: 63–80.
- Noble, David F. 1979, *America by Design: Science, Technology and the Rise of Corporate Capitalism*, Oxford: Oxford University Press.
- Nyland, Chris 1996, 'Taylorism, John R. Commons, and the Hoxie Report', *Journal of Economic Issues*, 30, 4: 985–1016.
- Olmsted, Frederick Law 1856, *A Journey in the Seaboard Slave States: With Remarks on Their Economy*, New York: Dix and Edwards.
- 1996 [1861], *The Cotton Kingdom: A Traveler's Observations on Cotton and Slavery in the American Slave States 1853–1861*, New York: Da Capo Press.
- Pearson, Chad 2004, 'Making the "City of Prosperity": Engineers, Open-Shoppers, Americanizers, and Propagandists in Worcester, Massachusetts, 1900–1925', *Labor History*, 45, 1: 9–36.
- Pittenger, Mark 2003, "'What's on the Worker's Mind": Class Passing and the Study of the Industrial Workplace in the 1920s', *Journal of the History of the Behavioral Sciences*, 39, 2: 143–61.
- Pitts, Jno. W. 1860, 'Best Method of Managing Negroes', *Southern Cultivator*, 18, 10: 325–6.
- Ramstad, Yngve and James L. Starkey 1995, 'The Racial Theories of John R. Commons', *Research in the History of Economic Thought and Methodology*, 13: 1–74.
- Rawick, George P. 1972, *From Sundown to Sunup: The Making of the Black Community*, Westport: Greenwood Press.
- Reid, Hugh 1921, 'Why Bar the Door to Labor?', *Nation's Business*, 9, 1: 29–31.
- Reidy, Joseph P. 1993, 'Obligation and Right: Patterns of Labor, Subsistence, and Exchange in the Cotton Belt of Georgia', in *Cultivation and Culture: Labor and the Shaping of Slave Life in the Americas*, edited by Ira Berlin and Philip D. Morgan, Charlottesville: University of Virginia Press.
- Rickard, T.A. 1905 (ed.), *The Economics of Mining*, New York: The Engineering and Mining Journal.
- Riebe, Ernest 1984, *Mr. Block: Twenty-Four IWW Cartoons*, edited by Franklin Rosemont, Chicago: Charles H. Kerr Publishing.

- Rindge, Jr., Fred H. 1917, 'From Boss to Fore-Man', *Industrial Management*, 53, July: 511–12.
- Rockman, Seth 2001, 'The Unfree Origins of American Capitalism', Library Conference of Philadelphia Program in Early American Economy and Society Inaugural Annual Conference, available at: <<http://www.librarycompany.org/Economics/PDF%20Files/Rockman%20paper.pdf>>.
- Rodney, Walter 1981, *How Europe Underdeveloped Africa*, Washington, DC.: Howard University Press.
- Roediger, David R. 1991, *The Wages of Whiteness: Race and the Making of the American Working Class*, London: Verso.
- 1994, *Towards the Abolition of Whiteness: Essays on Race, Politics, and Working Class History*, London: Verso.
- 2005, *Working Toward Whiteness: How America's Immigrants Became White*, New York: Basic.
- 2008, *How Race Survived U.S. History*, New York: Verso.
- Rose, Willie Lee (ed.) 1999, *A Documentary History of Slavery in North America*, Athens: University of Georgia Press.
- Rosenow, Michael 2008, 'Injuries to All: The Rituals of Dying and the Politics of Death Among United States Workers, 1877–1910', Unpublished Ph.D. diss.: University of Illinois.
- Saxton, Alexander 1975, *The Indispensable Enemy: Labor and the Anti-Chinese Movement in California*, Berkeley: University of California Press.
- Sell, Zach 2009, 'A Jungle to Work In': Race and the Social Terrain of Foundry Production', Senior thesis, University of Wisconsin-Milwaukee.
- Small Farmer 1851, 'Management of Negroes', *De Bow's Southern and Western Review*, 11, 4: 369–72.
- Smith, Mark M. 1997, *Mastered by the Clock: Time, Slavery, and Freedom in the American South*, Chapel Hill: University of North Carolina Press.
- Spence, Clark C. 1970, *Mining Engineers & the American West: The Lace-Boot Brigade, 1849–1933*, New Haven: Yale University Press.
- Starobin, Robert 1971, *Industrial Slavery in the Old South*, New York: Oxford University Press.
- Stone, Katherine 1975, 'The Origins of Job Structures in the Steel Industry', in *Labor Market Segmentation*, edited by Richard C. Edwards, Michael Reich and David M. Gordon Lexington: D.C. Heath and Company.
- Stromquist, Shelton 2006, 'Railroad Labor and the Global Economy: Historical Patterns', in *Global Labour History: A State of the Art*, edited by Jan Lucassen, Bern: Peter Lang.
- Strong, George Templeton 1952, *The Diary of George Templeton Strong: The Civil War, 1860–1865*, edited by Allan Nevins and Milton Halsey Thomas, New York: Columbia University Press.
- Takaki, Ronald 2000, *Iron Cages: Race and Culture in 19th-Century America*, Oxford: Oxford University Press.
- Taylor, Frederick Winslow 1907, 'Taylor to Charles Morse' (May 20, 1907), letter in the Frederick Winslow Taylor Papers at Stevens Institute of Technology Archives in Hoboken, New Jersey and online at: <<http://stevens.cdmhost.com/cdm4/document.php?CISROOT=/p41000coll1&CISOPTR=1547&REC=3>>.
- 1911?, 'Answer to Criticism of Mr. Upton Sinclair' (1911?) and online at: <<http://stevens.cdmhost.com/cdm4/document.php?CISROOT=/p41000coll1&CISOPTR=255&REC=2>>.
- 1914, 'Taylor to Willard Price' (September 17, 1914), letter in the Frederick Winslow Taylor Papers at Stevens Institute of Technology Archives in Hoboken, New Jersey and online at: <<http://stevens.cdmhost.com/cdm4/document.php?CISROOT=/p41000coll1&CISOPTR=1245&REC=3>>.
- 1967 [1911], *Principles of Scientific Management*, New York: Norton.

- Taylor, Griffith 1922, 'The Distribution of Future White Settlement: A World Survey Based on Physiographic Data', *Geographical Review* 12, 3: 375–402.
- Tead, Ordway 1918, *Instincts in Industry: A Study in Working-Class Psychology*, New York: Houghton Mifflin Company.
- Tead, Ordway and Henry C. Metcalf 1926 [1920], *Personnel Administration: Its Principles and Practice*, New York: McGraw-Hill.
- Towns, James M. 1851, 'Management of Negroes', *Southern Cultivator*, 9, 6: 87–8.
- Trotter, Joe 1990, *Coal, Class, and Color: Blacks in Southern West Virginia, 1915–1932*, Urbana: University of Illinois Press.
- United States Immigration Commission, 1911, 'Industrial Progress and Efficiency', in Volume 16, Part 18, 'Iron Ore Mining', in Reports of the Immigration Commission Washington, D.C.: Government Printing Office.
- Unsigned 1858a, 'Laborers for the South', *Southern Cultivator*, 16, 8: 233–6.
- 1858b, 'Revolutionizing a Plantation', *Southern Cultivator*, 16, 11: 346.
- 1860, 'A Picture of the West Indies', *De Bow's Review*, 28, 6: 729–38.
- 1863, Untitled, *Scientific American*, New Series, 9, 25 (19 December): 386.
- 1903, 'Rand Native Labour Committee', clipping in Pre-Commerce Papers; Box 56, Hoover Presidential Library, West Branch, IA.
- 1907, 'Notes on Stopping on the Rand During 1907', in Pre-Commerce Papers, Box 55, Hoover Presidential Library, West Branch, IA. Hoover 1909, pp. 161–5
- 1915, 'John Hays Hammond', in *Cyclopaedia of American Biography*, New York: Press Association Compilers.
- 1915, 'The Iron Industry's Labor Supply', *Iron Age*, 96, 8: 91.
- 1921, 'Negro Labor During and After the War', *Monthly Labor Review*, 12, 4: 853–8.
- 1923, 'Strong Support for Selective Immigration', *Iron Age*, 111, 1: 163.
- 1924, 'The Southern Negro in Cleveland Industries', *Monthly Labor Review*, 19, 1: 41–4.
- 1925, 'Working and Living Conditions of Negroes of West Virginia', *Monthly Labor Review*, 21, 2: 10–13.
- 1926, 'Industrial Employment of the Negro in Pennsylvania', *Monthly Labor Review*, 22, 6: 48–51.
- 1930, 'The Filipino Problem in California', *Monthly Labor Review*, 30, 6: 72–4.
- Upham-Bornstein, Linda 2007, 'Men of Families: The Intersection of Labor Conflict and Race in the Norfolk Dry Dock Affair, 1829–1831', *Labor*, 4, 1: 65–97.
- Vick, Steven G. 2002, *Degrees of Belief: Subjective Probability and Engineering Judgment*, Reston: ASCE Press.
- Warne, Frank Julian and J.R. Commons 1905, 'Slavs in Coal Mining', in *Trade Unionism and Labor Problems*, edited by J.R. Commons, Boston: Ginn and Company.
- White, W. Thomas 1985, 'Race, Ethnicity and Gender in the Railroad Work Force: The Case of the Far Northwest, 1883–1918', *Western Historical Quarterly*, 16, 3: 265–83.
- Williams, John M. 1917, 'An Actual Account of What We Have Done to Reduce Our Labor Turnover', *The Annals of the American Academy*, 71, 1: 51–70.
- Williams, Richard 1990, *Hierarchical Structures and Social Value: The Creation of Black and Irish Identities in the United States*, Cambridge: Cambridge University Press.
- Wilson, Joan Hoff 1992 [1975], *Herbert Hoover: Forgotten Progressive*, Prospect Heights: Waveland Press.
- Woolfer, Jr., T.J. 1933, *Races and Ethnic Groups in American Life*, New York: McGraw-Hill.