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**DEFEND YOUR RESEARCH**

## Plantations Practiced Modern Management

*by Caitlin Rosenthal*

# Defend Your Research



**Caitlin Rosenthal** is an assistant professor of history at the University of California, Berkeley. She is working on a book about her research, which Harvard University Press will publish in 2015.

*HBR puts some surprising findings to the test*

## Plantations Practiced Modern Management

**The finding:** Slaveholding plantations of the 19th century used scientific management techniques—and some applied them more extensively than the factories thought to be their originators.

**The research:** Caitlin Rosenthal pored over hundreds of account books from U.S. and West Indian plantations that operated from 1750 to 1860. She found that their owners employed advanced accounting and management tools, including depreciation and standardized efficiency metrics, to manage their land and their slaves. After comparing their practices with those described in the account books of northern factories, Rosenthal concluded that many plantations took a more scientific approach to management than the factories did.

**The challenge:** Did historians get the genesis of management wrong? **Professor Rosenthal, defend your research.**

**Rosenthal:** I was surprised by what we uncovered in these account books. The mythology is that on plantations, management was crude and just amounted to driving enslaved people harder and harder. These documents show that plantations used highly sophisticated accounting practices more consistently than many contemporary northern factories, which are often considered the birthplace of modern management. In some ways the conditions of slavery permitted a more scientific approach than the factories did.

**HBR: How so?**

In the factory books, you see lots of turnover. But slaves couldn't quit. While factories were worrying about filling positions and just keeping things going, plantation owners were focused on optimization. They could reallocate labor as they saw fit.

I found real quantitative analysis in their records. They were literally looking at humans as capital.

**This interview is going to make people queasy. I'm already cringing.**

It should make you cringe. This is not an easy topic. People tend to think about the positive with regard to management and capitalism. With our modern lens, efficiency is good. Here it was equal to the brutal extraction of labor from oppressed people. But it's important for businesspeople to read unvarnished history, not just the happy stories.

**Give me an example of this more scientific approach on plantations.**

Many plantations used a standard accounting system described in Thomas Affleck's *Plantation Record and Account Books*.

These books contained several advanced

techniques, including instructions on how to calculate depreciation. Some scholars think depreciation took off with the railroads in the late 19th century. But by the 1840s planters were depreciating their slaves. They appraised their inventory at market value, compared that with its past market value to assess appreciation or depreciation, calculated an allowance for interest, and used this to determine their capital costs. In a sense they were marking slaves to market. It's really as sophisticated as what most firms do today.

Slaveholders also developed an equivalence unit called "the prime field hand." They assigned certain capabilities to the prime hand, such as expected production per day. Workers were measured against this standard and given values such as "half hand" and "quarter hand." Owners used these units as benchmarks across plantations. If one slaveholder reported that he had 13 hands who were the equivalent of 10 prime hands, other slaveholders would have known exactly what that meant in terms of production.

**Considering the context, these techniques seem disturbingly cold and dehumanizing.**

It's completely chilling. Many of these planters were absentee owners. So you imagine them in London, getting reports in the mail about their plantations and just crunching the numbers over lunch, not so different from modern board members. It's so easy for someone at a long distance to forget about the humanity of the labor. Think of the garment factory collapse in Bangladesh earlier this year.

**Is there a direct link between slave management and Frederick Taylor?**

DAILY RECORD OF COTTON PICKED on *Christiana* Plantation, during the week commencing on the 7<sup>th</sup> day of January 1861. Oversee, *Henry C. Cooke*

NAME	No.	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Week's Picking
<i>Hean</i>	1		Sh. 9	Sh. 10	Sh. 10	Sh. 10	Sh. 10	
<i>Joe Home</i>	2		170	170	190	150		115
<i>Red Brown</i>	3		Boon	Boon	Boon	Boon	Boon	
<i>Jim Smith</i>	4		70	Boodle	75	80	80	315
<i>Pillado</i>	5		Roils	95	85	85		70
<i>Green</i>	6		Boodle	Boodle	95	80		Wag
<i>Richardson</i>	7		Boodle	Boodle	60	65		60
<i>Chaitman</i>	8		150	175	180	175		120
<i>Harrison</i>	9		Sh. 10	Sh. 10	Sh. 10	Sh. 10		
<i>Joe Peles</i>	10		Boodle	Boodle	Wag	Wag	Wag	
<i>Joe Gains</i>	11		70	Boodle	60	37		40
<i>John</i>	12		Boon	Boon	85	25		40
<i>Stephens</i>	13		Roils	75	85	65		50
<i>Jefferson</i>	14		160	175	150	Boile		90
<i>Bob Peles</i>	15		Boodle	Boodle	60	60		60
<i>Anderson</i>	16		80	80	75	65		60
<i>William Camp</i>	17		Roils	80	85	80		75
<i>Spencer</i>	18		110	115	120	95		75
<i>Stephen</i>	19		110	20	105	100		75
<i>Montgomery</i>	20		60	Boon	55	65		30
<i>Jim Henry</i>	21		90	100	80	80		70
<i>Jerry</i>	22		140	145	90	165		75
<i>Wes</i>	23		125	150	150	135		110
<i>Wes</i>	24		Sh. 10	Sh. 10	Sh. 10	Sh. 10		

## Advanced Accounting

Detailed account books from the 1840s through 1860s show that plantation owners, though part of an abhorrent system, were among the first to use modern management science.

I'm researching that. Plantations were tied reasonably directly to the types of textile mills that figure in the prehistory of scientific management—cotton came from plantations. This is not new; scholars have been debating the links between slavery and the Industrial Revolution for years. Whether there is a more direct link is still unclear. Right now I'm studying two of Taylor's close associates who were born on plantations, including Henry Laurence Gantt, inventor of the Gantt chart.

### How have these account books stayed hidden for so long?

Part of it is a library thing. Someone studying accounting wouldn't come across Thomas Affleck's books because they're not catalogued as accounting manuals. They're part of individual plantations' records. But there's also a disciplinary divide between business history and southern history. Historians of slavery have long known about these records and have used them to reconstruct slaves' day-to-day lives. But very few scholars who used them had ever looked at northern account books, so they didn't know how remarkable the records were. I learned about them because a mentor of mine who studies slavery suggested I look at them.

### Do you hear from people who are angered by your work?

Yes. Not from historians, but from the public. People react just as they did to Robert Fogel and Stanley Engerman 40 years ago, when their landmark research and their book *Time on the Cross* came out. They crunched the numbers to show that slavery could be extremely profitable. People were outraged at them for describ-

ing slavery as efficient, but they were just presenting their research. Today people continue to cling to the idea that slavery wasn't good business. Before the Civil War, both sides voiced this perspective. Plantation owners tried to paint a picture of themselves as "benevolent" paternalists who made the slaves' lives better while earning limited profits. Abolitionists argued that slavery was unprofitable in an effort to undermine it. We have lots of evidence to the contrary, but it's still uncomfortable to explore the links between slavery and modern capitalism.

### Why study this at all?

I didn't set out to tell this story—this isn't supposed to be a muckraking history of capitalism. I'm a historian writing for other historians, and I'm just following my sources. I see it as my job to tell honest origin stories. It's dangerous to read only the celebratory histories of Rockefeller and Carnegie and the railroads. I've thought a lot about whether this work has any real relevance for CEOs. I believe it does. Our management tools can separate us from our humanity. I keep going back to the absentee slave owner reading the numbers. I think of someone with a spreadsheet. The spreadsheet can create that same separation. When I'm reviewing the accounting records, I can get sucked into admiring the business acumen in the pages. But I always snap back to the fact that these were real people they were exploiting. The account books, strangely, remind me of the humanity of slaves, and that is absolutely necessary to remember. To never forget. ♥

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Interview by **Scott Berinato**

# Famous First Words

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