Counting and Accounting: Numerical Information and Communication in Early America (or, seeking a Quantitative Middle Ground)

Caitlin Rosenthal UC Berkeley

A paper presented at

"Economic History's Many Muses" Fourteenth Annual Conference of the Program in Early American Economy and Society October 24-25, 2014

> Library Company of Philadelphia 1314 Locust Street, Philadelphia PA

Faced with the incredibly broad terrain of "economies of print and communication" and enticed by the conference title, the "many muses of economic history," Joe Adelman and I decided to divide our territory by source, or should we say, by "muse." He would take narrative, qualitative sources, and I would take the tremendous proliferation of quantitative documents from the period. These categories of source material fared very differently during the ascendance of cultural history, and they coincide with two distinct groups of scholars. On the side of reading and writing, we have booming fields like book history and the history of communications, all of which have increasingly ventured into the terrain of the economy. On the other side, quantitative sources, from state statistics to account books have been (with notable exceptions) comparatively neglected. And those who have been their most avid users, economists in economics departments, have generally not been in close contact and collaboration with historians in history departments.

So at a conference where I suspect that the overriding tone will be optimism, I will perhaps start with a note of pessimism. We are in a moment when historical research into economic topics is increasingly popular, an exciting transition which PEAES has helped to usher in. But this vigorous movement has generally not been accompanied by increased collaboration or even interaction with colleagues working in economics departments. I wondered, as I prepared these comments and perused the program, if many of us would identify ourselves first as economic historians? And also whether the large number of scholars who do call themselves by that name will read our work? The answers, I fear, are "no" and "no."

Of course, this disciplinary disconnect is not new: collaboration between historians and economists has long been a challenge. When PEAES launched in 2001, the Library Company hosted a conference like this one on "The Past and Future of Early American Economic History." Though I was not present, or even yet a historian, an excellent volume records many of the papers and conversations that unfolded there. The opening sentence of chapter 1, written by Cathy Matson, traces these tensions to the very beginnings of the discipline. As she writes, "since its recognizable origins near the end of the nineteenth century, economic history has negotiated an uneasy coexistence between the two professional disciplines from which it came, history and economics."¹

In 1983, economic historian Jan DeVries characterized this uneasy coexistence in far more dramatic terms. He wrote evocatively that "confrontation between the economist and the historian resembles something like warfare between a conventional army and a band of guerillas: the are no agreed rules of the game nor are there shared criteria for success." The "structure of the two disciplines seems to differ in ways that encourage mutual misunderstanding." Though not an early Americanist, DeVries's assessment applies, if anything, more intensely to our period, where debates over slavery and the moral vs. market economy broiled intensely in the 1970s and 1980s. But, since then, the nature of the fight changed. The ground combat DeVries described turned into a cold war with skirmishes only at the margins. The result is the almost total segregation of work by historians and economic historians.

But enough pessimism: we are in a moment where more collaboration is possible, if not inevitable. So in the remainder of my time I want to highlight some signs of optimism and areas of opportunity. I will begin with an extended vignette from my own work—an example of the many questions opened up to me by following a set of partially quantitative economic documents as they circulated around the early American and Atlantic economies. These materials can be read in many registers and across disciplines, and my own work is only a small slice of a growing body of research where historians are reading quantitative documents in more varied ways. Second, I will turn to the potential of this work to open up a quantitative "middle ground" bridging history and economics. Because just as historians are making more use of quantitative materials, economic history has also seen a modest revival of descriptive research, a shift that suggests scholars in economics might be willing to meet us there.

Following the numbers

The story I want to begin with takes us to the first decades of the nineteenth century, in Jamaica, Guiana, Virginia, and Florida. But, for me, the trail started with an

¹ Cathy Matson, "A House of Many Mansions: Some Thoughts on the Field of Economic History," *The Economy of Early America*

article in Edmund Ruffin's *Farmer's Register*, which was published in Petersburg Virginia between 1833 and 1843.

Farquhar Macrae departed Jamaica in 1833, driven out by what he called "the mad abolition act of the infatuated English government."² Earlier that year, the British Parliament had passed a measure to end slavery throughout the colonies, including Jamaica. Though Macrae lamented his "sacrifice of property and prospects," he did not leave the West Indies empty-handed.³ The abolition act included a provision for compensating the slave owners for the loss of their human capital. In effect, parliament bought them out, paying more than £20 million in total compensation to the former slave holders.⁴ In Jamaica's Clarendon Parish, where Macrae filed for compensation, the largest individual claims reached nearly £10,000 for more than 500 enslaved Africans.⁵ By contrast, Macrae received £237 10S 6D for 11 men and women. ⁶ Though Macrae later styled himself a "sugar planter" accustomed to planting on a "very large scale," the modest size of his claim suggests a middling stature, perhaps as a manager or attorney.⁷

Macrae chose East Florida as his new home, settling on the Wacissa River near Tallahassee where he planned to plant sugar. By March of 1834 he had rented a plot of land and purchased a gang of slaves to till it—perhaps with his share of the British payout. But, as with other emigrating farmers, clerks, and overseers, Macrae brought more than capital to the American South. He arrived with knowledge of sugar planting, opinions about management, and expertise in accounting. He traded on his West Indian origins to become "something of a local celebrity," serving as corresponding secretary for

http://search.proquest.com/docview/125202390/abstract/6C81A88329894383PQ/3?accountid=14496; Macrae, Farquhar, "Forms for an Overseer's Journal and Montly Reports, Suited to a Southern Plantation," *The Farmers' Register.*, July 1835, American Antiquarian Society.

³ Macrae, "ON THE SOILS AND AGRICULTURAL ADVANTAGES OF FLORIDA.--No. 1."

² Farquhar Macrae, "ON THE SOILS AND AGRICULTURAL ADVANTAGES OF FLORIDA.--No. 1," *Farmer's Register; A Monthly Publication (1833-1843)*, July 1835,

⁴ Nicholas Draper, *The Price of Emancipation: Slave-Ownership, Compensation and British Society at the End of Slavery* (Cambridge, UK; New York: Cambridge University Press, 2010).

⁵ Jamaica Clarendon 1 (Parnassus Estate), 5th Oct 1835 | 525 Enslaved | £9591 12S 5D, Parliamentary Papers p. 20; http://www.ucl.ac.uk/lbs/claim/view/22211

 ⁶ Legacies of British Slave-ownership, Jamaica Clarendon 236. Claim No. 236, Parliamentary Papers p. 21.; Macrae is spelled "McRae" in the parliamentary reports.
 ⁷ Macrae, "ON THE SOILS AND AGRICULTURAL ADVANTAGES OF FLORIDA.--No. 1." Macrae

⁷ Macrae, "ON THE SOILS AND AGRICULTURAL ADVANTAGES OF FLORIDA.--No. 1." Macrae may also have been related to Alexander Macrae, who also filed for compensation for two larger estates in Clarendon parish.

the local agricultural society and writing a series of articles for Edmund Ruffin's popular magazine, *The Farmers' Register*.⁸

Macrae took up the subject of bookkeeping in his first article for the *Farmer's Register*. Occupying one of only a handful of two-page illustrations from the journal's ten-year run, Macrae drew a precise diagram after which planters could format their books (Figures 1-2). His forms were adapted for one month, and he recommended binding twelve sets together to form "an authentic record" of all operations on an estate. Because of the brevity and simplicity of the forms, Macrae believed that any overseer could keep them correctly, given "nothing to do save to fill up the heads and the columns." The keeping of detailed records would both occasion better management from day-to-day, and enable long distance monitoring. Though few American planters were year-round absentees, Macrae recommended that "when proprietors travel for the summer, or reside of their plantations" loose sheets of the report could be "neatly folded" and mailed to them as letters. ⁹

Macrae's plan replicated the format of pre-printed forms that had been circulating in the British Atlantic world for several decades. Figures 3-4 show a very similar form used on Plantation Hope and Experiment in Guiana in1812. Though Macrae may never have seen this particular form, the close similarities reflect what must be a shared lineage. And the Hope and Experiment record appears to have been folded for mailing or filing just as Macrae recommended.¹⁰

Macrae's recommendation included seven distinct forms, most of which were also included in the form for Hope and Experiment. The most prominent recorded (work performed on the estate. Macrae included a line for each day, with columns for the overseer to document the number of Men, Women, Boys, and Girls toiling in the field, as well as separate columns for those jobbing, ginning, working at trades, and serving in the

⁸ Edward E Baptist, *Creating an Old South Middle Florida's Plantation Frontier before the Civil War* (Chapel Hill: University of North Carolina Press, 2002), 20–21.<-check quote

⁹ Macrae, Farquhar, "Forms for an Overseer's Journal and Monthly Reports, Suited to a Southern Plantation," in The Farmers' register, ed. Edmund Ruffin, vol. III (Richmond, Va.: Edmund Ruffin, 1836), 163-165.

¹⁰ Journal of Plantation Hope and Experiment, Plantation Journals, 1812-1843, Wilberforce House Museum, Hull; **Box 9/1**, Hope and Experiment, June 1812 (Adam Matthew Slavery, Abolition, and Social Justice Collection)

house. To the right of these columns for labor were columns to note the number of sick, the invalids, the nurses, those minding the stock, and any absent for any other reason. The form for Hope and Experiment begins almost identically, though it also included a column for runaways, of which there were 2 throughout the month of June, 1812. These changes were incorporated in the mundane daily record to achieve an accounting "balance" —so that the final total at the end of the row would equal the total number of slaves laboring on the plantation. So long as it did, a planter reviewing the journal could know that he had accounted for every enslaved man, woman, and child toiling on his land.¹¹

Elsewhere Macrae recommended that planters analyze the "increase" and "decrease" on the plantation – the troubling mathematical shorthand for births and deaths, and for the upheavals caused by purchases or sale. To do this, planters were to draw up a kind of balance sheet of life and death. At the beginning of the period, an inventory of lives was taken and recorded under "on hand." Below this, each birth or purchase was to be added to "increase" to reach a total ever laboring on the plantation (the equivalent of the left hand side of a balance sheet). On the other side of the account (in this case inscribed below), a list of deaths and sales were noted as "decrease" and subtracted from the total. The result was the number that remained, a quantity that could be checked against the next inventory of lives. On Hope and Experiment, Diana "died in child bed," reducing the Negro Account from 270 to 269. Her child apparently did not live long enough to be recorded on either side of the account.¹²

Next to the form for the increase and decrease of Men, Women, Boys, and Girls, both forms included near identical accounts for Horses, Mules, Oxen, Cows, Calves, Sheep, Pigs, and Goats. Indeed, throughout these journals (and many other West Indian account books) accounts for men and livestock slip into one another. To the right of the tallies of life and death, Macrae proposed a record of consumption and expenditure, also structured as kind of balance sheet. Here again, though the columns list potatoes, rice, fish, meat, tobacco and molasses in the place of oats, rye, turnips, and fodder, in all other

¹¹ Macrae, Farquhar, "Forms for an Overseer's Journal and Monthly Reports, Suited to a Southern Plantation," in The Farmers' register, ed. Edmund Ruffin, vol. III (Richmond, Va.: Edmund Ruffin, 1836), 163-165.

¹² Ibid.

aspects "feeding negroes" was recorded identically to "feeding mules." The remaining accounts in Macrae's system and earlier alternatives typically focused on the management of land and the sowing of crops. Planters could record any changes in land cleared, as well as new acres planted in the past month, and total acres planted by crop.¹³

What can we learn from the publication and circulation of forms like Macrae's? These sources can be interpreted in several registers. Examined closely, the forms offer a window into the outlook of plantation capitalists. How did they think about the men and livestock who labored on their plantations? How did they imagine converting food, housing and human capital into an orderly labor force working in a complex production process like sugar? How did they measure their success in the output of commodities like sugar and cotton? And confronted with a neat form of standard categories, which portions did they complete and which did they neglect or repurpose?

Read slightly differently, these accounting techniques can be thought of as early information technologies. Blank forms were a paper technology that enabled new management strategies, and these technologies were carried through the Atlantic world in people and on paper. How did the dislocations of abolition bring expertise like Macrae's to the American South, ironically strengthening the institution of slavery? And when these forms were neatly folded and shipped to absentee owners, how did they fit into information practices that also included farms and factories employing free labor.

Finally, completed forms like those from Hope and Experiment can also be analyzed as repositories of data. These can be used to answer questions in the aggregate: how did plantations compare with each other from a demographic perspective? How did life, death, production, and reproduction vary across plantations? The data can also point to individual stories, both of planters and overseers and the enslaved. How did the narratives planters aspired to construct when they published forms and data in magazines compare to the messier realities they confronted on the ground? How did the days of the enslaved unfold during the height of the harvest? How recently had Diana been picking cotton before she died in childbirth, reducing the inventory of lives by one?

My work, which aspires to these different approaches to quantification, joins a growing body of research that uses multiple methodologies to make sense of early

¹³ Ibid.

American numerical sources. Of course, reading quantitative sources in unexpected ways is not a new technique. At least since Patricia Cline Cohen's *A Calculating People* historians have tried to parse the numerical archive in ways that go beyond simply adding it up.¹⁴ And the lively debates about the arrival of capitalism in early New England often used account books as windows into ideology and morals.¹⁵

But such work has blossomed over the last decade, and the pace of research seems to be accelerating. A prime example is Tamara Thornton's work on Nathaniel Bowditch, a mathematician, business executive, author, and astronomer who dealt extensively in blank forms. Thornton's work considers the intersections of Bowditch's many pursuits and the intersecting networks of expertise they reflected.¹⁶ Recent work on the history of insurance, including Sharon Murphy's *Investing in Life* and, on a slightly later period, Dan Bouk's forthcoming *How Our Days Became Numbered*, also combines awareness of the quantitative tools (and biases) of insurers with analysis of the data they left behind.¹⁷ Other recent research on credit, risk and finance has also approached quantitative documents from varied perspectives.¹⁸

The history of slavery, the terrain of some of the most vicious debates between historians and economists, has seen a particular resurgence of interest in numerical practices. Most recently, Justin Roberts's 2013 *Slavery and the Enlightenment in the*

¹⁴ Patricia Cline Cohen, A Calculating People: The Spread of Numeracy in Early America (Chicago: University of Chicago Press, 1982).

¹⁵ For a review of this debate and a discussion of the new ways of reading account books, see Naomi Lamoreaux, "Rethinking the Transition to Capitalism in the Early American Northeast," *Journal of American History* 90, no. 2 (2003): 437.

¹⁶ Tamara Plakins Thornton, "'A Great Machine' or a 'Beast of Prey': A Boston Corporation and Its Rural Debtors in an Age of Capitalist Transformation," *Journal of the Early Republic* 27, no. 4 (December 1, 2007): 567–97; Tamara Plakins Thornton, "The 'Intelligent Mariner': Nathaniel Bowditch, the Science of Navigation, and the Art of Upward Mobility in the Maritime World," *The New England Quarterly* 79, no. 4 (December 1, 2006): 609–35.

¹⁷ Sharon A. Murphy, *Investing in Life: Insurance in Antebellum America*, 1st ed. (The Johns Hopkins University Press, 2010); Daniel B Bouk, "The Science of Difference: Developing Tools for Discrimination in the American Life Insurance Industry, 1830-1930" (Ph.D., Princeton University, 2009). Bouk, *How Our Days Became Numbered*, Forthcoming form Chicago University Press (2015)

¹⁸ Rowena Olegario and ebrary, Inc, A Culture of Credit Embedding Trust and Transparency in American Business, Harvard Studies in Business History 50 (Cambridge, Mass: Harvard University Press, 2006), http://site.ebrary.com/lib/berkeley/Doc?id=10312785; Jonathan Levy and ebrary, Inc, Freaks of Fortune the Emerging World of Capitalism and Risk in America (Cambridge, Mass: Harvard University Press, 2012), http://site.ebrary.com/lib/berkeley/Doc?id=10614093; Cathy D. Matson, Merchants & Empire: Trading in Colonial New York, Early America (Baltimore: Johns Hopkins University Press, 1998); David Hancock, Citizens of the World: London Merchants and the Integration of the British Atlantic Community, 1735-1785 (Cambridge University Press, 1997).

British Atlantic examines the way planters' efforts at improvement –many of them quantitative—reflected and shaped enlightenment ideals. Not only does Roberts draw extensively on numerical records and manuals, he also analyzes the data they contain to illuminate both patterns of labor among the enslaved and the ways planters quantified and analyzed that labor.¹⁹ Roberts's work builds on a longer history of studies of time, recordkeeping and modernization in the American south, most notably Mark Smith's *Mastered by the Clock* and more recently John Majewski's *Modernizing a Slave Economy*.²⁰

Yet another growing body of work explores the aesthetics of quantification and finance. While this work strays farther from the traditional terrain of the economic, sometimes setting aside basic questions about the way things work, it nonetheless engages with quantitative documents in new and provocative ways. In the field of slavery studies broadly defined, Ian Baucom and Stephanie Smallwood have both taken up the question of what is lost in the production of numerical economic records. Baucom's *Specters of the Atlantic* analyzes the tragedy of the slaving ship *Zong*, while Smallwood's *Saltwater Slavery* reads account books against grain, asking what these documents can real about the lives of the enslaved and the nature of the middle passage.²¹ Beyond the study of slavery, Michael Zakim has written of bookkeeping as ideology, exploring the ways seemingly neutral quantitative practices legitimated the values of capitalism and big business during the nineteenth century.²²

¹⁹ Justin, 1975- Roberts, *Slavery and the Enlightenment in the British Atlantic, 1750-1807* (New York: Cambridge University Press, 2013).

²⁰ Mark M. Smith, *Mastered by the Clock: Time, Slavery, and Freedom in the American South* (The University of North Carolina Press, 1997); John Majewski, *Modernizing a Slave Economy : The Economic Vision of the Confederate Nation* (Chapel Hill: University of North Carolina Press, 2009); Lorena Seebach Walsh, *Motives of Honor, Pleasure, and Profit : Plantation Management in the Colonial Chesapeake, 1607-1763*, Colonial Williamsburg Studies in Chesapeake History and Culture. (Chapel Hill: Published for the Omohundro Institute of Early American History and Culture, Williamsburg, Virginia, by the University of North Carolina Press, 2010); B. W Higman, *Plantation Jamaica, 1750-1850 : Capital and Control in a Colonial Economy* (Kingston, Jamaica: University of the West Indies Press, 2008).

²¹ Ian Baucom, *Specters of the Atlantic : Finance Capital, Slavery, and the Philosophy of History* (Durham: Duke University Press, 2005); Stephanie E. Smallwood, *Saltwater Slavery: A Middle Passage from Africa to American Diaspora* (Cambridge, Mass.: Harvard University Press, 2007); See also Saidiya V. Hartman, *Lose Your Mother: A Journey along the Atlantic Slave Route*, 1st ed (New York: Farrar, Straus and Giroux, 2007). And work in progress by Jennifer Morgan.

²² Michael Zakim, "The Business Clerk as Social Revolutionary Or, a Labor History of the Nonproducing Classes," *Journal of the Early Republic* 26, no. 4 (September 11, 2006): 563–603; "Bookkeeping as Ideology," *Common-Place* 6, no. 3 (April 2006), http://www.common-place.org/vol-06/no-03/zakim/; Related to Zakim's approach but further afield from early America, see also Mary Poovey, *Genres of the*

Not all of this research is likely to open up opportunities for collaboration with economists. In particular, work on the aesthetics and ideology of quantification seems unlikely to open up dialogue with economic historians. But these topics are bringing historians to quantitative documents, and there are areas of opportunity. I see two in particular: first, a revival of descriptive research through digital technologies like text mining and mapping, and second, research that explores the significance of quantification as technology, attempting to quantify quantification itself.

A primary barrier to interaction has long been the near obsessive focus of economists on identification and causation at the expense of narrative and description. In 1982, when John McCusker and Russell Menard published *The Economy of British America* they identified the "engine of change" as the "new economic history," the "distinguishing characteristics of which are the explicit application of theory to the past and the testing of hypotheses through statistical analysis." They lamented the fact that "cliometrics has not penetrated very deeply into the history of early British America. Almost all the work in the field now completed and most of that currently under way is descriptive, aimed at measurement and narration, at getting the facts right, rather than at econometric analysis." After the publication of *The Economy of British America*, research in economics veered even more strongly in this direction. At the same time that history departments turned toward the cultural, economists embraced ever more complex econometrics. Top journals in the field have rewarded fancy models over the "careful grubbing in reluctant documents" that characterizes broad, descriptive economic histories like *The Economy of British America*.²³

This trend shows signs of changing, in part because of the availability of new data technologies that enable the aggregation of unprecedented amounts of data. Though the econometric portfolio available to scholars has continued to expand, cutting edge methods also include text mining, new mapping projects, and related opportunities for visualization. As a result a cohort of young economic historians are blending statistical work with more descriptive efforts to analyze very large data sets.

Credit Economy: Mediating Value in Eighteenth- and Nineteenth-Century Britain (Chicago: University of Chicago Press, 2008).

²³ John J. McCusker and Russell R. Menard, *The Economy of British America, 1607-1789, with Supplementary Bibliography*, Institute of Early American History and Culture (UNC Press Books, 1991), 5.

Some of the most exciting research in these areas relates directly to the theme of economics of print and communication. Two prime examples (though neither directly in the field of early American economy) are Jeremiah Dittmar's work on the printing press in early modern Europe, and Richard Hornbeck and David Donaldson's research on railroads in nineteenth-century America. Though all employ complex econometric models, some of the the most compelling aspects of their research involved the compilation of descriptive data sets. Dittmar uses the incunabulum, the record of the approximately 30,000 printed pamphlets and books published with moveable type before 1500. Though a not entirely persuasive instrumental variable – distance from Mainz – surely helped him place the paper in the Quarterly Journal of Economics, the data set also reveals a fascinating portrait of when and where printing first expanded as well as where fascinating pictures of what was published—including a huge cache of bookkeeping and commercial texts.²⁴

Another promising trend is the rise of visualization and mapping technologies. Here a prime example of new research by economists is Rick Hornbeck and David Donaldson's research on the railroads. They frame their findings around revising Robert Fogel's numbers for the impact of the railroads on American economic growth (their answer is "moderately larger"). But more interesting is the way their painstaking digitization of maps offers new opportunities to see where railroads did and did not make a decisive difference in market access.²⁵ One such analysis of regional difference can be found in Jeremy Atack, Fred Batemen, Michael Haines and Robert Margo's research pm the Midwest where they find large regional impacts on growth and urbanization patterns.²⁶ A general shift away from tables and toward figures and maps also has the potential to open up more descriptive work with potential for collaboration.

²⁴ Jeremiah E. Dittmar, "Information Technology and Economic Change: The Impact of The Printing Press," *The Quarterly Journal of Economics* 126, no. 3 (August 1, 2011): 1133–72, doi:10.1093/qje/qjr035.

²⁵ Robert William Fogel, *Railroads and American Economic Growth: Essays in Econometric History* (Johns Hopkins Press, 1964); Dave Donaldson and Richard Hornbeck, *Railroads and American Economic Growth a "Market Access" Approach*, ed. National Bureau of Economic Research, NBER Working Paper Series, no. 19213 (Cambridge, Mass: National Bureau of Economic Research, 2013), http://uclibs.org/PID/20782/w19213.

²⁶ Atack, Jeremy et al., "Did Railroads Induce or Follow Economic Growth?," accessed October 3, 2014, http://ssh.dukejournals.org/content/34/2/171.abstract.

Another promising area of economic research explores the rise of numeracy and quantification itself. Since Joel Mokyr's work on the Irish famine used over reporting of ages on the 5 and 10s digits to assess human capital, a series of economic historians have used "age heaping" to estimate levels of numeracy. The logic proceeds as follows: early censuses and other varieties of document where people report their ages tend to dramatically over-report ages rounded to the 5 or 10s, a pattern which diminishes over time. Comparing age heaping ratios offers an opportunity to assess broader levels of quantitative sophistication in a society. Age heaping may not be the most persuasive metric for numeracy, broadly conceived—it's not clearly superior than flawed but still informative approaches like counting signatures to judge literacy. It does offer a way to estimate adeptness at counting, and perhaps more importantly represents a critical posture to the numbers themselves, asking what data errors can tell us about numerical preferences and practices.²⁷

Are these areas of promise likely to bear fruit? Not all of the signs point in that direction. I recently spoke to a group of economists on a similar theme, and I mentioned two books published in the last two years, both already winners of numerous prizes. I have heard historians describe these texts as economic histories or, more often, histories of capitalism. None of the economists in the audience was even distantly familiar with Walter Johnson's *River of Dark Dreams* or Jonathan Levy's *Freaks of Fortune*.²⁸ The charge, of course, can be leveled both ways. Neither Levy nor Johnson cites much recently scholarship written by economists, with the most glaring omission Johnson's neglect of Paul Rhode and Alan Olmsted's *Creating Abundance*, which explores biological innovation in American agriculture including cotton.²⁹ And, perhaps with the

²⁷ Brian A'Hearn, Jörg Baten, and Dorothee Crayen, "Quantifying Quantitative Literacy: Age Heaping and the History of Human Capital," *The Journal of Economic History* 69, no. 03 (2009): 783–808, doi:10.1017/S0022050709001120; Kerstin Manzel, Jeorg Baten, and Yvonne Stolz, "Convergence and Divergence of Numeracy: The Development of Age Heaping in Latin America from the Seventeenth to the Twentieth Century" 63, no. 3 (August 2012): 932–60; Joel Mokyr and Cormac Ó Gráda, "Emigration and Poverty in Prefamine Ireland," *Explorations in Economic History* 19, no. 4 (October 1982): 360–84, doi:10.1016/0014-4983(82)90008-0.

²⁸ Walter Johnson, *River of Dark Dreams: Slavery and Empire in the Cotton Kingdom*, 2013; Levy and ebrary, Inc, *Freaks of Fortune the Emerging World of Capitalism and Risk in America*.

²⁹ Alan L. Olmstead and Paul W. Rhode, *Creating Abundance: Biological Innovation and American Agricultural Development* (Cambridge University Press, 2008).

exception of Thomas Picketty's *Capital for the 21st Century*, historians generally aren't taking much notice of big books in economics either.

But if collaboration is still limited, the opportunities are there, particularly as historians turn toward the digital humanities. New mapping and text mining efforts have the potential to generate fruitful areas of collaboration. Economies of print and communication will be a prime area for overlap, and PEAES is poised of facilitate opportunities for interaction, collaboration, and perhaps a bit more guerilla warfare.

Figure 1. West Indian Methods "Suited for a Southern Plantation"

OURS	(AL	OF PLAN	TAT	ION															
	Month.										NEG	ROES					_		-
Days		State of	18	THE	FIE	LD.												_	
af he	of the	the				1		1.	ien i	E.	1	1.	1	1			1.	1.	
reek.		weather.	÷.	ometh	50		obbing	Ginning.	Tradesmen	vanis		hvalids.	Nurses.	stock inder	bsent.	nfants.	herease	ecrease	! _
	Day	1	Men	Nº.	Boys.	irls.	202	12	2	<u> </u>	Sick.	The second	1	× 2	- E	- a	1.5	eer	

JOURNAL OF PLANTATION.

<u> </u>	NEGRO ACCOUNT.					1	¢A	TTLE A	.000	UNT		_			-14	P
r H				Men.	Women. Boys. Girls. Total.				Horses.	Mules.	Cows.	Alves.	Sheep.	Jg3.	Josts.	Cotal.
On hand, Increase,	2	-	:			On band, Increase,	-	-	F			Ĩ	-			
Total, Decrease,		-				Total, Decrease,	-	-	-		ſ	F				
Remain,		-	-			Remain,	-	-	-			-		-	-	

LAND AND CULTIVATION.

Acres land cleared,	-		-	Acres in cotton,			
Acres land in wood,	-		-	Acres in corn,			•
Acres in pasturage.	-		-	Acres in rice,	-	•	•
Acres land barren.			-		-	-	-
contract country	-	•	-	Acres in grain,	•		
Total land.	-			Acres in polatoes,	-	-	
	_		-		-	+	-
PLANT	ED THIS	MONTH.		 Orchards and gardens 	, -		-
Acres of corn.	-			T			
	-	-	-	Total cultivation,	-		
Acres of cotton,	-		-	Acres vacant,	-	-	
Acres of rice,						•	•
Acres of potatoes,	-		-	1			
mereo or poundes,	-	-	•	Total cleared land,	-		-

CROP HARVESTED.

		and the second se			 	_
Bushels of corn, Bushels of peas, Bushels of oats, Bushels rye or wheat, Pounds of fodder, Pounds of hay, Bushels turnips,		 Pounds raw cotton, Pounds clean cotton, Bushels raw rice, Pounds of pork, Pumpkins, Bushels potatoes,	-	-	-	

Figure 2. West Indian Methods "Suited for a Southern Plantation"

1835.]	FARMERS' REGISTER.		165
FOR THE MONTH O	P	183	
Pounds of cotton picked per diem.	EMPLOYMENT AND REMARKS.		
	4		_

CONSUMPTION AND EXPENDITURE.

-

	CONSUM	ED	THIS MONT	гн.		RECEIVED THIS MONTH.				
	Feedin	g N	legroes, via	i :		From				
Corn, (No.					-					
Potatoes, D		-	-	-	-					
	la.	-	-	-						
Salt, D		-	•							
Bacon, (No		•	-	-						
	Do.	-	-	-	-					
Fresh beef,		-	-	•	-					
Salt fish,		-	-	-	-					
Tobacco,		•	-	-	-					
Molasses, (galls.)	•	•	-	•					
	FEEDIN	G MI	ULES, &C.	viz:		-				
Corn, (bush			-	-	-					
	0.	-	•	-	-					
	ю.	•	-	-	-					
Turnips, D		•	-	-	-					
	ю.	-	-	•						
	o.	-	-	-	-					
Salt, D	ю.	-	-	-	-	1				
the state of the s		_			A REAL PROPERTY AND ADDRESS					

GENERAL REMARKS, &c.

Figure 3. Records for Plantation Hope and Experiment, 1812 (front) Figure 4. Records for Plantation Hope and Experiment, 1812 (back)