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# Managing the Farm

## Bullshit in Theory and Practice

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**ABSTRACT** “Management” is routinely understood by agricultural historians as an exercise in rational expertise, targeted at driving ever more efficient, “businesslike” practices on the farm. However, insights from critical management studies suggest that farm management, as a body of theory and as a form of practice, may be grounded in something less savory than epistemological superiority or the ability to improve farming practice. This article explores how the meaning of farm management changed substantially over the course of the twentieth and early twenty-first centuries, from a pragmatic approach for empowering individual farmers to a more abstract set of theories offering a chimera of control.

**KEYWORDS** *farm management, critical management studies, agricultural economics*

A FEW YEARS AGO, through a series of circumstances not entirely under my control, I found myself teaching in a management school. One consequence of this shift was that I suddenly had to make a deep dive into the history of management. Historians who have not had a similar experience might be surprised to know there are several very well respected and widely read textbooks and monographs on the history of management.<sup>1</sup> Many such textbooks begin with an etymological exercise, noting that the English word *management* derives from the Italian *mano* (for hand) and, by extension, *maneggiarre*—the activity of handling a horse. Within the context of a management school, the (self-serving) implication of this etymological claim is that “to manage” is to subtly exercise control over a willful beast, to work *with* the subordinate to arrive at a mutually beneficial destination.

Two very different definitions of *management*, however, appear in the *Oxford English Dictionary*, and neither is quite so flattering. One equates management with the process of manuring farmland, or literally with the manure itself.<sup>2</sup> A second defines management as a form of “cunning, manipulation, or trickery.”

In other words, management can be understood as *bullshit*.<sup>3</sup>

There is a stream of critical management studies literature that reflects on the ways in which management, as a discipline and as a practice, often functions as a means of making more money, without necessarily producing real social or economic value.<sup>4</sup> Ellen O'Connor, for instance, has argued that there is no clear definition of “management”—it is, she insists, an “institutional fiction” generated by the higher education market of the mid-twentieth century. Rakesh Khurana similarly traces contemporary problems with management to the mid-twentieth century, seeing a rise in the 1960s of a market-focused economic instrumentalism that was at odds with earlier efforts to define management as a socially legitimate profession.<sup>5</sup> David Graeber’s theory of “bullshit jobs” devotes many pages to the pointlessness of many roles described as management.<sup>6</sup> Indeed, one of the most insightful critiques from this literature is that—far from being manure in a concrete, physical sense—management has become increasingly abstract, detached from meaningful work, and inapplicable to real-world problems. As summarized by critical management scholar Dennis Tourish, management is, in effect, “nonsense.”<sup>7</sup>

Being exposed to this literature—most of which, I should note, is written by scholars employed in business and management schools—has been rather jarring for me, particularly when I think about my training as an agricultural historian. It is my sense that in agricultural history, management is routinely interpreted as an exercise in rational expertise—the extension of power over people and animals and landscapes, derived from assumptions of epistemological superiority, and targeted at driving ever more efficient, “businesslike” practices on the farm.

This version of farm management was famously portrayed by artist Davis Meltzer, who in 1970—“with the guidance of U.S. Department of Agriculture specialists”—envisioned the “farm of the future” as one in which farming is orchestrated from within a “bubble-topped control tower [that] hums with a computer, weather reports, and a farm-price ticker tape” (see fig. 1).<sup>8</sup> Technology, in this vision, has replaced farmworkers—but not the farmer. The farmer, ensconced in his bubble, exercises godlike control over the machine-dominated landscape stretching to the horizon. This is a technoscientific vision of management—a data-driven application of brains, not brawn, to dominate the natural world. Our farmer presumably never even smells the many tons of manure being produced in the cattle condos to the right of the picture.<sup>9</sup>

A fantastical image, to be sure. But the claims to the power of management that are embedded in such a visual have, I think, been taken very seriously by



FIGURE 1. Computer-aided farm management of “the future,” as envisioned by artist Davis Meltzer for *National Geographic* magazine in 1970.

agricultural historians—even when, or perhaps especially when—we critique the ethics of such a vision. As a field we routinely refer to management as rational, a means by which control can be exercised—whether over irrigation systems, wildlife, livestock, or over dirt farmers being targeted by purveyors of a “gospel of efficiency.”<sup>10</sup> In its purest form, according to Deborah Fitzgerald, farm modernizers of the early twentieth century pushed managerial expertise as a replacement for artisanal knowledge, with management serving as “an ideology of farm modernization,” pushing agriculture into a “quasi-industrial rubric” in the wake of the post–World War I farm crisis.<sup>11</sup>

But what if we take a hint from critical management studies and dwell a bit more on the possibility that—as no less an authority than the *Oxford English Dictionary* would have it—management may ultimately be grounded in something less savory than rationality or expertise? After all, the central premise of the discipline of farm management is that it can generate greater farm profitability. Yet how do we know if farm management actually works—as opposed, say, to luck, or to structural factors largely beyond the control of individual farm managers?<sup>12</sup> What, ultimately, does it mean to manage a farm? More specifically, how has the meaning of farm management changed over the course of the twentieth and early twenty-first centuries?

One thing that agricultural historians know, but that management scholars often ignore, is that important concepts, terminologies, and practices of management have regularly emerged from agricultural circumstances rather than offices or factories. Martin Giraudeau’s sweeping account of the “farm as accounting laboratory,” notes among many other examples that medieval

European livestock owners developed precise recordkeeping techniques.<sup>13</sup> Michael Scorgie locates the rise of modern accounting and industrial management techniques in the efforts of preindustrial agents, acting on behalf of lords of great English estates, who developed innovative methods to control “agricultural activities.”<sup>14</sup> Most agricultural historians are familiar with nineteenth-century texts promoting “scientific farming,” a means by which landowning elites could use knowledge of manuring and rotation methods (i.e., management) to maintain a stable society with a rigid social hierarchy. Of course, even in their own time, such treatises were routinely treated with circumspection.<sup>15</sup> An 1813 text promoting the “Norfolk System of Husbandry,” for instance, declared the system was “imperfectly understood” because, of the “Treatises which have been written on the subject . . . few, if any, have been from *real* practice.” The text goes on to insist that management was in fact core to the Norfolk system, but not as mere theoretical knowledge. Especially when overseeing harvest labor, “spirited management” was an embodied, “*real* practice” that was necessary to prevent farmworkers becoming idle.<sup>16</sup>

Indeed, while management certainly meant something concrete in the nineteenth century, and often in relation to agricultural practice, it also increasingly came to take on one of its more dominant contemporary connotations: the exercise of power and control over a large workforce. Several scholars have argued convincingly that the roots of professional management first took hold on American antebellum slaveholding plantations, not in industrial factories. In the United States, as Bill Cooke has noted, the thirty-eight thousand antebellum slave overseers recorded in the 1850 census were among the first to explicitly call themselves managers, well before the rise of the very large railroads that Alfred Chandler pointed to as the organizational birthplace of the “visible hand” of professional management.<sup>17</sup> A history of management that begins with violence and exploitation reads very differently than one that begins with rationality, productivity, and industrial progress.<sup>18</sup>

Management has never been merely the preserve of the office or factory. Yet at least since the late nineteenth century, English has routinely used “farm management” to distinguish what happens in agriculture from the manure being spread elsewhere. As suggested by the importance of management for preserving the imbalance of power on slaveholding plantations, many of the initial usages of farm management were focused on labor control and discipline. The US census first created an occupational category for farm manager in 1910 as part of an ongoing effort over the preceding four decades to

delineate the social hierarchies of rural society more carefully. The 1870 and 1880 censuses gathered more data about who was “involved in agriculture” than had previous censuses, but it was not until 1890 that enumerators were specifically instructed to distinguish between farmers, farm laborers, and a third category called “farm or plantation overseer,” interchangeably called a manager. Somewhat confusingly, however, the 1900 census also noted that any person (including a woman) who earned most of their income “by managing a farm” was to be counted as a “farmer” by occupation. In 1910, the occupation of “farm manager” became formalized as someone who managed a farm “for some one else for wages or a salary.” The class interests of farm owners and managers were thus united in contradistinction to farm laborers.<sup>19</sup>

But by 1910 the reality on the ground was that relatively fewer American farms were being managed by a distinct class of salaried professionals.<sup>20</sup> As Adrienne Petty has noted in the context of North Carolina, the first decade of the twentieth century did not witness the demise of small, wholly owned and operated farms but instead saw their rather rapid rise. In parallel with the continuance of tenancy and a landless rural proletariat, small commercial farms became increasingly important to the rural economy. In these small rural enterprises, farmers both owned the means of production and “made day-to-day decisions about the farms themselves,” exercising a degree of control particularly meaningful for African American landowners.<sup>21</sup> In the world of the urban industrial corporation, the space between management and ownership was becoming increasingly distinct, with operational control divorced from the proprietary interests of shareholders—an increasingly vexing problem for corporate governance in the twentieth century.<sup>22</sup> On the farm, however, the distinction between farmer and farm manager seemed to be collapsing. Petroleum-powered mechanization enabled many grain farm owners to reduce their reliance on migratory seasonal labor, while growers of more labor-intensive fruit, vegetable, and specialty crops increasingly contracted labor management out to third parties, whether in the private sector (e.g., *padrones*) or governmental sector (e.g., the Bracero Program).<sup>23</sup> An understanding of farm management as a form of nonwage work, tied to the land, was implicit in the 1920 instructions to census enumerators, which called for special attention to the “farm operator” as someone who “directly works a farm, as owner, hired manager, tenant, or cropper.”<sup>24</sup>

It was in this context that a self-proclaimed “science” of farm management arose in the early twentieth century, aimed not primarily at professional managers but at those who actively worked the land, as either small farm owners or aspiring owners. This took institutionalized form via the Office of Farm

Management, launched in 1904 in the USDA's Bureau of Plant Industry. Under the leadership of William J. Spillman, the new science was squarely aimed at providing pragmatic guidance to small farmers. Spillman defined farm management in 1903 not primarily as a matter of disciplining or exploiting laborers but as a means of fusing knowledge with practice to generate profitability, soil sustainability, and to "[bring] to the farmer and those dependent on him the largest measure of happiness."<sup>25</sup> Spillman further insisted that such knowledge, rather than coming from highfalutin experts, was often the result of successful innovations by individual farmers. The task of government researchers and demonstrators was to spread this knowledge far and wide.

Spillman and others who promoted farm management found increasing purchase in their approach before World War I. County agents demonstrated techniques such as cost accounting across the country, while land-grant universities including Cornell, Missouri, and Wisconsin pioneered new degree courses in farm management. By 1914 farm management was institutionalized as a component of the Federal Extension Service in the Smith-Lever Act.<sup>26</sup> Indeed, one way of conceiving of the institutionalizing of agricultural knowledge-sharing in this period is as a "managerial revolution" devoted to organizational learning—one taking place not in a vertically integrated corporation, but instead within a nationally coordinated network, as Louis Ferleger has argued, that produced "competitive advantage" for American agriculture over other nations.<sup>27</sup>

Early twentieth-century promoters of farm management insisted that it was a science—but there remained a remarkable humility and pragmatism in the field. A 1907 bulletin on poultry management noted, for instance, that most of its prescriptions were common sense without the need for "hard and fast rules."<sup>28</sup> In 1912 Spillman addressed the question "What is farm management?" and while noting that it was a "new science" devoted to systematic development of knowledge, he also insisted that it was "a very different thing" to develop a scientific fact in a laboratory versus "work[ing] out its application in practice." Spillman noted by example that whereas the science of agronomy sought the one best way to treat a crop, the science of farm management was "concerned with how to get the work done," with special consideration of "a crop from the standpoint of its requirements as a living, growing thing."<sup>29</sup>

Far from eliminating artisanal, embodied, tacit knowledge, this science of farm management envisioned the farmer as an empowered individual making choices based on personal experience as well as abstract knowledge. Many of



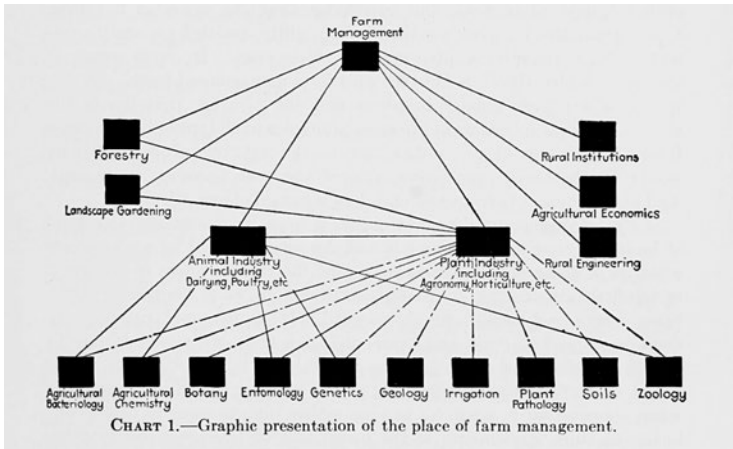


FIGURE 2. A 1921 textbook depiction of farm management as an integrative approach, combining both theoretical and practical knowledge.

those managerial choices continued to revolve around the most effective way to spread manure. Take, for example, a 1916 bulletin on the management of muckland farms that framed the manuring issue as one of carefully balancing choices, requiring consideration of multiple factors include acreage, soil fertility, labor requirements, and profitability of specific crops.<sup>30</sup> This approach to management was a world away from the “one best way” approach to “scientific management” that was promulgated in industrial manufacturing contexts at the same time by Frederick Winslow Taylor and his disciples.

All of which raises the question whether farm management is, on the one hand, an *act or process* or, on the other hand, a *body of knowledge*. There is, after all, a world of difference between learning how to apply livestock manure most effectively in practice—that is, developing an effective process of management—and advocating for, as Gabriel Rosenberg has critically explored, the racial management of human populations based on “scientific” experiments with livestock breeding.<sup>31</sup> To paraphrase Alexander Pope, a little knowledge can be a dangerous thing.

A 1921 text on farm management addressed the issue of practice versus theory directly, declaring that there was a “clean-cut distinction” between “the practice of farm management” and the abstract gathering of “scientific findings.” Despite the distinction, the textbook author insisted that both practice and knowledge were equally balanced in the discipline of farm management.<sup>32</sup> An image from the textbook (fig. 2) nicely captures this sense of farm management as an integrative balance between embodied processes of putting knowledge into practice—forestry, gardening, animal industry,

irrigation—as well as more theoretically oriented “ologies,” such as bacteriology, botany, geology, pathology, and zoology.

This question of abstract knowledge versus embodied practice continued to bedevil the discipline of farm management for decades after the Office of Farm Management was absorbed into the Bureau of Agricultural Economics in 1922.<sup>33</sup> Through the 1920s and 1930s, as farm management came to be more closely wedded to agricultural economics, there was a notable tilt toward theoretical knowledge. Farm management bulletins insisted, for instance, on the importance of farm budgets—not just as guides to greater profitability and efficient use of resources but as a form of epistemological magic. Budgets promised to predict an unknowable future—no mean feat, and certainly not one to be achieved through mere common sense. Problematically, however, as the “Farm Budgeting” bulletin of 1928, reissued in 1938, noted, real-world “conditions affecting farm returns are continually changing.” Accounting for rapidly changing prices, yields, and technologies was to some extent an exercise in fiction, of narrating a desirable, if perhaps unobtainable, future.<sup>34</sup>

My reading of dozens of farm management textbooks and bulletins covering the entire twentieth century suggests to me, however, that for a surprisingly long period, proponents of farm management emphasized not a disciplinary, coherent body of knowledge but instead very pragmatic, socially embedded ways of being a farmer. Management was routinely depicted as a process, and a very human one at that, well into the 1940s. Often this took the form of promoting management as a marker of social capital. Business records enabled poultry growers not only to seek efficiencies but also to prove their creditworthiness to lenders.<sup>35</sup> Cost accounting enabled farmers to rank themselves in comparison to their neighbors on specific criteria, such as rates of livestock production or diversification of enterprises, in order to know one’s place in the rural social hierarchy.<sup>36</sup> A 1946 textbook emphasized that in a world of overall higher average agricultural productivity, “a high degree of skill and managerial ability” was required for farm success. The same text, however, also noted that running a farm took more than just planning, data analysis, and budgeting—it also required “technical ability” and “mechanical skill” as well as interpersonal skills to “mak[e] the most effective use of available labor” without direct supervision.<sup>37</sup>

Such ministrations often took a moralistic tone, suggesting that a farmer who had access to reliable knowledge but failed to put it into effective practice was a failure at business.<sup>38</sup> In this sense, managing the farm was about engaging in “business.” Not business in the abstract sense of organizations seeking profit, but rather in the Puritanical sense of keeping busy, as moralized by



the classic folk song “The Boy Who Wouldn’t Hoe Corn” (also known as “A Lazy Farmer Boy”): “Why do you come for me to wed? You can’t even make your own corn grain.” Integrating the social dimension of farm management into the moral of the story remained common; as one 1963 USDA bulletin insisted, “In farming more than in any other occupation, the home is closely linked with the business.” Making money was not the sole purpose of farm management: “The song of the lark in the fragrance of a calm sunny morning may outweigh in the farmer’s book of debits and credits the metallic clink of a few extra dollars.”<sup>39</sup>

But increasingly from the late 1940s on, economic theory infiltrated the discourse of farm management, promoting management as a form of intellectual capital, a way of knowing rather than a way of being. Economists such as Earl O. Heady criticized the first generation of farm management researchers for emphasizing farm accounting over structured data analysis. What was needed was formal models, ideally rooted in production economics, that would reveal fundamental principles. A 1949 workshop in Blackduck, Minnesota, produced heated arguments between the pragmatists and the theoreticians, with the theoreticians triumphing. Through the 1950s and 1960s, farm management research was increasingly influenced by neoclassical economic theory.<sup>40</sup>

It is worth noting that general management, outside the world of farm practice and research, also took a strong turn toward neoclassical economics in this period. A pair of 1959 reports commissioned by the Ford and Carnegie Foundations lambasted American business schools for failing to integrate the discipline and rigor of quantitative sciences into their curricula. Business schools across the United States responded with gusto, increasingly hiring professors with PhDs in quantitative fields, primarily economics.<sup>41</sup> Strategic management, as highlighted by the work of Igor Ansoff, increasingly drew on high-level mathematics, such as the systems analysis developed at the RAND Corporation in the early Cold War. Ansoff’s 1965 text *Corporate Strategy* laid the groundwork for the school of rational planning that took corporate America by storm in the 1960s and 1970s. Premised on rigorous application of formalized concepts and theories, and presented in the form of “exhaustive . . . lists, boxes, diagrams, matrices, charts, and timelines,” Ansoffian prescriptions were so complicated they required corporations to invest in specialized strategic planning divisions atop the corporate hierarchy.<sup>42</sup>

Some business schools, including Harvard, integrated mathematics-heavy economics concepts into new programs in “agribusiness management.” Agribusiness programs were distinct from farm management, as they did not

target actual or future farmers but instead sought to train future leaders of the vertically integrated corporations responsible for producing farm inputs, processing farm outputs, and marketing and distributing food and fiber to consumers. The economics-driven management theories of the period unashamedly prioritized the interests of big businesses, as exemplified by the late 1970s rise to prominence of Harvard's Michael Porter, who openly advocated monopoly power as a path to "supranormal profits."<sup>43</sup>

Meanwhile, within farm management in the 1960s and 1970s, the "physics envy" rampant among economists of the time drove an increasing push for abstraction. In what has been called "the most influential paper ever to appear in the *Journal of Farm Economics*," for instance, Yair Mundlak developed a "fixed-effect model" to explain "differences in unobserved managerial ability when estimating a Cobb-Douglas production function." Modeling and transforming data on farm production to enable application of classical regression techniques produced an estimate, according to economists, of exactly how much "managerial ability" was responsible for a given outcome.<sup>44</sup> This was a level of mathematical prowess seemingly far more powerful than the epistemological magic previously promised by advocates of farm budgeting.

Other farm management theorists, meanwhile, worked to deduce the number of essential "functions" of effective farm management. Debates of the 1960s raged over whether there were five or six. By the 1980s, theorists would settle on just three: planning, implementation, and control. One thing that seemed increasingly certain was that "management" was not itself a thing or process but instead an abstract summary of a set of decisions. As influential theorist G. L. Johnson put it, "I have never observed a dairy cow eating or consuming management." According to Johnson, farm management was nothing more than the "controller of which, how much, when, and under what conditions inputs will be used in production functions."<sup>45</sup>

Such thinking led to ever more prescriptive models of farm management in the 1970s, increasingly drawing on linear programming and simulation modeling.<sup>46</sup> Not only was the farmer's "management" increasingly abstracted, but the farmer as a person also seemed to be a problematic element of "noise" in the equations. Take Ramesh C. Agrawal and Earl O. Heady's 1972 tome *Operations Research Methods for Agricultural Decisions*. The introduction to the text bemoaned the fact that small farms (unlike large corporations) could not afford "their own planning and economic experts," which led to a large "number of farmers making plans and committing resources" inefficiently. Operations research techniques, according to Agrawal and Heady, would solve the problem. All one needed to implement them was "a conventional

course in calculus” and familiarity with “the classical operations of matrix algebra.” Presumably a supercomputer would also be of benefit.<sup>47</sup>

Farm management textbooks followed suit, increasingly depicting the process of management as a cybernetic feedback loop of information processing—“a continuous cycle of planning, implementation, monitoring, and recording progress back to a re-evaluation of the plan and the implementation procedures using the new information obtained through the control function.”<sup>48</sup> Diagrams of such feedback loops had no space for manure. Indeed, one might wonder, could a farmer implementing such an abstract process “make their own corn grain?” It turns out that I am not the first to ask this question. One economist, engaging in a debate over the definition of “farm management” in a 1981 article in the *Journal of Agricultural Economics*, quoted a 1951 article titled “The Teaching of Farm Management”: “Although usually quite incapable of managing a farm himself, the agricultural economist does not hesitate to draw conclusions (often quite the wrong ones) from these analyses.”<sup>49</sup> This specific critique was raised in a debate about whether reigning definitions of “farm management” as of 1981 were effectively tautological—for example, that “farm management is what farmers do.” From this perspective, according to farm management theorist John Dillon, too many researchers had confused their economic analyses with the actual processes of managing a farm.<sup>50</sup>

To be sure, even in the 1980s many proponents of farm management continued to subscribe to the older, more pragmatic approach. Members of the University of Georgia’s Extension Farm Management Department, for instance, circulated “common sense” advice to local farmers in the 1980s. Tips included avoiding “unnecessary trips across the field or to town” to minimize outlays at a time of inflation and continuing the cost-accounting practices promoted by W. J. Spillman and his followers many decades earlier.<sup>51</sup> Some extension economists who set out to introduce farmers to more abstract theory—such as concepts of risk management—found their would-be students readily understood the core ideas (having already put many of them into practice) but remained skeptical of theory for theory’s sake, dismissively asking, “How can I use this information to make money?”<sup>52</sup>

In theorizing farm management as a constellation of decisions, economists of the 1960s onward imagined farmers as *Homo economicus*, capable of making rational decisions if given all relevant information. The premise of a diagram depicting farm management as a feedback loop was straightforward: plan appropriately, implement effectively, and farming will be under control. From this premise flowed a consequence: the theoretical distinction between

farming and management increasingly collapsed. From the 1980 census onward, the difference between farmer and farm manager was increasingly elided. Indeed, the most recent US census occupational codes list includes “farmers, ranchers, and other agricultural managers” under the broader category of “management occupations.”<sup>53</sup>

Yet the cruel irony of all this was that by the end of the twentieth century, most farmers had less autonomy over decision-making, planning, or control than ever. In what could be described as a process of “chickenization,” farmers have been increasingly tasked not with planning and implementing decisions within a self-contained “farm system” (as imagined by 1980s farm management theorists) but instead as contractors within a network of corporate entities striving to distribute production and price risks. As one informant recently explained, “As contract poultry growers, you learn to exist on what you can get. There’s still a lot of management decisions that we don’t make, [that] somebody else makes.”<sup>54</sup> Financialization, capitalization, and other structural changes mean that on-farm management decisions account for less and less of the actual productivity of an individual farm.<sup>55</sup>

In the last three decades of the twentieth century, two key transformations emerged as responses to the recognition that individual farmers, as managers, had severely restricted autonomy to make optimal decisions. One is the rise of risk management as a discourse in both agricultural practice and policy. The concept of risk management emerged first in corporate practice in the 1950s, as a means of internalizing procedures for minimizing hazards and thus avoiding the rising costs of market-based insurance. In the 1960s and 1970s, new modes of financial risk management enabled certain corporations to navigate increasingly wild fluctuations in commodity prices, interest rates, and exchange rates.<sup>56</sup> Early proponents of integrating these corporate techniques into agriculture likewise based their arguments on the widespread instability faced by farmers, particularly in the wake of the 1972–73 season, when grain price shocks, coupled with President Nixon’s efforts to dramatically transform American farm policy, exposed agriculturalists to global economic complexities far beyond their control.<sup>57</sup> Farm management extension agents promoted risk management in the 1970s and 1980s as a means of regaining control in a chaotic economic environment. This included adoption of tools such as crop insurance, futures market hedging, and diversifying business units across disconnected price cycles.<sup>58</sup> In 1994 the USDA established a Risk Management Agency, and within two years the amount of federal money spent on crop insurance had tripled compared to the 1980s. Financialization of farmers’ understandings of risk promised greater control

but was fundamentally premised on the only real certainty in agriculture—namely, that farming is a uniquely uncertain enterprise.<sup>59</sup> Risk management started out as a set of corporate, technical calculations. By the early years of the twenty-first century, agricultural risk management had become embedded in the social fabric of farming, “central to farmers’ ability to hold on to their land, their lifestyle, and their sense of self.”<sup>60</sup> Yet it also remained a set of technical calculations, derived first from abstract economic theory rather than farmers’ own personal experiences.

The second transformation of the latter years of the twentieth century was the rise of so-called precision agriculture. Precision ag is often touted as a means of achieving “sustainability” based on its capacity for maximizing the ratio between inputs—chemicals, seeds, labor—and ultimate yields. Yet in practice the agribusiness firms that have pioneered precision ag—including John Deere, working with Monsanto in the early 2000s—have primarily marketed their platform services to farmers as revolving around the provision of data as a path to greater autonomy. As one report on Monsanto’s work noted in 2011, “Monsanto has been developing tools to bring data to growers to help them [gain] confidence in seed choice.”<sup>61</sup> Syngenta has likewise in recent years promoted its products as empowering, calling their platform not “precision ag” but “decision agriculture” solutions: “The premise behind decision agriculture versus precision and I would also add, you know, we, we have customers that want the insights but, either through a lack of time or skill, you know, aren’t necessarily technically adept to create the dashboard views that they want or to put the data in that they wish to have.”<sup>62</sup> Compare this statement to the earlier quote from a 1946 textbook, in which farm management experts continued to insist that having “technical skills” was one of the most important elements of managing a farm. In the world of precision ag, it seems, farmers are not expected to have those technical skills but instead must purchase them from a multinational agribusiness—whether it’s Syngenta or Monsanto’s new corporate parent Bayer. “Confidence” in decision-making is apparently now a commodity for sale, not something to be learned from either experience or USDA bulletins.

But in fact, as recent class-action lawsuits regarding an alleged “right to repair” John Deere’s “smart” tractors indicate, quite a few farmers continue to think that their own “technical skills” are in fact quite valuable. One can also look at Farmhack.org, where farmer-programmers have developed, for instance, a set of open-source Drupal-based tools called farmOS to help farmers pursue their own, royalty-free digital agriculture solutions.<sup>63</sup> Ultimately, although advocates of precision agriculture promote sustainability, their

primary strategy is one of commodifying information, positioning agribusiness managers as the key decision-makers rather than farmers themselves.<sup>64</sup>

For much of the twentieth century, the central premise of farm management was that farmers, as individuals, could put theory and knowledge into practice to gain control over the inherent unpredictability of the farm. More elaborate theories emerged by the latter twentieth century, offering the chimera of more control at the expense of lost individual autonomy. Farm management, much like corporate management, increasingly trained people to think in abstract financial terms, “performing theory” (in the words of Donald MacKenzie).<sup>65</sup> Or, as the imagery of precision agriculture seems to suggest, farm management entails embodying the market—becoming one with the cloud of data—rather like the financiers in Karen Ho’s ethnography of Wall Street, who think of themselves as “liquid” commodities rather than employees. Those same financiers, not coincidentally, routinely describe their work to Ho as being centered on “bullshit”: that is, convincing their corporate clients that their advice—which is always to restructure—is valuable and essential.<sup>66</sup>

In the wider world of nonfarm management, the consequences of becoming too tightly wedded to mathematicized, marginalist economics has increasingly come under attack. This is particularly true since the global financial crisis of 2008–9, which many commentators within and without the world of management studies attributed to the failure of financial managers to conceive of the human consequences of their decisions. From this perspective, the instrumentalist market-think that has infiltrated management theory and practice since the 1970s seems very much in line with the *Oxford English Dictionary’s* definition of *management* as “cunning, manipulation, or trickery.” Indeed, in the wake of the global financial crisis, the Carnegie Foundation commissioned a new report, *Rethinking Undergraduate Business Education*. Often referred to as “Carnegie II,” the 2011 report reversed the position laid out in 1959, this time lambasting business schools for treating management as merely the realm of economics. Its authors called instead for more training in liberal arts and humanities fields, to generate capacity for synthesis as well as analysis, for empathy and sense-making rather than calculative decision-making. The response has been substantive, if not entirely transformative. Art, novels, poetry, and history have increasingly been used to teach in a wide variety of business and management subfields, including entrepreneurship, human resources, organizational behavior, and strategy. I have done so myself, running a course titled “Business Humanities” with my colleagues Stephen Linstead and Simon Mollan at the University of York.<sup>67</sup>



To my knowledge, however, there is currently no similar movement afoot in farm management circles. There is no stream devoted to “critical farm management studies” at either the annual meetings of the American Society of Farm Managers and Rural Appraisers or the Agricultural and Applied Economics Association. “How can I use this information to make money?” remains the implicit question undergirding most farm management research and theory. Whether such a framing holds true to W. J. Spillman’s 1903 definition of farm management as a means to achieve “the largest measure of happiness,” I would suggest, is a question that remains worthy of further consideration.

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## Notes

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1. Wren and Bedeian, *Evolution of Management Thought*; Wilson and Thomson, *Making of Modern Management*; Witzel, *Management History*.

2. The *Oxford English Dictionary* attributes the “manure” understanding to British regional dialects, focusing on Lincolnshire. *Oxford English Dictionary*, 3rd ed., s.v. “management,” i.e. However, some of the earliest USDA farmers bulletins refer specifically to the “management of manure” as a core practice of prudent farm management. See Beal, *Barnyard Manure*.

3. Here I take some license with Harry G. Frankfurt’s insistence that bullshit is an elevated form of trickery that goes beyond mere lying, into the realm of ignoring the existence of truth. See Frankfurt, *On Bullshit*.

4. Parker, *Shut Down the Business School*; Ghoshal, “Bad Management Theories”; Hambrick, “Field of Management’s Devotion to Theory.”

5. O’Connor, *Creating New Knowledge in Management*; Khurana, *From Higher Aims to Hired Hands*.

6. Graeber, *Bullshit Jobs*.

7. Tourish, “Triumph of Nonsense in Management Studies.”

8. Jules B. Billard, “The Revolution in American Agriculture,” *National Geographic*, February 1970, 184–85.

9. James C. Scott’s reading of this image is one of “simplification of the landscape and centralization of command”—a critical perspective that nonetheless accepts the managerialist claim to knowledge as power. Scott, *Seeing like a State*, 271.

10. Vail, “False Gospels of Efficiency”; Swanson, “Growing Wild.”

11. Fitzgerald, *Every Farm a Factory*, 50.

12. Alston, “Unpacking the Agricultural Black Box.”

13. Giraudeau, “Farm as an Accounting Laboratory.”

14. Scorgie, "Progenitors of Modern Management Accounting Concepts."
15. Stoll, *Larding the Lean Earth*; B. Cohen, *Notes from the Ground*.
16. *Practical Norfolk Farmer*, b, 47.
17. Cooke, "Denial of Slavery"; Rosenthal, *Accounting for Slavery*; Chandler, *Visible Hand*.
18. Perhaps unsurprisingly, management history textbooks routinely present the Chandlerian version rather than the critical history rooted in extensive archival evidence by a wide range of practicing historians. For example: "With size [of industrial enterprises] came the need for salaried managers; the need for a capable, disciplined, trained, motivated workforce; and the need for rationalizing the planning, organization and controlling of operations in early enterprises." Wren and Bedeian, *Evolution of Management Thought*, 47.
19. US Census Bureau, *Measuring America*, 29–51.
20. There were, of course, important exceptions, particularly on the "corporate farms" of the early twentieth century; see, e.g., Foley, *White Scourge*; McWilliams, *Factories in the Field*. Furthermore, the professional class of farm managers certainly did not disappear; in 1923 a group of farm managers in eastern Illinois created a professional society for themselves, which in 1929 morphed into the American Society of Farm Managers and in 1936 began publishing its own journal. Doane, "History and Growth of the American Society of Farm Managers and Rural Appraisers"; "History of the American Society of Farm Managers and Rural Appraisers." The 1940 and 1950 censuses, furthermore, continued to distinguish farm manager as a distinct occupation, separate both from farm owners and farm laborers.
21. Petty, *Standing Their Ground*, 32.
22. Berle and Means, *Modern Corporation and Private Property*; Cheffins, "Corporate Governance since the Managerial Capitalism Era."
23. Suits, "Hoboes, Wheat, and Climate Precarity"; Hahamovitch, *Fruits of Their Labor*; D. Cohen, *Braceros*.
24. US Census Bureau, *1920 Census*, 41.
25. Spillman, "Systems of Farm Management in the United States," 343.
26. Fitzgerald, *Every Farm a Factory*, chap. 2; Stanton, *George F. Warren*.
27. Ferleger and Lazonick, "Managerial Revolution and the Developmental State"; Ferleger, "Arming American Agriculture."
28. Bell, *Poultry Management*.
29. Spillman, *What Is Farm Management?*, 39, 15, 14.
30. Smalley, *Management of Muck-Land Farms*.
31. Rosenberg, "No Scrubs."
32. Adams, *Farm Management*.
33. I am aware of the very US-centric focus of this essay, although it is worth noting that "farm management" as a formal discipline of study and practice had a much later trajectory elsewhere. In the United Kingdom, for instance, the first systematic farm survey was only undertaken in 1936 (more than two decades behind the United States), while government agencies devoted to farm management only came into being in the 1950s. See Brassley et al., "Accounting for Agriculture"; Brassley et al., *Real Agricultural Revolution*. The University of Reading, a leading center for agricultural research and education in the United Kingdom, did not develop its first farm management unit until 1979.
34. Hutson, *Farm Budgeting*, 4. On budgeting as narrative performance, see Corrigan, "Accounting Practice and the Historic Turn." On calculative technologies and narratives under conditions of radical uncertainty, see Beckert and Bronk, *Uncertain Futures*.
35. Johnson and Lee, *Business Records for Poultry Keepers*.
36. Hart, Bond, and Cunningham, *Farm Management and Marketing*.
37. Johnson, *Managing a Farm*, 4, 7–8.

38. Hampson, *Starting and Managing a Farm*.
39. Johnson and Parsons, *Planning the Farm for Profit and Stability*, 3.
40. On the specifics of the Blackduck conference, see Jensen, "Farm Management and Production Economics." For two profoundly divergent interpretations of the consequences of this turn, see Gray, Parker, and Kemp, "Farm Management Research"; Chavas, Chambers, and Pope, "Production Economics and Farm Management."
41. The 1959 reports were Gordon and Howell, *Higher Education for Business*; and Pierson, *Education of American Businessmen*. The impact of the reports is explored in Khurana, *Higher Aims*, chap. 5; and Conn, *Nothing Succeeds like Failure*.
42. Freedman, *Strategy*, 500; Ansoff, *Corporate Strategy*. The classic critique of Igor Ansoff's approach is Mintzberg, "Pitfalls and Fallacies."
43. On the Harvard agribusiness program, see Hamilton, "Agribusiness." On Porter, see Ghoshal, "Bad Management Theories"; Grundy, "Rethinking and Reinventing Michael Porter's Five Forces Model."
44. Chavas, Chambers, and Pope, "Production Economics and Farm Management."
45. Partenheimer, "Executive Skills and Executive Capacity in Farm Management."
46. Gray, Parker, and Kemp, "Farm Management Research."
47. Agrawal and Heady, *Operations Research Methods for Agricultural Decisions*.
48. Kay, *Farm Management*.
49. J. S. Hall, quoted in Long, "Definition of Farm Management," 225–27.
50. Dillon, "Definition of Farm Management."
51. O. Cecil Smith, "Increasing Odds for Survival," Farm Economic Report, Extension Farm Management Department, University of Georgia, May 6, folder Extension Farm Management, box 75, Agricultural Economics Department records, UA92-043, University of Georgia Archives, Athens (hereafter AED); O. Cecil Smith, "Three Important Planning Tools," Farm Economic Report, Extension Farm Management Department, University of Georgia, November 3, folder Farm Management Staff, box 74, AED.
52. Anderson and Mapp, "Risk Management Programs in Extension," 33.
53. US Census Bureau, *Detailed Occupation*, 11; "Industry and Occupation Code Lists and Crosswalks," US Census Bureau, last revised November 30, 2022, <https://www.census.gov/topics/employment/industry-occupation/guidance/code-lists.html>.
54. Stull, "Chickenizing American Farmers." At the level of the overall system of poultry production, the distribution of risks can have both positive and negative effects on individual farmers, economically speaking. See Knoeber and Thurman, "Don't Count Your Chickens." Historically speaking, however, it is clear that "chickenization" has involved a dramatic curtailment of individual autonomy, pushing management decisions increasingly off-farm. See Hamilton, *Supermarket USA*; Gisolfi, "From Crop Lien to Contract Farming."
55. Hendrickson, Howard, and Constance, "Power, Food, and Agriculture."
56. Dionne, "Risk Management."
57. Barry and Fraser, "Risk Management in Primary Agricultural Production."
58. Boehlje and Trede, "Risk Management in Agriculture"; Claude L. Dorminey, "Risk Management," Farm Economic Report, Extension Farm Management Department, University of Georgia, August 26, folder Farm Management Staff, box 74, AED.
59. Jerry Hagstrom, "Sharing the Risk," Government Executive, August 1997, 36–40; Hamilton, "Crop Insurance and the New Deal Roots."
60. Alexander, "Forecasting the Challenges of Climate Change."
61. Hopkins, "Monsanto Expands Precision Program."
62. Cowman, "Exploring the Future of Digital Agriculture."
63. Gibson, "Automating Agriculture."

64. Wolf and Wood, "Precision Farming"; Elmore, *Seed Money*; Nygren, *State of Conservation*.
65. MacKenzie, *Engine, Not a Camera*, 1.
66. Ho, *Liquidated*. Evidence is mixed on whether mergers and acquisitions produce the value that financial consultants predict; see, e.g., Steigenberger, "Challenge of Integration."
67. Colby et al., *Rethinking Undergraduate Business Education*; Landfester and Metelmann, "Value of Doubt"; March, "Poetry and the Rhetoric of Management"; Spee and Fraiberg, "Topics, Texts, and Critical Approaches"; Steyaert, Beyes, and Parker, *Routledge Companion to Reinventing Management Education*.

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