

# The Annals of Iowa

Volume 67, Number 1  
Winter 2008



A QUARTERLY JOURNAL OF HISTORY

## In This Issue

DAVID L. SEIM, visiting assistant professor of history at Texas A&M University, tells the complicated story of a controversy during World War II involving agricultural organizations, watchdog groups, and economists and college administrators at Iowa State College. The controversy focused specifically on a pamphlet recommending that citizens consider substituting margarine for butter as part of the war effort. But it involved much larger issues, most notably, perhaps, the role and legitimacy of policy-oriented social science research at a land-grant institution.

JOANNE ABEL GOLDMAN, associate professor of history at the University of Northern Iowa, describes the emergence of Frank Spedding as a new breed of scientist—a science manager—as he shaped the development of the Ames Laboratory at Iowa State College during and after World War II.

MARK FINLAY, professor of history at Armstrong Atlantic State University, reviews two new books about meat production.

## Front Cover

In this 1937 image, the Iowa State College Campanile presides over a bucolic landscape on the campus. But the college was anything but a peaceful place in the ensuing decade, as the two feature articles in this issue show. A college economist's recommendation that households substitute margarine for butter as part of the war effort sparked a bitter controversy. At the same time, scientists on campus were actively involved in work that supported the famous Manhattan Project, which was developing the means to explode an atomic bomb. Photo courtesy Special Collections, Iowa State University Library.

## Editorial Consultants

Rebecca Conard, Middle Tennessee State University

Kathleen Neils Conzen, University of Chicago

William Cronon, University of Wisconsin-Madison

Robert R. Dykstra, State University of New York at Albany

R. David Edmunds, University of Texas at Dallas

H. Roger Grant, Clemson University

William C. Pratt, University of Nebraska at Omaha

Glenda Riley, Ball State University

Malcolm J. Rohrbough, University of Iowa

Dorothy Schwieder, Iowa State University

# The Annals of Iowa

Third Series, Vol. 67, No. 1  
Winter 2008  
Marvin Bergman, editor

---

## Contents

- 1      The Butter-Margarine Controversy  
and "Two Cultures" at Iowa State College  
*David L. Seim*
- 51     Frank Spedding and the Ames Laboratory:  
The Development of a Science Manager  
*Joanne Abel Goldman*
- 82     Mastering the Vocabulary of Meat:  
A Review Essay  
*Mark Finley*
- 89     Book Reviews and Notices
- 122    New on the Shelves
- 

A QUARTERLY JOURNAL OF HISTORY FOUNDED IN 1863  
Copyright 2008 by the State Historical Society of Iowa  
ISSN 0003-4827

## Book Reviews and Notices

- 89 TOM SAVAGE, *A Dictionary of Iowa Place-Names*, by Sarah S. Uthoff
- 89 WILLIAM BRIGHT, *Native American Placenames of the United States*, by W. Raymond Wood
- 90 MARK E. STEINER, *An Honest Calling: The Law Practice of Abraham Lincoln*  
BRIAN DIRCK, *Lincoln the Lawyer*  
by Kenneth Winkle
- 93 H. ROBERT BAKER, *The Rescue of Joshua Glover: A Fugitive Slave, the Constitution, and the Coming of the Civil War*  
RUBY WEST JACKSON AND WALTER T. McDONALD, *Finding Freedom: The Untold Story of Joshua Glover, Runaway Slave*  
by Rebekah Mergenthal
- 95 JEREMY NEELY, *The Border between Them: Violence and Reconciliation on the Kansas-Missouri Line*, by Derek R. Everett
- 97 PHILIP E. WEBBER, *Zoar in the Civil War*, by Kristen Anderson
- 98 GEORGE S. BURKHARDT, *Confederate Rage, Yankee Wrath: No Quarter in the Civil War*, by David Brodnax Sr.
- 99 STEVEN CONN, *History's Shadow: Native Americans and Historical Consciousness in the Nineteenth Century*, by Michael J. Sherfy
- 101 CARROLL ENGELHARDT, *Gateway to the Northern Plains: Railroads and the Birth of Fargo and Moorhead*, by Eric J. Morser
- 103 ROBERT V. HINE AND JOHN MACK FARAGHER, *Frontiers: A Short History of the American West*, by Mark R. Scherer
- 104 RUDY J. FAVRETTI, *Jacob Weidenmann, Pioneer Landscape Architect*, by Heidi Hohmann
- 106 THOMAS LESLIE, *Iowa State Fair: Country Comes to Town*, by Chris Rasmussen
- 108 MARY LOU NEMANIC, *One Day for Democracy: Independence Day and the Americanization of Iron Range Immigrants*, by Frank Van Nuys
- 110 STEPHEN W. HINES, ED., *Laura Ingalls Wilder, Farm Journalist: Writings from the Ozarks*, by Pamela Riney-Kehrberg
- 111 DOROTHY SCHWIEDER AND GRETCHEN VAN HOUTEN, EDs., *A Sesquicentennial History of Iowa State University: Tradition and Transformation*, by John L. Rury
- 113 GERALD R. BUTTERS JR., *Banned in Kansas: Motion Picture Censorship, 1915-1966*, by Jerold Simmons
- 115 MIKE AND VICKI WALKER, *Cinematic Journeys: An Uncommon Guide to Classic Movie Theaters: Missouri, Kansas, Nebraska, Iowa*, by Jennifer Fleeger
- 115 ROYDEN LOEWEN, *Diaspora in the Countryside: Two Mennonite Communities and Mid-Twentieth-Century Rural Disjuncture*, by Steven D. Reschly
- 118 WILLIAM BARLOW QUARTON III, *Lucky Man: Memories of a Life in Communications*, by Stephen C. Coon
- 119 LOLLY PARKER EGGERS, *Iowa City's Irving Weber: A Biography*, by Jan Olive Nash
- 120 JOHN PRICE, *Not Just Any Land: A Personal and Literary Journey into the American Grasslands*, by Thomas K. Dean

# The Butter-Margarine Controversy and “Two Cultures” at Iowa State College

DAVID L. SEIM

DURING WORLD WAR II, economists, college administrators, and citizens of Iowa battled over the purposes of social science. One particular debate in Iowa was a frontline event in a struggle to establish safeguards allowing policy research at public colleges and universities. In a conflict over a proposed policy to temporarily produce less butter, one side declared that economists at Iowa State College (ISC) must limit themselves to advocating policies directly supporting Iowa interests, while an opposing group advocated policy research to win the war (even if that policy temporarily disadvantaged state interests).

Between about 1930 and 1945 an “Ames School” of economics arose at ISC. At the University of Wisconsin, economists traditionally advised government officials on “progressive” policy, but Wisconsin’s economists were often criticized for injecting personal values into what should be rigorous and impartial science. ISC’s economists wanted policy relevance while escaping such trouble. They avoided Wisconsin-style “collaboration” between academic researchers and government policymakers and took their policy proposals directly to the public.<sup>1</sup>

---

I am grateful for a research grant from the State Historical Society of Iowa.

1. On the “Wisconsin Idea” (or “Wisconsin School”), see John P. Henderson, “Political Economy and the Service of the State: The University of Wisconsin,” in *Breaking the Academic Mould: Economists and American Higher Learning in the Nineteenth Century*, ed. William J. Barber (Middletown, CT, 1988), 318–39; and

THE ANNALS OF IOWA 67 (Winter 2008). © The State Historical Society of Iowa, 2008.

What eventually happened at ISC was that financial donors and college administrators insisted on social science devoid of policy arguments; ISC's social scientists wanted a more realistic standard. The defining moment in the debate took place during 1943 and 1944, when a series of events resulted in a conflict over the possibilities and limitations of policy-oriented social science.<sup>2</sup>

In 1943 Iowa was second in the nation in dairy production. In April of that year, ISC's agricultural economists published a pamphlet titled "Putting Dairying on a War Footing," the fifth installment in the school's Wartime Farm and Food Policy series. The dairying pamphlet analyzed conditions that had resulted in a shortage of dairy products for soldiers. The report recommended, among other solutions, having American households substitute more margarine for butter.<sup>3</sup>

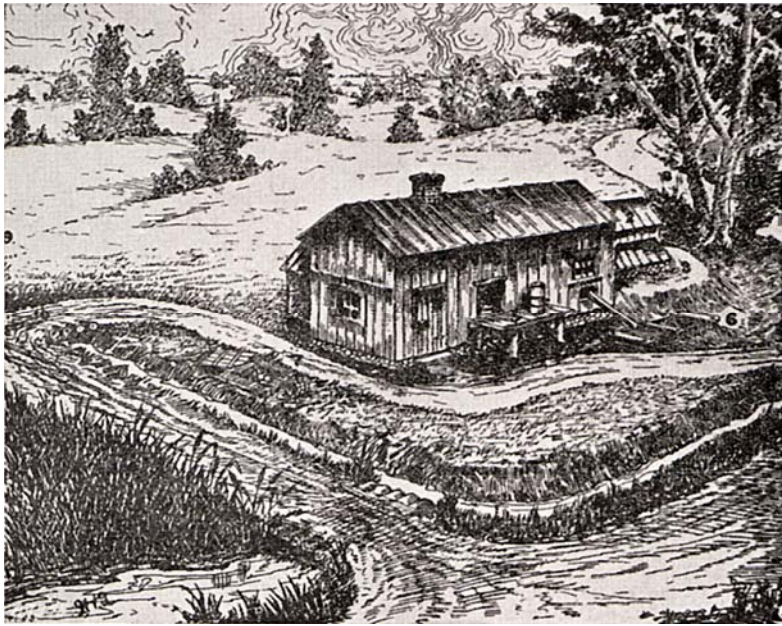
Dairy interests vigorously objected to "Pamphlet No. 5." Dairy industry leaders contacted the college president, applying pressure to retract the pamphlet. After the president gave in, more than half of the faculty in the Department of Economics

---

Malcolm Rutherford, "Wisconsin Institutionalism: John R. Commons and His Students," *Labor History* 47 (2006), 161-88. The "Ames School" of economics sought to connect agricultural economics to broader economic issues by employing multiple research methods. See brief mentions in Leonard Silk, *The Economists* (New York, 1974), 208; and Richard H. Day, "Toward a Dynamical Economic Science: An Autobiographical Reflection," in *The Makers of Modern Economics*, vol. 4, ed. Arnold Heertje (Cheltenham, UK, 1999), 1-31, esp. p. 3.

2. Debates about objectivity in social science predate the 1940s. See Mary O. Furner, *Advocacy and Objectivity: A Crisis in the Professionalization of American Social Science, 1865-1905* (Lexington, KY, 1975); Mark Blaug, "The Formalist Revolution or What Happened to Orthodox Economics after World War II?" in *From Classical Economics to the Theory of the Firm: Essays in Honour of D. P. O'Brien*, ed. Roger E. Backhouse and John Creedy (Northampton, MA, 1999), 257-80; Mary S. Morgan and Malcolm Rutherford, eds., *From Interwar Pluralism to Postwar Neoclassicism* (Durham, NC, 1998). An underappreciated factor in the shift toward emphasizing formal approaches in economics was a reaction to the question whether public colleges and universities are "research arms" of private industry—what Jim Hightower once called the "land-grant college complex." See Jim Hightower, *Hard Tomatoes, Hard Times: A Report of the Agribusiness Accountability Project on the Failure of America's Land-grant College Complex* (Cambridge, MA, 1973).

3. *Dairy Record*, 4/28/1943, 16; O. H. Brownlee, "Putting Dairying on a War Footing," Wartime Farm and Food Policy Series, no. 5 (Ames, 1943). A copy of the original pamphlet is in file 8/4, Robert E. Buchanan Papers, Special Collections, Iowa State University Library (hereafter cited as Buchanan Files).



*Iowa's first creamery was built at Spring Branch, near Manchester, in 1872. Spring Branch butter took first place at the Philadelphia Centennial Exposition in 1876. From Iowa Farm Economist, June 1940.*

and Sociology eventually resigned in protest, interpreting the retraction as a violation of academic freedom and a development that endangered the social sciences at ISC. National observers wondered whether events in Iowa had implications for social science in general.<sup>4</sup>

The controversy encompassed a variety of views. For some, the central issues were purely scientific questions of taste and nu-

---

4. Publications covering the butter-margarine controversy include Raymond R. Beneke, "T. W. Schultz and Pamphlet No. 5: The Oleo Margarine War and Academic Freedom," *Choices*, Summer 1998, 4-8; Minnesota Economics Faculty, "Remembering Oz Brownlee (Oz and Oleomargarine)," *Minnesota Department of Economics Graduate Alumni Newsletter*, Fall 1994, 1-2. Older summaries include Chester Kerr, *A Report on American University Presses* (Washington, DC, 1949), 68; Charles M. Hardin, *Freedom in Agricultural Education* (Chicago, 1955), 119-25; Earle Ross, *The Land-Grant Idea at Iowa State College: A Centennial Trial Balance, 1858-1958* (Ames, 1958), 217-20. The controversy is mentioned briefly in Dorothy Schweider, "Iowa State at Mid-Century: The Friley and Hilton Years," in *A Sesquicentennial History of Iowa State University: Tradition and Transformation*, ed. Dorothy Schweider and Gretchen Van Houton (Ames, 2007), 43-44.

tritional equivalence between butter and margarine. For others, the prevailing concern was a college administration declaring that ISC's first purpose was to serve Iowa's special interests. Some Iowa citizens emphasized the need to prevent social science research methods from becoming too "soft." Many participants in the controversy interpreted the event as a test case for the validity of allowing social scientists at public institutions to advocate public policy.

THE ROAD TO CONFLICT over Pamphlet No. 5 began when Theodore W. Schultz joined the Department of Economics and Sociology at ISC in 1930. Quickly establishing a reputation for willingness to confront what he called "vested interests," Schultz focused on the ways that powerful interest groups distort economic efficiency in such areas as tariff policy, the tax system, and agricultural production. To help understand problems created by special interests during the Great Depression, in 1932 Schultz recommended a pamphlet series for public readership to be titled *Agricultural Emergency in Iowa*.<sup>5</sup>

Upon his appointment as acting head of agricultural economics at ISC in fall 1932, Schultz met with Agricultural Experiment Station director Robert Buchanan to push for the envisioned pamphlets. Schultz explained that the school's agricultural econ-

---

5. Little is published about Schultz during his ISC years. Schultz came to ISC with a Ph.D. in agricultural economics from the University of Wisconsin (1930). He soon published a series of papers on policy concerns. He took a position, for example, against the effects of a generally high import tariff, especially on the nation's ability to export agricultural products. Schultz's ideas were respected by Henry A. Wallace, editor of *Wallaces' Farmer and Iowa Homestead*, who saw Schultz as "a remarkable young man because he had the courage to tell the truth about the tariff to an Iowa audience." Henry A. Wallace, "Odds and Ends," *Wallace's Farmer and Iowa Homestead*, 3/5/1932, 5. Schultz established a reputation for not backing down from unpopular messages. In 1935 he argued that the "realistic view of the facts forces us to the conclusion, whether we wish it or not, that American agriculture is still dependent upon foreign buyers." T. W. Schultz, "Vanishing Farm Markets and Our World Trade," *World Affairs Pamphlet* no. 11 (Boston, 1935), 23, 26. For brief bits of information on Schultz's ISC years, see D. Gale Johnson, "Theodore William Schultz, 1902-1998," *National Academy of Sciences, Biographical Memoirs*, vol. 77 (Washington, DC, 1999), 302-17; and Mary Jean Bowman, "T. W. Schultz: Scholar and Statesman," in *Contemporary Economists in Perspective*, ed. Henry W. Spiegel and Warren J. Samuels, 2 vols. (Greenwich, CT, 1984), 1A: 103-21.



omists were interested in educating citizens on contemporary farm policies. Buchanan agreed that, as a land-grant institution, ISC had obligations in "Extension Service," and he approved the pamphlets.<sup>6</sup> Once produced, the series of ten pamphlets boosted the reputation of ISC's economists. Schultz then met with ISC President Raymond Hughes to suggest that the time was right to hire new faculty to make the Department of Economics and Sociology one of the best in the nation. Hughes was persuaded, generous funding was provided, and new hires were made.<sup>7</sup>

Schultz became permanent head of the Department of Economics and Sociology early in 1935. He recruited rising stars to join a group soon known as the "Ames School" of economics. Before long ISC's economists earned national recognition for their work in defining the place of social science at a land-grant institution. Their goal was to communicate research findings and their likely implications to the public. Schultz encouraged economists in his department to find value in many research methods, including theory, empiricism, and historical analysis, as well as such allied fields as political science, legal studies, social psychology, and social anthropology. Such methodological openness was needed to fully evaluate real world problems and to counteract the economic inefficiency created by special interests. In 1941 Schultz concluded, "The future demand for professional and scientific workers in the rural social science fields will be affected favorably by the fact that workers in these fields are not strait jacketed by a series of rigid job descriptions."<sup>8</sup>

---

6. "T. W. Schultz Appointed Head of Economics Work," *Summer Quarter News*, Iowa State College, 6/27/1935, 1, in file 14/2, Theodore W. Schultz Papers, Special Collections, Iowa State University Library (hereafter cited as Schultz Files-ISC). On the Extension Service at ISC, see Dorothy Schwieder, "The Iowa State College Cooperative Extension Service through Two World Wars," *Agricultural History* 64 (1990), 219-30; and Hightower, *Hard Tomatoes, Hard Times*.

7. Iowa State College Press produced 10 pamphlets between November 1932 and March 1933 under the title *Agricultural Emergency in Iowa*. Seven ISC economists wrote the pamphlets, which were submitted directly to the press by the authors and were published as submitted.

8. "Schultz Appointed Head"; Theodore W. Schultz, *Training and Recruiting of Personnel in the Rural Social Sciences* (Washington, DC, 1941), 6-8, 10.

The response to a 1937 article by Margaret Reid, published in the department's magazine for public readership, *Iowa Farm Economist*, tested Schultz's belief that social scientists at an agricultural college were no longer limited by constraining job descriptions. In "Taxing the Chain Store," Reid argued that any national policy of increased taxes on chain stores would disproportionately affect small Iowa communities. In response to Reid's analysis, the U.S. Post Office decided, three years later, to bill ISC's Extension Service for postage due on the magazine installment containing the article. (The government was to pay mailing costs only if all contents fit the proper purview of Extension Service research.) The Office of the Postmaster General ruled that Reid's article "is not regarded as relating exclusively to 'cooperative agricultural extension work.'" The ruling suggested a potential limitation on government-sponsored economic analysis.<sup>9</sup>

ISC Agricultural Experiment Station director Buchanan and Extension Service director Ralph K. Bliss disagreed. Determining that there was "a principle involved," they weighed possible responses. "The educational purpose of this article," they argued in their letter to Washington, "was to give the farm people in the State of Iowa an awareness of some of the important issues" in U.S. policy. Specifically, "the prevailing type of taxation is likely to bear heavily on stores in the smaller towns." Buchanan and Bliss believed that it was appropriate to ensure "that farm people be enlightened on all matters pertaining to their interest." When the Post Office rejected ISC's appeal, Buchanan went to Washington, where he resolved the matter in ISC's favor.<sup>10</sup>

When Schultz took aim at southern special interests during an NBC radio broadcast on "Farmers and Victory" in early 1943, saying "it would not hurt the war effort one iota if we dumped all the 1943 cotton crop into the Gulf of Mexico," a flood of let-

---

9. Margaret G. Reid, "Taxing the Chain Store," *Iowa Farm Economist* 3 (April 1937), 8-10; Third Assistant Postmaster General to Postmaster, Ames, 10/7/1940, Buchanan Files 10/5.

10. R. K. Bliss to R. E. Buchanan et al., 10/30/1940; W. W. Wilcox to R. K. Bliss, 11/6/1940; R. K. Bliss and R. E. Buchanan to Third Assistant Postmaster General, 11/30/1940; Ramsey S. Bloch, Third Assistant Postmaster General, to R. K. Bliss, 12/7/1940; R. E. Buchanan to Dean H. P. Rusk, 12/19/1940, all in Buchanan Files 10/5 (quotations are from Bliss and Buchanan's 11/30 letter).

ters from Southern politicians and business leaders depicted Schultz as a loose cannon. ISC president Charles E. Friley, previously a dean at Texas A&M, managed to stay above the fray by distancing himself from Schultz and by allowing simply that the situation was complex.<sup>11</sup>

IN RECOGNITION of the ISC economists' growing reputation for publicly oriented social science policy research, in October 1942 U.S. Secretary of Agriculture Claude Wickard asked them to prepare food policy analysis for a national readership. With Director Buchanan's approval, ISC agreed to develop policy pamphlets for distribution.<sup>12</sup> In its agreement with the U.S. Department of Agriculture (USDA), ISC requested a grant from the Rockefeller Foundation. In the request Schultz emphasized the pressing importance of "a study of governmental policies affecting production and distribution of food." He assured the foundation that the project had been cleared "with President Charles E. Friley and with members of the administrative staff at ISC," and was encouraged by Secretary Wickard's "urgent" belief in "the need for critical appraisals made by persons outside of government, evaluations which will point out the merits and limitations of current policies and programs." Wickard, Friley, and Buchanan provided endorsement letters. Friley, claiming that he had personally "gone over" the research plans, assured the foundation of his "full endorsement."<sup>13</sup>

---

11. Letters and other materials relating to the "cotton controversy" are in file 29/15, Theodore W. Schultz Papers, Special Collections, University of Chicago Library (hereafter cited as Schultz Files-Chicago); and Schultz Files-ISC 14/2. See also C. E. Friley to L. P. Gabbard, 3/31/1943, file 9/27, Charles E. Friley Papers, Special Collections, Iowa State University Library (hereafter cited as Friley Files).

12. Schultz's summary of events during the initial stages of the project is in T. W. Schultz, "Outline of a Presentation before the Board of Education on 'Studies of Government Food Policy,'" 6/22/1943, Buchanan Files 8/1, Friley Files 6/9. The USDA's show of respect for ISC would not have been surprising. ISC economists were known to be at work on agricultural price studies, and the college had a tradition of producing agriculturists who became national leaders: "Tama Jim" Wilson, Henry C. Wallace, and Henry A. Wallace, for example.

13. T. W. Schultz to J. H. Willits, 10/1/1942; Claude Wickard to J. H. Willits, 10/8/1942; C. E. Friley to J. H. Willits, 10/10/1942, folder 39, series 218S, RG 1.1, Rockefeller Archives Center, Rockefeller Foundation, Sleepy Hollow, New



*In keeping with his ongoing support for the war effort, ISC President Friley (right) conferred with Undersecretary of the Navy Gerard Swope. From the ISC yearbook, The Bomb.*

The ensuing Rockefeller Foundation grant stipulated that all money be administered by Schultz and that all funds revert to the foundation should Schultz leave ISC. The foundation hoped that the proposed study would result in "recommendations as to food production, distribution and consumption policies." Joseph Willits, the director of the Rockefeller Foundation's Social Science Division, wrote to Secretary Wickard:

This is a very interesting relation between the Department [of Agriculture] on the one hand and Professor Schultz on the other. It is the kind that seems to me to be one of the constructive relations between a government department and a social scientist, but the

---

York (hereafter cited as RAC-RF, with all such citations citing this same folder, series, and record group unless otherwise noted); R. E. Buchanan, "Recommendation for Acceptance of Gift Funds by the Iowa Agricultural Experiment Station," 10/20/1942, Friley Files 6/9. Additional correspondence between Schultz and Willits is in Schultz Files-Chicago 29/23. See also correspondence between C. E. Friley and J. H. Willits, Friley Files 6/9.

kind that is possible only where, as in this case, there is a public official statesmanlike enough to welcome and seek out independent and competent outside criticism and a social scientist who is sympathetic with the problems of the administration and also competent and objective. The whole arrangement is a very reassuring one to me as a citizen; I hope it works out well.<sup>14</sup>

Clearly, by 1942, ISC's economists had established a reputation among national leaders for competent, detached professionalism in studying policy matters.

Preparation of the pamphlets began as four ISC economists formed an "economics review committee" to identify food policy problems and distribute draft manuscripts to economists and government officials. The committee established that each pamphlet must pass a minimum of six rounds of revisions and that pamphlets passing all rounds would be certified with the indicia, "Iowa State College Press." Such official status was important, Schultz explained, because "by publishing we make ourselves professionally accountable, which is an essential step in work of this kind." By December 1942 a series of 15 pamphlets was outlined and ready to begin.<sup>15</sup>

---

14. Joseph Willits to Claude Wickard, 10/16/1942, RAC-RF; Joseph Willits to T. W. Schultz, 10/16/1942, *ibid.*; Schultz to Willits, 10/17/1942, *ibid.* Originally, the \$10,000 grant was for a period ending June 30, 1943, but was later extended. "Resolved RF 42091," 10/16/1942, *ibid.*; "Grant Extension," 6/10/1943, *ibid.* President Friley gratefully accepted the foundation's grant and reiterated his knowledge of what the project aimed to accomplish. C. E. Friley to Norma S. Thompson (Joseph Willits's secretary), 11/2/1942, *ibid.*

15. T. W. Schultz to Joseph Willits, 12/3/1942, RAC-RF. Schultz invited Willits to visit with the social science seminar at ISC to "probe with us 'the nature of the more fundamental research underway in the social science fields and its merits and limitations' as seen from your point of vantage?" Willits accepted the invitation, but hesitated to "make any speeches." Schultz to Willits, 1/5/1943, *ibid.*; Willits to Schultz, 1/8/1943, *ibid.*; Secretary Paine (Willits's secretary) to Schultz, 1/20/1943, *ibid.*; Schultz to Willits, 1/29/1943, *ibid.* Willits in fact visited in February 1943 and recorded a lofty view of the ISC economists. Yet he worried that "they would break up if Schultz left," although Schultz's recent decline of job offers from the University of Chicago and the University of California suggested that "he is likely to stick and cares more for the group and the work close to his own problem there than he does for the kudos and money the other places offer." "Memoranda of Interview," JHW with Theodore W. Schultz, 2/11-12/1943, *ibid.* By late February Schultz reported that drafts of the first three pamphlets (dealing with the overall framework of food production) were well received by reviewers, and that "the dairy pamphlet is

The first pamphlet through the review process was Margaret Reid's "Food Strategy," published in January 1943. Reid set an overall tone for the series by proclaiming "that shortage of many foods will become greater" and that "wise strategy calls for action of several types": use of national and international agencies; management of food stockpiles; rationing by civilians; educational programs; and squeezing the greatest economy from existing resources. Such management strategies would be analyzed in upcoming pamphlets intended especially for farmers, educators, and politicians.<sup>16</sup>

More pamphlets quickly followed. In early February came Schultz's pamphlet, "Farm Prices for Food Production," and the next month saw "Manpower in Agriculture" and "Food Rationing and Morale." O. H. Brownlee's 35-page pamphlet, "Putting Dairying on a War Footing," passed through the review process and into print the first week of April 1943. The author, a doctoral student in economics, advocated making more milk products available to soldiers, generally by rationing and shifting milk to its most productive uses. One specific proposal was that American households use more margarine instead of butter.<sup>17</sup>

---

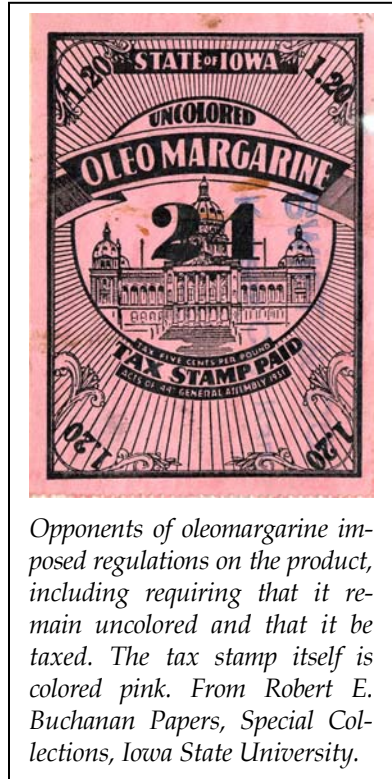
also far along." Schultz to Willits, 2/25/1943, *ibid.* See also Willits to Schultz, 3/5/1943, *ibid.*; and Schultz to Willits, 4/14/1943, *ibid.*

16. Margaret G. Reid, "Food Policy," Wartime Farm and Food Policy Series, no. 1 (Ames, 1943), 1-2. Reid's pamphlet, published on January 21, served as a broad overview of the issues to be dealt with throughout the series.

17. Theodore W. Schultz, "Farm Prices for Food Production" (no. 2); Rainer Schickele, "Manpower in Agriculture" (no. 3); C. Arnold Anderson, "Food Rationing and Morale" (no. 4); O. H. Brownlee, "Putting Dairying on a War Footing" (no. 5). Six more pamphlets ended up being published: Geoffrey Shepherd, "Commodity Loans and Price Floors for Farm Products" (no. 6); Arthur C. Bunce, "Using Our Soils for War Production" (no. 7); Mary Jean Bowman and Albert Gailord Hart, "Food Management and Inflation" (no. 8); William G. Murray, "Land Boom Controls" (no. 9); D. Gale Johnson and O. H. Brownlee, "Food Subsidies and Inflation Control" (no. 10); and Geoffrey Shepherd, "Agricultural Prices After the War" (no. 11). All of the pamphlets were fairly substantial documents, ranging between 27 and 50 pages in length. Brownlee's Pamphlet no. 5 went to press after Schultz and others had evaluated the report on which it was based, interpreted it as solid, and circulated it to academic and government economists. Commentators approved of Brownlee's broad recommendation that milk be shifted to its most productive uses. The economics department then admitted it into the series, and 1,000 copies were printed. See O. H. Brownlee, "A Biography of Pamphlet No. 5 by the Author," Oct. 1943, Schultz Files-Chicago 29/23.

Adverse reaction to Brownlee's "Pamphlet No. 5" was prompt and vociferous, especially from representatives of Iowa's dairy industry. They especially objected to the recommendation that Americans use more margarine and Brownlee's claim that "margarine compares favorably with butter both in nutritive value and palatability." Their objection was consistent with the dairy industry's declared goal to achieve nothing short of "complete extermination of oleomargarine."<sup>18</sup>

Dairy leaders filed complaints directly with President Friley. An attorney for dairy interests identified the pamphlet as an infraction against farmers as taxpayers. The Iowa dairy industry stood betrayed "like Caesar," wrote Addison Parker, "stabbed in its own house by its friends." No record exists of any response by Friley to Parker or any other early complainant. In fact, dairy representatives consistently found Friley unavailable for meetings. Failing to achieve satisfaction from ISC economists or administrators, dairy representatives took their complaints to the press.<sup>19</sup>



Opponents of oleomargarine imposed regulations on the product, including requiring that it remain uncolored and that it be taxed. The tax stamp itself is colored pink. From Robert E. Buchanan Papers, Special Collections, Iowa State University.

18. Brownlee, "Putting Dairying on a War Footing," 30; "Call for a Conference," *Dairy Record*, 6/18/1941, 10-11; "Will Butter Win the Peace?" *Fortune Magazine*, Nov. 1944, 133; *Des Moines Register*, 6/13/1943. The sale of oleomargarine was illegal in some states, and in others the product needed to be dyed pink or green. In Iowa, oleomargarine could not be sold colored yellow, although capsules of yellow dye were sometimes allowed so people could color their own. See "Iowa and Margarine," *Newsweek*, 6/14/1943, 72, 74. For more on the history of "bull" or "bogus" butter and a variety of reactionary "margarine laws," see S. F. Riepma, *The Story of Margarine* (Washington, DC, 1970), esp. 108-33.

19. Addison M. Parker to Charles E. Friley, 5/6/1943, Schultz Files-Chicago 29/23.

On April 28 the *Dairy Record* (St. Paul, MN) published a bitter editorial declaring Pamphlet No. 5 a "repetitious peroration" and a "dud." ISC had thrown "a gratuitous slap at the creamery industry." The economist authoring the pamphlet was a "sadistic" person who "has a false notion that he pursues a calling that is, of itself, a science. The very fact that the author . . . fails to take cognizance of the economic importance of the butter industry to the state he is supposed to serve seems to indicate that, in his search for the profound, he has forgotten the simplest definition of his vocation." The author, like all economists, must be an "unstable" person troubled by an "inferiority complex," who during college days was "unwilling or unable to provide the concentration needed to master the exact sciences."<sup>20</sup>

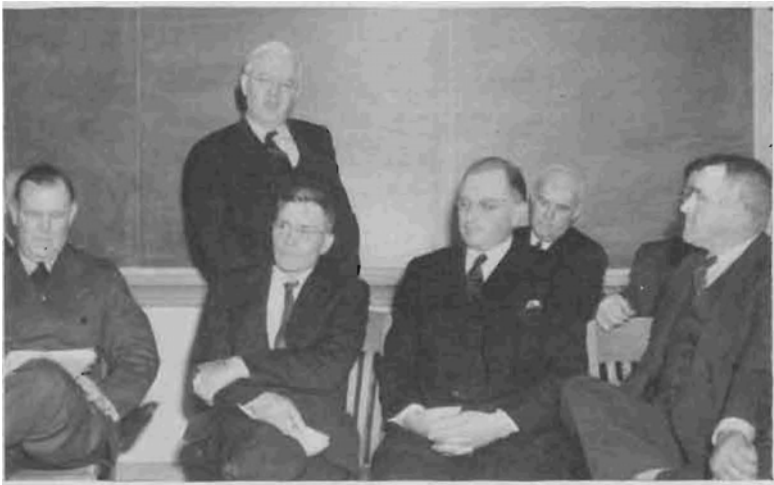
In early May the *Creamery Journal* (Waterloo, IA) chimed in, declaring the pamphlet "an uncalled for outburst." The journal reported that "a number of dairy leaders were on their way to the college to confer with officials." The *Des Moines Register* also paid attention; the Iowa Association of Local Creameries told it that "dairy farmers will be satisfied with nothing less than a recall of the pamphlet, denial of faculty responsibility for it, and removal from the faculty of Iowa State College of its authors as self-convicted incompetents." Julius Bruner, president of the association, complained that the pamphlet was sanctioned by the same institution "that the dairy farmer willingly and liberally has taxed himself to maintain and support over a long period of years." The *Dairy Record* returned to the subject in mid-May with an editorial reporting that "dairymen, refusing to be placated by other college representatives," had pressed for a meeting with Friley.<sup>21</sup>

---

20. "Iowa Issues a Pamphlet," *Dairy Record*, 4/28/1943, 16. Possibly the earliest articles outside of Iowa were "Dairy Industry Facing Butter Curb Problem," *Chicago Journal of Commerce*, 5/17/1943 (copy in Schultz Files-Chicago 29/23); and "Iowa Booklet Stirs Storm in Dairy Industry," *Chicago Daily News*, 5/25/1943.

21. "Iowa Dairy Interests Incensed at College Economists View," *Creamery Journal*, May 1943, 26; "State College Oleo Booklet Raises Storm," *Des Moines Register*, 5/15/1943; "Iowa Groups Wrathful," *Dairy Record*, 5/19/1943, 7, 23. The *Iowa State Daily Student*, 5/18/1943, saw the dairy industry move as a "hysterical attack" designed "to oppress those whose interests lie only in relaying the truth." The next day's editorial stated that science should advance on the basis of the truth or falsity of findings alone.





*Pictured left to right are ISC President Charles E. Friley and the six dairy representatives on the Joint Committee: Clem O'Neil (standing), secretary of the Iowa Milk Dealers Association; Julius Bruner, president of the Iowa Association of Local Creameries; Clarence Nielson, Iowa Butter Manufacturers Association; P. W. Crowley, Association of Ice Cream Manufacturers of Iowa; Ralph Bartlett (hidden), Iowa Creamery Operators Association; Scott Ellis, Iowa Dairy Industry Commission. O'Neil was later replaced by A. N. Heggen, Iowa Cooperative Milk Producers Association. Photo taken on May 19, 1943, at Ames; from Creamery Journal, June 1943.*

On May 19 an estimated 125 dairy and creamery representatives met with ISC administrators. Friley's opening remarks focused on one question: Are there any inaccurate facts in the pamphlet? The only debatable issues would be "the legitimacy of the facts and perhaps the form and clarity of the phraseology used in stating those facts." "The right of the institution to publish facts is not a debatable question in this nation. Otherwise, the entire framework of academic freedom, and even of freedom of speech, is gone, and the usefulness of the institution is at an end." After Schultz summarized USDA objectives for the pamphlet series as a whole, dairy representatives took the floor to voice their objections. Francis Johnson, president of the Iowa Farm Bureau Federation, spoke the longest. He drew attention to farming interests "alarmed over the apparent tendency to

make over Iowa State College into a tax-supported blueprint of Harvard University." ISC is different from Harvard by not being a "free-lance" institution. ISC has no right to risk making "impractical suggestions or recommendations" on policy matters. "The true test of the value of most research on matters of public policy," Johnson pronounced, "is determined by the eventual acceptance and use of the recommendations. The college cannot justify its existence on the basis of mere 'irrational value.'"<sup>22</sup> The central question was already clear: What kinds of policy research by social scientists would be allowed at a taxpayer-supported college?

Friley ended the meeting by ordering appointment of two committees: a five-member "Special Committee" (including no one from agricultural economics), whose task was to evaluate the pamphlet and report directly to Friley; and a "Joint Committee" of six dairy and six faculty representatives, with the task to review Pamphlet No. 5 "paragraph by paragraph to determine by objective evidence the accuracy of the contents." Friley named his assistant, George Godfrey, to head the Special Committee, and Dean of Agriculture Henry H. Kildee to chair the Joint Committee. The two committees had until July 12 to report their findings.<sup>23</sup>

---

22. C. E. Friley, "Statement, Dairy Industry Conference, by Charles E. Friley, President," 5/19/1943, Friley Files 2/27; *Des Moines Register*, 5/20/1943; "Comment," *Creamery Journal*, June 1943, 14, 26; "Right to Analyze Data Should Never Be Denied—Friley," 20 May 1943, Information Service, Iowa State College, Buchanan Files 8/14. News releases from the Information Service are in an archived collection titled "Daily News" (also known as the "Blue Sheet Collection"), Special Collections, Iowa State University Library. Many of Friley's talking points were prepared by Buchanan. Buchanan to Friley, 5/17/1943, Buchanan Files 8a/3, Schultz Files—Chicago 29/17.

23. Friley assigned B. H. Thomas (professor of animal husbandry), B. W. Hammer (professor of dairy industry), C. Y. Cannon (professor of dairy industry), and Pearl Swanson (professor of foods and nutrition) to serve with Godfrey on the "Special Committee." *Des Moines Register*, 5/20/1943. The six faculty representatives on the Joint Committee (with Kildee as non-voting chair) were R. E. Buchanan (director of the Agricultural Station); C.A. Iverson (head of the Department of Dairy Industry); W. G. Murray (Department of Economics and Sociology); P. Mabel Nelson (head of the Department of Food and Nutrition); T. W. Schultz (head of the Department of Economics and Sociology); and G. S. Shepherd (Department of Economics and Sociology). Charles E. Friley to R. E. Buchanan et al., 6/1/1943, Buchanan Files 8a/3.

The weeks that followed were anything but quiet. While Iowa Farm Bureau president Johnson launched an attack on another objectionable pamphlet, "Food Management and Inflation," by Mary Jean Bowman and Albert G. Hart, Schultz continued working to establish a place for unbiased policy analysis at ISC.<sup>24</sup> Still wanting to believe that ISC "is outstanding in its policy of supporting research findings, pressure or no pressure" (as he wrote a friend), Schultz arranged a late May meeting with President Friley. Schultz provided a general critique of the role of ISC professors as "trustee[s] of the public." In particular he cited the case of an ISC professor exposed for accepting employment to write ads for a cattle breed association's advertising campaign. "Can a professor under arrangements of this nature stay wholly impartial, unbiased and objective?" Schultz asked Friley. "Will not other special interest groups, seeing arrangements of this type, quite properly come to expect similar personal services on their behalf?" Schultz believed that any such ties to special interests necessarily led to a loss of public confidence in research findings at ISC.<sup>25</sup>

Pamphlet No. 5—in no way captive to special interests—found warm reception in at least some quarters. An excited Carl Hamilton, assistant to the U.S. Secretary of Agriculture—and a proud ISC alum—reported to Friley that the pamphlet had re-

---

24. *Des Moines Register*, 5/23/1943. The American Farm Bureau supported the Iowa Farm Bureau's attempt to push ISC to dismiss the faculty members involved. "Iowa Booklet Stirs Storm," *American Farm Bureau Federation, Official News Letter*, 6/1/1943, 4. On the other hand, Iowa Farmers Union president Donald Van Fleet accused Johnson of launching a "witch hunt . . . to smother free thought at our state schools." *Des Moines Register*, 5/25/1943. See the ensuing exchange of letters to the editor, *ibid.*, 6/2/1943, 6/5/1943, 6/16/1943.

25. T. W. Schultz to Trayer S. Anderson, 5/18/1943, Schultz Files-Chicago 29/22; Schultz to Friley, 5/28/1943, Friley Files 10/48. See also Trayer S. Anderson to Schultz, 5/15/1943, Schultz Files-Chicago 29/22, where Schultz's friend, University of Iowa history professor Trayer Anderson, writes that the need to confront constant pressures by dairy interests "is a vital matter for the integrity of our institutions of higher education." In his correspondence with Anderson, Schultz wrote of his desire to remain at ISC for the long term even though he had been offered a job at the University of Chicago. Schultz explained that he had declined the job offer mainly because the ISC administration was outstanding in allowing controversial research. Schultz specifically cited the administration's support against "protests" by dairy groups "that have been expressed during the years I have been here."

ceived "considerable and favorable comment" in Washington. The USDA had been waiting for a reputable institution to have the courage to say "the things Iowa State College has now said." People in Washington were grateful to ISC, and Friley should interpret all the public attention as an opportunity for ISC to join an elite rank of research institutions in the social sciences. Hamilton even recommended that Friley request more projects along similar lines.<sup>26</sup> Harvard agricultural economist John D. Black, a friend of Schultz, informed Willits at the Rockefeller Foundation that Brownlee had produced "a very good pamphlet," a pamphlet benefiting from extensive commentary by a reputable group of draft readers.<sup>27</sup> Willits joined in thinking highly of the pamphlet, yet was also growing concerned about the reaction unfolding in Iowa. He asked Schultz to keep him apprised of the situation.<sup>28</sup>

Iowa newspapers began debating whether ISC's social scientists should be permitted to make policy arguments. An editorial in the *Des Moines Register* framed some of the issues. Expressing "devotion to 'the scientific approach'" to social research, the *Register's* editorial board opined that "as a democratic people we are trying to thrash the thing out, in the light of all the facts and interpretations that we can get, so as to arrive eventually at the right answer." Yet the editorial added that "the issue is not one of the right and duty of professors to try to serve the public

---

26. Carl Hamilton to Charles E. Friley, 6/12/1943, Buchanan Files 8a/16. Hamilton suggested that Friley tell Schultz that his new series of bulletins "is one of the most significant things being done in any land-grant college at the present time. But you must plan to expand this series into something that will bring home to Iowans the utterly staggering new responsibilities which must be theirs in the post-war world."

27. John D. Black to J. H. Willits, 5/12/1943, RAC-RF. Another positive reaction by an important person outside of Iowa came from L. J. Norton, professor of Farm Management Extension at the University of Illinois, who described Pamphlet No. 5 as "a rather forward looking analysis," published in the face of the "masses of farmers and other people [who] understand only one language when it comes to economic matters." L. J. Norton to T. W. Schultz, 6/1/1943, Buchanan Files 8a/13.

28. J. H. Willits to T. W. Schultz, 5/18/1943, RAC-RF. Schultz provided Willits a copy of Friley's "Statement," as well as clippings from the *Iowa City Press-Citizen* (5/20/1943), *Mason City Globe-Gazette* (5/20/1943), and *Des Moines Register* (5/21/1943). Schultz to Willits, 5/25/1943, RAC-RF.

**IF RATIONING BRINGS DELICIOUS DELRICH I'LL TAKE MORE OF IT!**



**NEW NOURISHING VITAMIN-RICH**

**TOPS IN NUTRITION... TOPS IN FLAVOR... AND FIGURE UP THE POINTS YOU SAVE... THE MONEY YOU SAVE!**

**Try a pound package of this Vitamin-enriched margarine now!**

- Here's just what you've been wishing for to stretch your ration points—without sacrificing food values or flavor! A delicious new kind of margarine made from pure vegetable oils processed with fresh pasteurized skim milk and fortified with 7,000 U.S.P. Units of Vitamin A!
- You'll enjoy using Delrich as a table spread... on hot vegetables... to make delicious frostings... for all kinds of cooking and baking. It spreads easily, creams quickly... and tastes so good it's a sensation!

Best of all, you give your family important **Vitamin A** and rich food energy every time you use Delrich. It's one of the vitamin-rich spreads recommended in U.S. Official Nutrition Food Rules to make America strong.

Get a pound of Delrich today and when you've discovered how wonderful it tastes... how many ration points it saves... how much money it saves... tell your friends about this new food... one of the most nourishing and delicious foods produced by American agriculture!

**FREE \$555** Tune in "Something To Talk About" over the CBS network and find out how to win some of that free money Check. Accre gives away every day, 7 days a week!

Free in—88N2—8.06 to 8.83 C.W.K.

**THE CUDAHY PACKING CO... AFTER ALL THE TASTE TELLS**

**THE ALL-PURPOSE SPREAD**

**BETTER as a Spread**  
The best way to enjoy the fine taste of Delrich is spread it on bread! You, too, it's delicious!

**BETTER for Baking**  
You'll enjoy using Delrich and give them a specialy delicious taste. Cream quickly!

**BETTER for Waffles**  
Delrich will make waffles taste delicious. Cream quickly and give them a specialy delicious taste. Will not sputter in cooking!

*Oleomargarine makers maintained that if rationing was needed, then consumers should be reminded of the good taste and nutritional value of margarine. From Des Moines Register, 6/2/1943.*

interest." Numerous subsequent letters and editorials revealed complex thinking on both sides of the issue.<sup>29</sup>

The *Register* also published excerpts from Pamphlet No. 5, to which dairy interests responded with a full-page advertisement sponsored by the American Dairy Association (ADA). The

29. *Des Moines Register*, 5/21/1943, 5/23/1943, 5/26/1943, 5/27/1943, 5/31/1943, 6/11/1943, 7/11/1943, 7/15/1943, 9/2/1943, 9/9/1943, 9/26/1943, 9/29/1943, 10/1/1943. At least twice the *Register* gathered published opinion from other newspapers around the state. Overall, those expressing the pro-dairy view seem to outnumber those supporting the economics department. *Des Moines Register*, 5/31/1943, 10/9/1943.



*The dairy industry depicted the American housewife as doing all she could to resist the mad science that must be behind the duping of as many margarine users as there already were. From Creamery Journal, July 1943.*

ad accused ISC economists of proposing “that the housewives of America be denied butter and be forced to accept a product they have refused on its own merits.” The ADA even depicted ISC as subverting the war effort by “taking a stand against the Government’s Wartime Food Production Program.” The ADA claimed that no fewer than “five million dairy farmers are shocked at the rumpus created by the much-discussed Pamphlet No. 5,” which “rocks the very foundation of diversified farming” and “challenges the dairy farmer’s way of life.” Iowa dairy representatives, following immediately in the slipstream of the ADA’s advertisement, passed a formal resolution declaring that the pamphlet “jeopardizes the national war food program” and “has done untold injury to a basic industry which

means an annual income to the state of more than 100 million dollars per year.”<sup>30</sup>

The Iowa Board of Education, which oversaw the state’s educational institutions, promptly convened an emergency meeting exclusively to discuss Pamphlet No. 5. Schultz was invited to describe the policy project, including the dairy pamphlet. According to one member of the board, Schultz said that “the trouble with the [dairy] pamphlet was that the material had been boiled down and boiled down to get into smaller compass until the array of facts, supporting the conclusion announced in the pamphlet, had been pretty well boiled out of it.” When asked if any conclusions might be changed once all supporting facts were reintroduced, Schultz’s reply was “absolutely no.”<sup>31</sup>

WHILE PUBLIC OPINION was in turmoil around the state, the Special Committee and the Joint Committee were hard at work. The Special Committee completed its report for Friley on June 14. That same day (prior to meeting with Friley) the committee met with Brownlee, Schultz, and Reid. The three economists identified some possible errors in the committee’s analysis and explained that the committee had overlooked the cautious realism of Brownlee’s recommendations. For example, whereas the pamphlet recommended redirecting resources *whenever feasible*, the committee seemed to be reading the pamphlet as arguing that nearly all resources must be redirected. Still, Schultz, conceding the need for “major clarification,” especially to document the pamphlet’s argument “a good deal more than it has been,” visited Friley’s office the next day to recommend that ISC take the initiative in revising the pamphlet.<sup>32</sup>

---

30. *Des Moines Register*, 6/3/1943, 6/15/1943, 6/16/1943. See also *Creamery Journal*, July 1943, 22, 27. Iowa dairy interests even suggested that Pamphlet No. 5 was somehow in violation of the rules of the Rockefeller Foundation Gift Fund. Law Office of Harry J. Albrecht to R. E. Buchanan, 5/29/1943; R. E. Buchanan to Law Office of Harry J. Albrecht, 6/3/1943, Buchanan Files 8a/13.

31. Schultz, “Outline of a Presentation”; board member Thomas W. Keenan’s letter to the editor, *Des Moines Register*, 9/9/1943.

32. Brownlee, “A Biography”; T. W. Schultz to George Godfrey, 6/16/1943, Buchanan Files 8a/2. See also H. H. Kildee to P. Mabel Nelson, 6/16/1943, Buchanan Files 8/11.

Friley accepted Schultz's proposal, then decided to take the offensive in defining how social science should be done at ISC. He told the six faculty members of the Joint Committee that Pamphlet No. 5 "must stand or fall on its merits as determined by competent authorities on the basis of objective evidence." People dealing in the social sciences should, according to Friley, be able to reach unanimous conviction on the truth or falsity of the evidence. If any errors had been made in Pamphlet No. 5 with respect to such an absolute standard, ISC must own up to them. As he put it, "If we are wrong, we are in no way hurt by a free acknowledgment of the mistakes and prompt correction. If we are entirely right on any particular issue and are unanimous in that conviction, it is equally important that we stand for that right." The probing of Pamphlet No. 5 in light of such a standard was an urgent matter, one that "touches on the reputation of the College and of research men."<sup>33</sup>

Brownlee quickly got a revised manuscript to Buchanan. It included a few new citations dealing with the qualities of margarine and smoothed some wording in general. Buchanan assured Friley that the Special Committee would complete a speedy review. He also informed Friley that another planned pamphlet, one by William Nicholls and John Vieg titled "Wartime Government in Operation," was ready for its final round of review.<sup>34</sup>

Friley reacted quickly to news about the latest pamphlet, deciding to scrutinize any policy analysis in it. The pamphlet's fifth round of revision had been accepted by the economics review committee, and Schultz now invited wider criticism for the final review. Buchanan decided to appoint a whole new interdepartmental review committee for that final critique. Within three days the five-person committee convened to report its findings. Friley showed up unannounced at the meeting and took Schultz and the committee chair aside, breaking the news that this new pamphlet simply could not be approved. Nevertheless, the meeting continued, with the committee approving publication by a 3-2 vote. The committee informed Buchanan of

---

33. Friley to H. H. Kildee et al., 6/16/1943, Schultz Files-Chicago 29/16.

34. Buchanan to George W. Godfrey et al., 6/23/1943, Buchanan Files 8/11; Buchanan to Friley, 6/22/1943, Buchanan Files 8a/3, Friley Files 6/9.



the vote, and he requested one additional revision round to try for a unanimous favorable verdict.<sup>35</sup>

By this time it was becoming clear that President Friley and Director Buchanan were trying to assert their own ideas about policy-oriented social science at ISC. Friley, as college president, needed to evaluate all campus activities in terms of their potential impact on the college, including its funding from the state as well as from donors. As for Buchanan, he had already shared with ISC's alumni that one of his main job responsibilities at ISC was to accommodate "many pressure groups, inasmuch as they have been responsible for past legislation creating and supporting the Iowa State College and in the future will be responsible for enactment of legislation relating to the institution."<sup>36</sup>

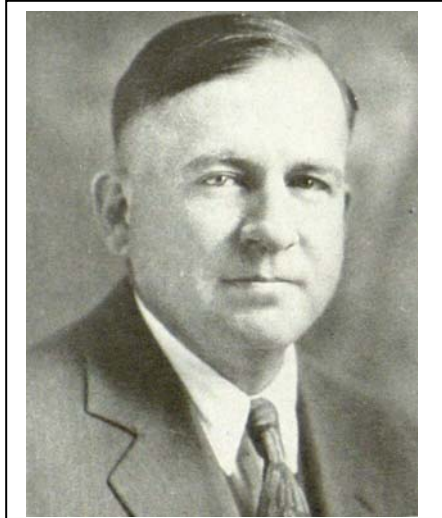
What, then, would happen if the economic interests of Iowans who financially supported ISC came into conflict with ISC's contribution to the wartime interests of the nation as a whole? That was the unprecedented question at hand. One way for Friley and Buchanan to begin answering this challenging question was to deal with the Nicholls-Vieg manuscript.

Two days after learning of the 3-2 vote in favor of the manuscript, Buchanan informed Schultz that ISC needed to tighten its definition of allowable social science. "In my opinion," Buchanan explained, "it is not appropriate that the Agricultural Experiment Station use its funds for research in fields which have very little or no direct relationship to agriculture." It was not enough that the Nicholls-Vieg pamphlet might clarify arguments in an overall food policy being produced for wartime purposes; for even though the pamphlet might serve the "public good," Buchanan found no "reasonable justification" to believe that the pamphlet could meet the school's test of directly

---

35. William H. Nicholls, "A Narrative Chronology of Administrative Procedures Followed with Regard to a Manuscript, 'Wartime Government in Operation,' by William H. Nicholls and John A. Vieg," 1943, Schultz Files-Chicago 29/16; E. W. Lindstrom et al. to R. E. Buchanan, 6/28/1943, Friley Files 6/9; Buchanan to E. W. Lindstrom et al., 6/30/1943, cited in Nicholls, "A Narrative Chronology"; Buchanan to Friley, 6/30/1943, Friley Files 6/9.

36. Charles E. Friley, "Iowa State College and the War Effort," *Iowa Farm Economist*, Feb. 1942, 2; Robert E. Buchanan, "What University Professors and Administrators Owe to Each Other," *The Alumnus of Iowa State College*, Nov. 1941, 67-69 (copy in Buchanan Files 5/4).



*Iowa Agricultural Station Director Robert E. Buchanan. From The Alumnus of ISC College, 1941.*

serving “as a benefit to agriculture.” Furthermore, any social science to be done through the Agricultural Experiment Station must be as much like physical science as possible, in that it is “to be as objective as is possible and above all to avoid language which would indicate advocacy rather than objective analysis.”<sup>37</sup>

Buchanan noted that the 3-2 vote on the Nicholls-Vieg pamphlet was precisely split between representatives of the social and physical sciences, a division today’s historians might describe as “two cultures” – the idea that “hard” scientists and “soft” scientists often hold some deep misunderstanding of each other’s research methods. In keeping with Buchanan’s and Friley’s ideas that “truths” in social science need to be every bit as certain as truths in the physical sciences, Nicholls consented to one more manuscript revision in the pursuit of unanimous acceptance. Although attaining unanimity was a tall order, Nicholls recognized that Buchanan’s role in redefining the pur-

---

37. Buchanan to Schultz, 6/30/1943, Friley Files 9/8. See also Buchanan to Carl Hamilton (assistant to the U.S. Secretary of Agriculture), 7/7/1943, Buchanan Files 8a/16.

pose of social science was an “honest” effort “to establish a policy in a new area, under the severest of pressure.”<sup>38</sup>

But Friley now insisted that the Nicholls-Vieg pamphlet was absolutely unfit for publication by ISC, no matter what. “This is in no sense a policy-making institution,” Friley declared, further hardening the reversal of his original support for the policy pamphlets: “We are on solid ground only as we study problems and present all facts which clearly arise from the research.” Conclusions may be reached on the basis of facts, Friley allowed, “but we must distinguish very rigidly between our conclusions on the basis of fact and specific recommendation that one or another policy be adopted.” Friley concluded that making policy recommendations “is entirely a governmental function.”<sup>39</sup>

Such an argument for a clean division between scientific and political functions in policy making was firm in academic discourse by the 1940s. The idea of social scientists as professional experts implied that society can simply provide social scientists with some preselected goal, and the social scientists will determine whether the goal is attainable and by what means. The political process can then place some values upon the situation by choosing between alternative means identified by detached and objective social science.<sup>40</sup> Friley wanted particularly tight boundaries for the social scientists at his land-grant institution. The debate over the Nicholls-Vieg manuscript represented just one opportunity to impose his idea that complete agreement on all facts is attainable in social science.

---

38. Nicholls, “A Narrative Chronology.” For the “two cultures” idea, see Charles P. Snow, *Two Cultures and the Scientific Revolution* (New York, 1960). Snow’s argument—that a nearly intractable level of mistrust existed between persons in the hard sciences and those in the social sciences and humanities—has been much debated. See D. Graham Burnett, “A View from the Bridge: The Two Cultures Debate, Its Legacy, and the History of Science,” *Daedalus* 128 (1999), 193–218. After Charles M. Hardin visited ISC in the 1940s, he reported discovering deep “mutual distrust” in “a split between physical and biological scientists versus social scientists,” and that split represented “one of the major obstacles to the fulfillment of publicly supported research institutions of their obligation freely and effectively to examine controversial issues.” Charles M. Hardin, *Freedom in Agricultural Education* (Chicago, 1955), 122.

39. Charles E. Friley to R. E. Buchanan, 7/3/1943, Friley Files 6/9.

40. Michael A. Bernstein, *A Perilous Progress: Economists and Public Purpose in Twentieth-Century America* (Princeton, NJ, 2001), 15.

AS FOR PAMPHLET NO. 5, Friley received the Special Committee's "final" report on June 30, and it was presented at a joint meeting of the Special Committee and Joint Committee on July 12. The report broadly criticized the pamphlet, but took no position on any disagreements concerning questions of comparable taste and nutritional value between butter and margarine. During the presentation of the report at the July 12 meeting, Clarence Nielson, reading the dairy group's prepared response, said that Pamphlet No. 5 was so full of "half truths" that it "should be condemned." Nielson accused Brownlee of avoiding citing even "a single nutritionist or dietician" from fear of seeing "his argument upset or his conclusions disturbed by the[ir] authoritative views." Brownlee had even violated the law, Nielson declared, by consistently referring to the product as "margarine" instead of "oleomargarine." Nielson demanded an explanation of how such a faulty work got published by ISC. Once Nielson was finished, the six faculty representatives conceded their agreement with the aggregate of the objections raised.<sup>41</sup>

All members of the Joint Committee recommended retraction. "It is unanimously agreed," they pronounced publicly, "that many of the statements contained in Pamphlet No. 5 are either incorrect or are susceptible to misinterpretation or are inadequately documented as to facts." Notice of that recommendation was communicated to Friley, who ordered the pamphlet rewritten and reissued. Friley soon sent an official retraction letter to all recipients of the original pamphlet.<sup>42</sup>

---

41. "Putting Dairying on a War Footing, an Analysis," 6/30/1943, Buchanan Files 8/5, Schultz Files-Chicago 29/18. Materials introduced at the meeting include: C. E. Friley, "Letter," 7/9/1943, Friley Files 2/27; T. W. Schultz, "Putting Dairying on a War Footing, Tentative and not for publication," July 1943, Schultz Files-Chicago 29/18; "Statement of Special Dairy Committee to President Charles E. Friley," July 1943, Buchanan Files 8/11, Friley Files 2/27.

42. "Report of the Joint Committee of Twelve Appointed to Review Pamphlet No. 5. July 12, 1943," Buchanan Files 8/11, Friley Files 6/10; *Creamery Journal*, Aug. 1943, 14, 22; *Dairy Record*, 7/28/1943, 12; Friley to Recipients of Pamphlet No. 5, 7/28/1943, Buchanan Files 8/11, Friley Files 2/27. Brownlee and Schultz considered the Special Committee's report as a turning point in Friley's attitude toward the social sciences. Brownlee thought that the report "definitely weakened Friley's stand" in defending policy research in the social sciences. Brownlee, "A Biography." Schultz identified the report as the point at which Friley concluded that he wanted to "shrink and limit the functions of

How was unanimity achieved on the Joint Committee? Pressure to appease dairy interests was one clear factor. After receiving advice from such organizations as the National Dairy Council, the American Dairy Association, and the National Dairy Union, the Iowa Dairy Association “sharply disagree[d]” that the central issue in the controversy concerning Pamphlet No. 5 was one of academic freedom. Instead, it insisted that ISC was “accountable to the industry attacked, and to the citizens of the state”: ISC was out of bounds in proposing policies potentially disadvantageous to basic industries in the state.<sup>43</sup>

In addition, it appears that unanimity was considered the best face for ISC to put on for outside appearances. Schultz later explained his own vote by saying that the situation was a “most trying circumstance,” and ISC needed to get moving ahead. “The faculty representatives were very anxious to patch up the matter, hoping somehow to reestablish working relations with the dairy interests. The dairy spokesman, however, came to the meeting instructed to settle for one thing and one thing only, namely the retraction of the pamphlet.”<sup>44</sup>

At a broader level, retraction seems to have been ISC’s next move to harness the social sciences. Director Buchanan and Dean Kildee later shared their reasons for advocating retraction. Kildee, the non-voting Joint Committee chair, explained how inappropriate it would have been for a land-grant institution to allow its social scientists to recommend policy. It was nothing short of “amazing” to him “that this pamphlet was published by any unit of a land-grant college.” Buchanan added, “The reason behind the action was that those involved in the state represent a large clientele with whom it is highly desirable that the College work amicably.” ISC needed to “get faced in the same direction with the dairymen of the state in order to carry forward satisfactorily our programs of research and education.”<sup>45</sup>

---

social sciences so that controversial issues would be avoided.” T. W. Schultz to Joseph H. Willits, 9/22/1943, Schultz Files–Chicago 29/23 (also in RAC-RF).

43. The words are from Fred Larrabee, president of the Iowa Dairy Association, in *Creamery Journal*, July 1943, 22, 27.

44. T. W. Schultz to Joseph Willits, 16 Oct. 1943, Schultz Files–Chicago 29/23.

45. H. H. Kildee to Carl Hamilton, 9/1/1943, Buchanan Files 8a/16; R. E. Buchanan to V. V. Malcom, 8/12/1943, Buchanan Files 8a/13. The President’s

Friley's retraction letter provoked many comments from its recipients. Leaders in agricultural economics were stunned. One of them, G. W. Forster, wrote to Schultz and asked, "Is this another case of interference with research by vested interests?" Schultz conceded, "We still have a long way to go in developing a procedure and organization in our land-grant colleges that will facilitate studies in the social sciences without fear or favor." Schultz viewed the situation of Pamphlet No. 5 as "a measure of . . . our willingness up to this point to tackle some of the really important and bigger issues in our economy." He feared that the progress of social science at public institutions had "probably been thrown for a substantial loss."<sup>46</sup>

Edwin G. Nourse, formerly chair of ISC's Department of Agricultural Economics and now chair of the national Social Science Research Council, sent his comments directly to Friley. "When I received Pamphlet No. 5," Nourse explained, "I read it with deep interest and a feeling bordering on amazement. I thought that perhaps the time had arrived when a publicly-supported institution could present the results of objective study of economic problems with complete freedom, without pulling its punches or resorting to 'carefully contrived ambiguities' of statement." Friley's recantation alarmed Nourse, who believed that "the situation thus created is one of almost incalculable importance to every person interested professionally or merely as a citizen, in the preservation of opportunities for the conduct of objective scientific investigation and the uninhibited presenta-

---

Special Committee delivered its findings to Friley's office on July 14. The committee complained that all the data tables had yet to be checked and that some data seemed to come from "rather obscure sources." The committee also proclaimed that too much data was "in the comparative form which make them more obnoxious to many readers than if they were simple statements." "Report from Special Committee," 7/14/1943, Buchanan Files 8/11. No known comment exists from Friley on this Special Committee report.

46. G. W. Forster (professor of agricultural economics at the University of North Carolina) to T. W. Schultz, 8/9/1943; Schultz to Forster, 9/3/1943, Schultz Files 29/22. Schultz expressed similar views to another North Carolina agricultural economist and to Joseph Willits. Schultz to Sam H. Hobbs Jr., 9/2/1943, Schultz Files-Chicago 29/22; "Memo of phone conversation," Schultz with Willits, 8/11/1943, RAC-RF. To Willits he suggested that the central issue in the controversy was the matter of how individual faculty members could publish policy arguments without a college needing to take the same policy position.

tion of results." Friley replied that "the Iowa State College has always prided itself on the accuracy and high quality of its research work; it has tried to draw a clear distinction between research and advocacy." Pamphlet No. 5, said Friley, contained both faulty research and policy advocacy introduced "to a very great degree."<sup>47</sup>

Nourse, in the meantime, contacted other leading agricultural economists to learn whether there really were any major factual errors in Brownlee's research. Karl Brandt of Stanford University's Food Research Institute responded, "I have not found in Mr. Brownlee's treatment of his subject any reason for such strong and startling exception to the statements made in the pamphlet as a majority of the members in the special adjudicating committee obviously have done." Brandt added, "How fortunate my colleagues and I are, indeed, in serving on a faculty of a privately owned institution." Brandt also wrote to Friley, reiterating his assessment that Brownlee had analyzed the dairy situation "without bias, and on the whole correctly."<sup>48</sup>

The Iowa press extensively covered the retraction of Pamphlet No. 5. National farming magazines also reported on the controversy. Iowa citizens wrote letters to ISC, mostly accusing the school of capitulating to special interests. Even the national press took an interest in the controversy at a time when Americans had bigger worries on their minds. In the midst of war coverage, *Time* published an article titled "The Butter Atheist," and *Newsweek* facetiously reported that Iowa's dairy leaders had "found a traitor in their ranks" – the traitor being ISC. Even the *Chicago Journal of Commerce* expressed disbelief that President Friley and the ISC administration were trying to "bamboozle"

---

47. E. G. Nourse to C. E. Friley, 8/9/1943, RAC-RF; Friley to Nourse, 8/11/1943, *ibid.* Another who wrote to Friley was ISC economist Walter W. Wilcox, who was then working in Washington. Wilcox reported that many people in Washington interpreted the retraction letter "as capitulation on the part of the Iowa State College to pressure group interests." Wilcox to Friley, 8/20/1943, Buchanan Files 8a/13, Schultz Files-Chicago 29/18. See also Buchanan to Wilcox, 8/23/1943, Buchanan Files 8a/13; Wilcox to Schultz, 8/27/1943, Schultz Files-Chicago 29/18; and Wilcox to Schultz, 9/7/1943, Schultz Files-Chicago 29/17.

48. E. G. Nourse to Karl Brandt, 8/10/1943, RAC-RF; Brandt to Nourse, 9/3/1943, *ibid.*; Brandt to Friley, 9/3/1943, *ibid.*

the public with “puerile actions” that have “cast suspicion on all future publications coming from faculty members” at ISC. As seen through the eyes of the nation’s business leaders, the problem was clear: “If the pressure groups like the dairymen in Iowa get research conclusions revised merely by putting the squeeze on the college president and threatening to have the legislature cut the college’s appropriations, why should anyone believe that any of the college’s future research publications are impartial and not written with an eye to catering to the prejudices of the producers around the state?”<sup>49</sup>

Under such pressure, Friley and Buchanan moved to get the revision process under way. On July 27 they agreed to reappoint the President’s “Special Committee” to oversee the process.<sup>50</sup> Friley also directly contacted the Iowa State College Press to demand reorganization of the press’s editorial board. By the end of July, Friley had successfully removed the economics review committee from any oversight of the pamphlets and reassigned all review powers over the pamphlet series to the press’s reorganized editorial board. Friley even personally removed a professor of journalism from chairing the editorial board, substituting a professor of animal husbandry. For added measure, Friley removed the lone social scientist (Margaret Reid) from the editorial board. As a result of these changes, Friley “anticipated” no foreseeable reason why the College Press’s new editorial board “will at any time delegate its authority for review of manuscripts to any other committee or organization.”<sup>51</sup>

---

49. In addition to more letters to newspapers, numerous letters to ISC are in the Buchanan Files, Friley Files, and Schultz Files—Chicago. See also Harry O’Brien, “Less Butter, More Bread,” *Country Gentleman*, Aug. 1943, 18, 27; W. A. Gordon, “The Farmer Rebels with Printer’s Ink,” *Successful Farming*, Aug. 1943, 11; “The Butter Atheist,” *Time*, 8/2/1943, 86; “Iowa and Margarine,” *Newsweek*, 6/14/1943, 72, 74; “Research at Iowa State College,” *Chicago Journal of Commerce*, 7/31/1943, 12 (copies in Buchanan Files 8/13 and 8a/1). The *Chicago Journal of Commerce* editorial upset Buchanan and others at ISC. Buchanan shared his view in R. E. Buchanan to V. V. Malcolm, 8/12/1943, Buchanan Files 8a/13. Leroy D. Snyder, president of the Iowa State College Alumni Association, responded to the editorial in “ISC Criticism Challenged,” *The Alumnus of Iowa State College*, July–Aug. 1943, 3.

50. R. E. Buchanan to Special Committee, 7/27/1943, Buchanan Files 8/11.

51. Friley to Buchanan, 6/1/1943, Friley Files 9/8; Buchanan to Friley, 6/8/1943, *ibid.*; Buchanan to Friley, 6/22/1943, Buchanan Files 8a/3. For more about the



The situation at ISC took a new turn for the worse when the ISC administration used the Nicholls-Vieg manuscript to further redefine the nature of allowable social science. Roger Fleming, director of research at the Iowa Farm Bureau, submitted comments on the manuscript, suggesting that if social scientists at ISC were to advocate policy in any way, they should seek "to present an accurate, understanding and sympathetic orientation of the broad discussion to the Iowa situation." Leland G. Allbaugh, associate director of the Extension Service, agreed that ISC's social scientists should serve Iowa's interests first. Subsequently, even though the interdepartmental review committee's mix of physical and social scientists unanimously approved the pamphlet's sixth revision, President Friley overruled the committee and rejected the manuscript for publication by ISC. Nicholls, deciding that further pursuit of the principle of the matter was not worth his energy, got the pamphlet published elsewhere, with support from the American Council on Public Affairs. Reflecting on the whole matter once it was over, Nicholls wrote that he "felt like a person put on trial for a murder he did not commit who, after five appeals, was relieved to get the death sentence."<sup>52</sup>

TWO MONTHS LATER, the entire controversy reached a head, when Schultz unexpectedly resigned from ISC. The final straw, it seems, had been Friley's newest approach to finding a solution. On August 16 Friley had moved to appoint yet another four-person committee. This "Committee to Reorganize the Department of Economics and Sociology," headed by Extension Service director R. K. Bliss, was assigned the weighty responsibility "to make a thorough study of the organization, functions, program and relationships" of the department, yet it

---

reorganization of Iowa State College Press's editorial board in 1943, see Russell Paul Kaniuka, "A History of the Iowa State University Press" (M.S. thesis, Iowa State University, 1961), 34-35.

52. Nicholls, "A Narrative Chronology." The Nicholls-Vieg pamphlet was published as William H. Nicholls and John Vieg, *Wartime Government in Operation* (Philadelphia, 1944). It was dedicated to T. W. Schultz for "his devotion to unbiased scholarship and the general welfare." Friley is nowhere in the book's substantial list of kindly acknowledged colleagues, but Nicholls added a handwritten statement to the copy in the Iowa State University Special Collections: "To President Friley with the best personal regards of William H. Nicholls."

included no one from the department, and was even ordered not to communicate with anyone from the department. The new committee's work was well under way by mid-September.<sup>53</sup>

Schultz's resignation letter, dated September 15, emphasized his displeasure over the handling of Pamphlet No. 5, dealings with the Nicholls-Vieg manuscript, the removal of the lone social scientist from the press's editorial board, and a host of related matters. Schultz held President Friley responsible for the "crisis in the development of the social sciences on this campus." Although in the past ISC had encouraged "an unusually vigorous development" of the social sciences, Friley had compromised ISC's public purpose by cowering to special interests, causing "a serious loss of confidence in the integrity of the Iowa State College both on the part of its faculty members and on the part of scholars elsewhere." Schultz emphasized ISC's error: "The failure to have served, first and foremost, the general welfare of the state and nation has quite understandably created expectations that the facilities and faculty of Iowa State College were primarily here to serve agriculture in ways prescribed by the organized pressure groups in agriculture regardless of the effects of what was done upon the public interest generally." Schultz urged Friley to inform the faculty in the social sciences that "there is to be freedom to work on national and other problems, even though they are controversial in nature."<sup>54</sup>

Schultz and Friley met personally two days after Schultz resigned. Immediately thereafter, Friley held a news conference to announce the resignation, which was covered by Iowa's newspapers. The press also published excerpts from Schultz's letter, thereby introducing Iowans to Schultz's argument that Iowa pressure groups endangered free inquiry in the social sciences.<sup>55</sup>

---

53. C. E. Friley to R. K. Bliss et al., 8/16/1943, Friley Files 6/15.

54. "Form S-3, Iowa State College, Resignation," T. W. Schultz, 9/15/1943, Schultz Files-Chicago 29/17; Schultz to Friley, 9/15/1943, Buchanan Files 8/7, *ibid.*, 29/16. Schultz's letter also urged Friley to discontinue the pamphlet series; cease any further administration of Rockefeller Foundation funds without Schultz's approval; and disband the committee recently established to limit the functions of the Department of Economics and Sociology.

55. "Schultz Resigns as Economics Head at State College," 9/17/1943, Information Service, Iowa State College, Ames, Buchanan Files 8/14; *Des Moines Register*, 9/18/1943, 9/19/1943. The *Cedar Rapids Gazette*, 9/19/1943, pub-



Following his September 1943 resignation, Schultz (right) is shown sharing ideas with William G. Murray, who became acting head of the department on October 1. From *Iowa Farm Economist*, October 1943.

Governor Bourke B. Hickenlooper immediately stepped forward to express confidence in Friley and the ISC administration. Francis Johnson, president of the Iowa Farm Bureau Federation, also rallied to support Friley, describing the situation as a “minor incident,” merely a corrective in the “fight to keep Iowa State College an institution of ‘practical agricultural education and scientific research along agricultural lines.’”<sup>56</sup>

---

lished lengthy excerpts from Schultz’s letter and independently confirmed the likelihood of a series of resignations from the economics faculty. See also *Dairy Record*, 9/22/1943, 8, 25.

56. *Cedar Rapids Gazette*, 9/20/1943, 9/22/1943. On the other hand, Donald W. Van Fleet, president of the Iowa Farmers Union (and an opponent of Francis Johnson’s strategies against ISC economists), began a letter-writing campaign to the governor requesting outside investigation of Friley and ISC. See five letters (from 9/22/1943 to 10/14/1943) between Van Fleet and Governor Hickenlooper in Friley Files 6/12.

*Wallaces' Farmer*, on the other hand, recognized Schultz's resignation as a "great loss" for ISC as well as "in the larger field of public affairs." The central issue in the Pamphlet No. 5 controversy, as *Wallaces' Farmer* interpreted it, was what kind of social science would be allowed at ISC. To be useful, economists "must deal with pressing and controversial issues." ISC's economists are expected to be as impartial as possible, and to present facts as they see them. "But so long as it bases its conclusions on the best evidence it can find, nobody should object, altho some may squirm and altho others may—quite properly—ask for further investigation into the facts." The editorial added, "You can't cure cancer by telling the doctor you don't believe in it, and that he is to find another diagnosis. So, in economic diseases, we need to let the economists do the best they can without any orders as to what the diagnosis should be."<sup>57</sup>

Schultz finished his days at ISC writing letters to friends. To one he acknowledged that an open job offer from the University of Chicago "has given me an opportunity to do what needed to be done here." A once "favorable environment" for the social sciences, Schultz wrote, had turned sour due to a notion that the ISC economists' policy studies "were not in harmony with the program and policies advocated by the National Farm Bureau Federation." Schultz expressed deep concern that the nation may be losing a research center "of great promise"; yet he maintained hope "that the tolerance, concern, and good judgment of the many leaders in this state will bring with them the necessary 'light' to help cure the wounds." "We have not as yet developed the necessary safeguards for social science studies in a land-grant college such as this." What was urgently needed was to establish "institutional arrangements which will protect the Iowa State College and other land-grant colleges when they undertake vital and courageous research in the social sciences."<sup>58</sup>

---

57. *Wallaces' Farmer and Iowa's Homestead*, 10/2/1943, 6.

58. Schultz to James G. Patton (president of the National Farmers Union), 9/23/1943, Schultz Files-Chicago 29/23; Schultz to Joseph H. Willits, 9/22/1943, *ibid.* See also Schultz and Willits, phone conversation, 10/11/1943; Willits to Schultz, 10/11/1943, RAC-RF; Schultz to Willits, 10/16/1943, *ibid.* Other letters Schultz wrote during his last days at ISC include ones to Jim Russell (farm editor, *Des Moines Register*), 9/19/1943, Schultz Files-Chicago 29/23; Donald Murphy (agricultural editor, *Des Moines Register*), 9/28/1943, *ibid.*

In an open letter titled "Iowa State College and Social Science Research," Schultz explored the relationship between ISC and special interests and discussed why policy research was needed at ISC. Successful resolution to the broad controversy, he explained, might ultimately depend upon whether "the people of Iowa believe, as I think they do, that the most serious problems affecting their well-being over the next few decades lie in the fields of economics, government and social organization." If Iowans take that view, then they will want social research that is "consistent with the general welfare of society." Iowans must ask: "Should state supported institutions such as Iowa State College assume a far greater part of the necessary research and educational functions of the social sciences?" Schultz hoped readers would decide that "unbiased research in the social sciences can be prosecuted with vigor" at ISC.<sup>59</sup>

Friley moved to control the damage. Despite the evidence to the contrary, he was convinced that the "range of comments both on and off the campus unanimously condemns the manner in which [Schultz] had handled the situation."<sup>60</sup> To set matters right, he called a meeting with the economics faculty. Before the meeting, the faculty submitted a memo expressing their main points of discontent, consolidating their most pressing concerns under the banner, "Controversial Issues and the Social Sciences." They called for dialogue to explore the balance between faculty research for short-run goals of special interests and faculty research for the public interest. Above all, they wrote, ISC must "recapture and preserve the respect and confidence that has existed in the past throughout the state and the nation."<sup>61</sup>

---

and Charles H. Brown (head librarian, ISC), 9/28/1943, Schultz Files-Chicago 29/16. Schultz also received many letters from friends in the days following his resignation. See Schultz Files-Chicago 29/23. One who wrote was Edwin G. Nourse, who said that ISC's tendency to suppress free expression of ideas dated back to an earlier "troubled period" of free expression at ISC during the 1910s and 1920s. E. G. Nourse to Schultz, 10/4/1943, RAC-RF.

59. *Des Moines Register*, 9/24/1943.

60. C. E. Friley to Richard H. Plock, 9/23/1943, Friley Files, 6/12.

61. "Memorandum to the President's Office from the Faculty of the Department of Economics and Sociology," 9/22/1943, Schultz Files-Chicago 29/23. The memorandum was signed by economists Arthur Bunce, D. Gale Johnson, Frank Robotka, Geoffrey Shepherd, and Wallace Wright.

Friley, however, was set on going his own way. After meeting with the economists, he released his "Statement of Policy" concerning the limits to be placed on social science at ISC. "The staff of the Iowa State College," Friley stated in no uncertain terms, "must work in full and sympathetic cooperation with all agencies in the State which are working for the welfare of the State as a whole, or any of its segments." ISC's social scientists were, in other words, to be "servants of power."<sup>62</sup>

By the end of September, the American Association of University Professors (AAUP) was aware of the controversy and announced a "probable" investigation of "suppression of 'academic freedom'" at ISC. The AAUP was especially interested in investigating "larger issues concerning the relation of publicly controlled education institutions to private interests and the public at large." Friley responded to the possible outside investigation by sending Buchanan to Washington to assure the AAUP that ISC would publish some version of a revised Pamphlet No. 5. Evidently Buchanan provided enough information to keep the AAUP at bay.<sup>63</sup>

But newspapers in the state were again picking up the question of what kind of social science was to be allowed at ISC. An October commentary in the *Ames Daily Tribune*, for example, suggested that the central issue that "must be taken into account . . . is that the social sciences are not precise sciences. On many questions it is possible for another person in the field to take a different—even an opposite—position from Doctor Schultz and still be considered as competent an economist as he." The *Des Moines Register*, that same month, featured Schultz supporter Thomas W. Keenan offering historical comparison:

When Copernicus reported his conclusion that the sun did not revolve around the earth but that the earth revolved around the sun, there was plenty of 'studied judgment by qualified authorities' to

---

62. "Friley Repledges College to Service to State of Iowa," Information Service, Iowa State College, Ames, Friley Files 2/27. The term *servants of power* comes from Loren Baritz, *The Servants of Power: A History of the Use of Social Science in American Industry* (Middletown, CT, 1960).

63. *Des Moines Register*, 10/2/1943; President Charles E. Friley to Ralph E. Himstead, 10/5/1943, Buchanan Files 8a/15. See also Himstead to Friley, 4/12/1944, Buchanan Files 8a/15. Copies of correspondence between AAUP representatives and ISC faculty and administrators are in the AAUP Archives, Washington, DC.

the effect that he was a heretic. If he had been on the faculty at I.S.C. would the college have refused to assist in publicizing that report? When Harvey reported that the blood in our bodies circulated through the veins and arteries there was plenty of 'studied judgment by qualified authorities' to the effect that he was crazy; so we would have turned thumbs down on him and he would have gone to the University of Chicago.<sup>64</sup>

STILL UNRESOLVED through all this was the matter of revising Pamphlet No. 5. By mid-October, Friley's reappointed Special Committee approved Brownlee's outline, which was substantially the same as for the original pamphlet.<sup>65</sup>

By the end of the month, however, Buchanan set another ball in motion, this one aimed at producing an "official" statement of what could be allowed from social science in relation to the mission of a public, land-grant institution. Buchanan established yet another committee, named the "Committee on Sponsorship of Publications." Buchanan informed the committee's five members (including two social science representatives) that he had been "unable to find any adequate discussion of this problem in the writings relating to the land-grant colleges and experiment stations." He directed the new committee to scrutinize every applicable congressional act and then formulate written rules.<sup>66</sup>

The situation for Pamphlet No. 5 became even more unclear when, between mid-November and mid-December, two members of the Special Committee resigned. Friley handpicked a respected professor of chemistry, Ralph M. Hixon, as the new committee chair.<sup>67</sup> Hixon promptly declared that the Special

---

64. *Ames Daily Tribune*, 10/1/1943 (emphasis in original); *Des Moines Register*, 10/24/1943.

65. Oswald Brownlee to T. W. Schultz, 10/12/1943, Schultz Files—Chicago 29/21.

66. R. E. Buchanan to Members of the Committee on Sponsorship of Publication, 10/25/1943, Buchanan Files 10/17.

67. B. W. Hammer resigned on November 23, providing no reason; committee chairman George Godfrey resigned on December 14, citing ill health (he died two months later). Iver J. Johnson, already chairman of Buchanan's new "Committee on Sponsorship of Publications," replaced Hammer. Another new committee member, C. A. Iverson, was also added. Buchanan to R. M. Hixon, 11/23/1943, Buchanan Files 8/11; George Godfrey to Buchanan, 12/14/1943, *ibid.*; Buchanan to Ray Anderson, 2/25/1944, Buchanan Files 8/13.

Committee would take over the rewriting of Pamphlet No. 5. Margaret Reid, on leave in Washington, expressed alarm over the precedent such an action would establish. Reporting that leaders in Washington were counting on him, she encouraged Brownlee "not to let your impatience to get finished lead you to consent to anything to which you do not fully subscribe." Reid wrote to Buchanan the same day, suggesting that the members of the Special Committee "have been asked to appraise something outside the special field of competence of every one of the members." She added that "suspicion deepens in many quarters that no publication will be forthcoming."<sup>68</sup>

ISC was, in fact, getting flogged on the national stage. In October *Time* published a report that an ISC graduate student had produced a "disinterested oleopus," but the Iowa Farm Bureau had declared it foul. Such a pamphlet "might befit scholarly Harvard," the article reported the Farm Bureau crying, "but was disloyal in a cow college." According to the traditionally conservative *Reader's Digest*, Brownlee had published an informative and balanced collection of facts only to discover that "there was the very devil to pay." Dairy interests "demanded Brownlee's scalp"; Schultz then "chucked his job and escaped to Chicago," while President Friley "placated the dairy interests by disowning the heretical tract." *Harper's Magazine* reported that margarine, suddenly charged with "the power of dynamite," had ignited an explosion that has "blown up the works at Iowa State College of Agriculture—through the suppression of a pamphlet enumerating the virtues of margarine during the wartime butter shortage."<sup>69</sup>

---

68. Margaret G. Reid to O. H. Brownlee, 12/23/1943, Buchanan Files 8a/1; Margaret G. Reid to R. E. Buchanan, 12/23/1943, Buchanan Files 8a/2.

69. "Cowed?" *Time*, 10/11/1943, 40; Harland Manchester, "Here's Why There's Nothing to Spread on Your Bread," *Reader's Digest*, Dec. 1943, 49–52; Wesley McCune, "The Oleomargarine Rebellion," *Harper's Magazine*, Dec. 1943, 10–15. The *National Union Farmer* (Denver, CO) sided with academic freedom against the arguments of the Farm Bureau. Complicity between the Iowa Farm Bureau and ISC, the magazine reported, "has forced the resignation of a nationally known professor . . . because he would not compromise academic standards and freedom at the demand of the Extension Service's pressure group." "Professors May Probe Extension," *National Union Farmer*, 10/15/1943, 1. See also *Boston Herald*, 11/15/1943.



President Friley reacted by assuring Iowa taxpayers and ISC donors that all future college publications would be tightly controlled and would be required to pass through strict procedures of "faculty review, criticism and final approval provided by institutional regulations." Buchanan, for his part, remained optimistic that the new Committee on Sponsorship of Publications would soon clarify "this whole problem of sponsorship [of ISC research] and its possible relationship to academic freedom." As for Pamphlet No. 5, Buchanan emphasized that he wanted to see a revision published as much as anyone, but that the entire matter was not up to him, or even to Friley. "For me to step in and issue a directive," he commented, "I am quite sure would do more harm than good." And, he continued, no matter what the Special Committee decides, nothing would be published unless the original author, Brownlee, agreed to it. Friley and Buchanan considered the matter settled, that is unless Brownlee or Reid decided to risk initiating any objection. Neither of them did.<sup>70</sup>

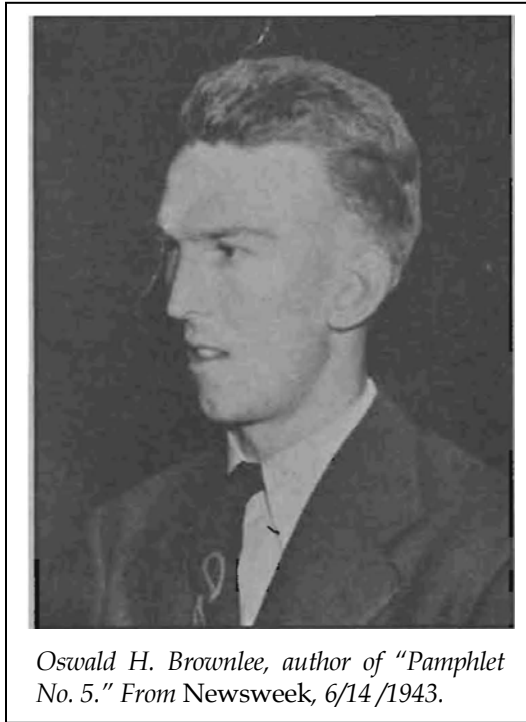
When Hixon learned that Brownlee had "accused" his Special Committee of "attempting to rewrite the pamphlet," however, he told Brownlee that he should see the offer of rewriting services as providing "a means of assisting" him. Hixon added that the committee now had major problems with Brownlee's previously approved revision outline.<sup>71</sup>

Within two weeks, Brownlee responded to the committee's edited materials and request for revision, enclosing his latest revision and calmly explaining that he had attended to all points of criticism, agreeing on some but disagreeing on others.

---

70. Charles E. Friley, "Right to Speak or Publish—Has Never Been in Question," *Alumnus of Iowa State College*, Dec. 1943, 75; R. E. Buchanan to Margaret Reid, 12/27/1943, Buchanan Files 8a/1. Leroy D. Snyder, president of the ISC Alumni Association, also reassured ISC's supporters. Admitting that the ISC community had been "stunned by the nationwide comment," he explained that the retraction was best interpreted as "a mark of courage, an evidence of integrity" when a review board "finds questionable conclusions." L. D. Snyder, "Answers Criticism at ISC," *Iowa State College Bulletin—News of ISC*, 10/13/1943. Buchanan, for his part, assured Snyder that he did "not believe there is any significant question of academic freedom now before us." Buchanan to Snyder, 12/16/1943, Buchanan Files 8a/13.

71. R. M. Hixon to Brownlee, 1/5/1944, Buchanan Files 8a/2. Hixon now described the pamphlet as "excessively documented." Hixon to Buchanan, 1/6/1944, Buchanan Files 8/11.



*Oswald H. Brownlee, author of "Pamphlet No. 5." From Newsweek, 6/14/1943.*

As requested, Brownlee placed increased emphasis on the nutritive value of dairy products, but maintained that margarine needed to be noted as an available substitute for butter. Margarine, Brownlee insisted, "has to be mentioned rather freely in the reissue." The "emphasis given to various points," he conceded, "is a matter of judgment." If the Special Committee still disagreed with anything, "I would suggest that you be given space running concurrently with my presentation for rebuttal."<sup>72</sup>

Hixon had failed to provoke Brownlee into expressing anything regrettable. Still, the Special Committee found the latest revision unacceptable. Writing to Buchanan on January 28, the committee described Brownlee's writing as "argumentative and misleading," and found that all of his revisions "lack objectivity." The committee added that Brownlee has turned "so dogmatic in his convictions that he is unable to see the problem in its proper

---

72. Brownlee to Hixon et al., 1/21/1944, Buchanan Files 8/11.

perspective." The committee, presumably seeing the proper perspective, now wanted the "dominant theme" to be the analysis of problems associated with shifting milk production away from using milk products for animal feed (especially for calves and hogs) to producing more milk products fit for human consumption. At the same time, the committee recommended dropping all discussion of oleomargarine, which perhaps might be included in some future college pamphlet focusing on comparison of different fats and oils. Hixon further recommended that Buchanan take the time to recruit two more new committees, one to be made up of Experiment Station personnel who would receive any future revisions, a second that would be some kind of all-college group responsible for rewriting the pamphlet as they might see fit. Hixon ended his insubordinate letter by declaring that the Special Committee's work was done.<sup>73</sup>

Buchanan was incensed. He ordered Hixon and the Special Committee to meet with the economics faculty to share their latest findings, and he praised Brownlee for showing great patience through the entire process. If ever there had been a hint of misunderstanding, "the author has taken it upon himself to clear matters promptly and has volunteered to my office all correspondence that had pertinence." Fully aware that Hixon's Special Committee wanted to avoid any further responsibilities, Buchanan reminded the committee that republication was not to be partially deferred to a future pamphlet on fats and oils, but was to be in one pamphlet—as ISC had announced publicly. Republication was both "necessary" and "overdue." Buchanan thanked the committee for their service, but, he added, it was certainly not dismissed.<sup>74</sup>

Buchanan did, however, add one new committee: a focused review group that would need to work fast. Supposedly a subcommittee of Hixon's Special Committee, this four-person group, including Brownlee and Buchanan, would work out its own conclusions on Pamphlet No. 5 and then submit them to

---

73. Hixon et al. to Buchanan, 1/28/1944, Buchanan Files 8/11.

74. R. E. Buchanan, "A Statement to the Joint Meeting of the Committee on Review of the Manuscript of Pamphlet No. 5 and the Advisory Council of the Department of Economics and Sociology," 1/28/1944, Buchanan Files 8/11, Friley Files 2/27.

Hixon's committee. If, in the end, any person on Hixon's committee still disagreed on pamphlet content, "consideration will be given to inclusion of his signed objections in an appendix." The new review group met every day for two to four hours through the last week of January and well into February.<sup>75</sup>

By the end of January, Buchanan's Committee on Sponsorship of Publications came through with a draft of its new social science regulations. The draft was distributed to readers, and feedback returned to Buchanan during the following weeks. One respondent was Schultz, now at the University of Chicago. Schultz respected the effort in general, but expressed a "feeling of uneasiness" that any restrictive guideline on social science would likely lead the college to "screen out" quality scholarship, causing certain kinds of critical opinion to "tend to go underground." Researchers in the social sciences might even turn so "discreet" that they would not put themselves on record.<sup>76</sup>

The Committee on Sponsorship of Publications submitted its finished report in early February, and Buchanan released a 13-page statement of policy for all social science at ISC. The statement cited wording newly discovered in the 1935 Bankhead-Jones Act to the effect that the U.S. Secretary of Agriculture, as the ultimate overseer of the nation's system of experiment stations, is "authorized and directed to conduct research" to identify "new and extended uses of and markets for agricultural commodities and by-products and manufactures thereof." Such wording—specifically the search for "extended uses of and markets for"—perhaps was instrumental in the new recommendation to allow policy research by social scientists so long as "publication directly by the author does not in any way predicate experiment station sponsorship for the ideas, opinions or conclusions expressed." The report added, "There is no reason

---

75. Buchanan, "A Statement to the Joint Meeting." One member from Hixon's committee (B. H. Thomas) would be on the new subcommittee as would one faculty member from the economics department (D. Gale Johnson). Buchanan served as chair.

76. "Sponsorship of Publications by the Agricultural Experiment Station," draft manuscript, January 1943, Buchanan Files 10/17; Schultz to Buchanan, 2/4/1944, *ibid.* John A. Vieg also commented on the draft report, sharing Schultz's concerns. Vieg to Buchanan, 2/22/1944, Buchanan Files 8a/13.

for committees or other formal proceedings before publication." In conclusion, "the desirable way to handle such publication is really that of scientific papers in general," that is, "informal [peer] review by colleagues in the experiment station itself or, still better, in the wider field of international science."<sup>77</sup> The final report of the Committee on Sponsorship of Publications did not say what to do about Pamphlet No. 5.

Hixon's attempt to stop the revision process suggested to some observers the need for increased pressure by outside interests capable of challenging Iowa special interests. On February 10 John Vieg, then on leave in Washington, wrote to inform Friley that the AAUP was preparing to send an investigating committee to Ames. Vieg had spoken to AAUP secretary Ralph Himstead to try to persuade him to hold off sending a committee a little longer. In light of this favor he was doing for Friley and ISC, Vieg strongly urged Friley to get a revised Pamphlet No. 5 published "without much additional delay."<sup>78</sup>

On February 12, the *Des Moines Register* reported that a "reliable source" said the revised manuscript had gotten only as far as Buchanan's desk, and that Buchanan's actions must be the holdup. Yet Buchanan was also quoted directing blame at Hixon's committee: "I had hoped it would be out before this. The committee just hasn't done the job." Buchanan disclaimed the quotation, calling it a "fabrication." He explained to Hixon that he had never assigned such blame to Hixon's committee. Yet Buchanan admitted that "a series of mistakes [were] made . . . in handling the problem of the famous Pamphlet No. 5."<sup>79</sup> He only

---

77. "Sponsorship of Publications by the Agricultural Experiment Station"; Report of a Special Committee Appointed by the Director," R. E. Buchanan to Members of the Agricultural Experiment Station Staff, 2/11/1944, Buchanan Files 10/17, esp. pp. 3-4.

78. John A. Vieg to Charles E. Friley, 2/10/1944, Friley Files 6/14. The *Ames Tribune*, 1/21/1944, reported that the AAUP was considering whether to investigate partly because of a request by Donald Van Fleet, who had placed such a request after the State Board of Education and Governor Hickenlooper had each declined to make any investigation. The State Board of Education had said simply, "The charge of the violation of the fundamentals of academic freedom in all particulars is without foundation in fact." See also Henry C. Shull to Governor B. B. Hickenlooper, 11/5/1943, Friley Files 2/27.

79. *Des Moines Register*, 2/12/1944; Buchanan to Members of the Review Committee on "Pamphlet No. 5," 2/14/1944, Buchanan Files 8/11; Buchanan to J. S.

hoped that those mistakes would not result in the “complete disintegration” of a fine economics department, a situation that appeared increasingly likely.<sup>80</sup>

Meanwhile, an exasperated Vieg in Washington notified Buchanan that he would no longer try to postpone any impending investigation by the AAUP. Friley had written to Vieg, stating, “I have just learned that the final copy is being typed today, and I hope it can go to press very shortly.” Perhaps Friley hoped that Vieg would dutifully pass such information to the AAUP. Vieg did not believe him, however. In fact, Friley’s claim was false, and he knew it. Buchanan had recently informed Friley that the situation was entirely different from what Friley reported to Vieg, and certainly did not claim that the pamphlet was imminently forthcoming. Buchanan responded to Vieg, emphasizing the importance of letting the newly structured review process run its course. Buchanan was tired of so much “undue pressure from various friends.” In an odd way, he might welcome an outside investigation; at least a group such as the AAUP might stand a chance of running a review process that is “properly conducted.”<sup>81</sup>

---

Russell (farm editor, *Des Moines Register*), 2/14/1944, Buchanan Files 8a/10; Russell to Buchanan, 2/15/1944, *ibid.*; Buchanan to Russell, 2/17/1944, *ibid.* The person who had said that the revised manuscript languished in Buchanan’s hands was Russell’s own daughter, a journalist for the *Register* (and, indeed, a “reliable person”). In his February 15 letter, Russell demanded to know the truth, noting that the status of the revision is “the public’s business.” Buchanan provided a detailed response on February 17. The specific mistakes Buchanan now recognized were (1) that a pamphlet intended as an “unsponsored publication” did not come across that way; (2) that ISC had failed to notice that the Iowa Farm Bureau (in particular Francis Johnson) had certain objectives stemming from other grievances; (3) that the faculty members on the original Joint Committee conceded too much on certain points raised by the dairy representatives; and (4) that the President’s Special Committee included no one from the Economics Department.

80. Indeed, by this time the report out of Ames was that many economists had resigned or were on the verge of doing so. In addition to the resignations of Schultz and Walter Wilcox (who was also a member of the original economics review committee), it now appeared that at least four other economists were planning their exodus. *Des Moines Register*, 3/3/1944.

81. Vieg to Buchanan, 2/22/1944, Buchanan Files 8a/13; Friley to Vieg, 2/16/1944, Friley Files 6/14; Buchanan to Friley, 2/7/1944, Friley Files 9/8; Buchanan to Friley, 2/17/1944, *ibid.* Buchanan to Vieg, 2/28/1944, Buchanan Files 8a/17. Buchanan corresponded as well with Walter Wilcox, now at the Uni-

The AAUP informed President Friley on April 12 that their investigation was serious. Himstead explained that the AAUP ultimately wanted to investigate "the relationship of Iowa State College to the public." Friley, responding on May 2, asserted that Himstead's view was based on "wholly untenable hypotheses" which "might well lead to a questioning of the objectivity of your inquiry."<sup>82</sup>

The American Civil Liberties Union (ACLU) was also threatening an investigation. In an article in *The New Republic*, J. M. O'Neill, who chaired the ACLU's Committee on Academic Freedom, identified the case at ISC as concerning "the freedom to speak, to teach, to publish the truth as he sees it on the part of the teacher and research scholar." President Friley, O'Neill charged, had "given up without a fight the fortress for truth and the public interest."<sup>83</sup>

ISC economist Albert G. Hart was the first to respond to O'Neill. Hart corrected minor misunderstandings of certain details and asked O'Neill to clarify whether the ACLU planned to investigate. Buchanan wrote next, agreeing with O'Neill's overall opinion of the importance of academic freedom, but he could "conceive of nothing in this procedure which in any way involves academic freedom." Furthermore, he was astonished that O'Neill had made so many incorrect statements about a situation that was much more involved than O'Neill recognized. Bu-

---

versity of Wisconsin. Wilcox believed that Hixon's committee would never approve a revision, and he suggested that such a conflict would never happen at Wisconsin. To that Buchanan responded: "What has the University of Wisconsin ever done to seriously combat the domination of the dairy pressure groups in that state?" Wilcox to Buchanan, 2/14/1944, Buchanan Files 8a/15; Buchanan to Wilcox, 2/17/1944, *ibid.* Wisconsin actually was little different from Iowa on the issue at hand. The *New York Times*, 11/7/1943, reported that Wilcox had first had to be cleared of any close association with Pamphlet No. 5 before the State Board of Regents would approve his appointment. See also May 1944 correspondence between Charles Friley and John D. Jones Jr. of the Regents of the University of Wisconsin in Friley Files 9/8.

82. Ralph Himstead to C. E. Friley, 4/12/1944, Buchanan Files 8a/15, Friley Files 6/14; Friley to Himstead, 5/2/1944, Friley Files 6/14. Friley consulted Buchanan to determine how ISC should respond, if at all. Buchanan recommended that ISC should be defiant and stonewall. Buchanan to Friley, 4/24/1944, Buchanan Files 8a/3, Friley Files 6/14.

83. J. M. O'Neill, "Academic Freedom and the Catholics," *The New Republic*, 2/14/1944, 204-7.

chanan demanded that O'Neill publish "a retraction" of his statements, which "are demonstrably untrue."<sup>84</sup>

APPROVAL of revised Pamphlet No. 5 actually had finally come on March 16, shortly before Hart and Buchanan wrote to O'Neill. Attached to the revision was a "minority report," signed by Hixon. It identified treatment of technical facts in the revised pamphlet as "essentially correct," but declared that much of the analysis was mistaken on "emphasis and inference." The Special Committee further absolved itself by declaring that any appended statements must be viewed as constrained by "limitations imposed by the fact this is a revision of the former publication."<sup>85</sup>

ISC released a publicity notice on March 17 announcing that the revised manuscript had gone to the publisher. Buchanan contacted Friley to recommend including an explanatory foreword. Buchanan also delivered the news to Brownlee, expressing appreciation for making "a substantial contribution to the economics of a very involved situation."<sup>86</sup> The revised manu-

---

84. A. G. Hart to J. M. O'Neill, 3/21/1944, Buchanan Files 8a/13; Buchanan to O'Neill, 3/27/1944, Buchanan Files 8a/17. See also Buchanan to Hart, 3/27/1944, Buchanan Files 8a/13; and Buchanan to Charles E. Friley, 3/27/1944, Buchanan Files 8a/3. Both Hart and Buchanan also wrote to Bruce Bliven, editor of *The New Republic*. Hart to Bliven, 3/21/1944, Buchanan Files 8a/17; Buchanan to Bliven, 3/27/1944, *ibid*.

85. R. M. Hixon et al. to R. E. Buchanan, 3/16/1944, Buchanan Files 8/11. The minority report was written by C. A. Iverson and C. Y. Cannon. C. A. Iverson and C. Y. Cannon to Ralph Hixon, 3/16/1944, Buchanan Files 8/11. In response to the minority report, Buchanan agreed that "it is highly desirable and fitting that there be complete freedom to record minority opinions and that such opinions be respected." Buchanan to Members of the Committee on Review of the Manuscript of the Revision of "Pamphlet 5," 3/21/1944, Friley Files 9/8.

86. "News Release," Information Service, Iowa State College, 3/17/1944, Buchanan Files 8/14; Buchanan to Friley, 3/17/1944, Buchanan Files 8a/2; Buchanan to Oswald Brownlee, 3/20/1944, Buchanan Files 8a/2; Buchanan to Friley, 3/20/1944, Buchanan Files 8a/3. Buchanan's foreword informed readers that the original pamphlet had contained cases of inadequate documentation, ambiguous statements, statements subject to misinterpretation, and topics inappropriately overemphasized (including "the competitive relationships of oleomargarine and butter"). The revised pamphlet explicitly was not an official publication of the Agricultural Experiment Station. R. E. Buchanan, "Foreword," in O. H. Brownlee, *Wartime Farm and Food Policy Series*, no. 5, rev. ed. (Ames, 1944), 1. See also Buchanan to Friley, 3/17/1944, Buchanan Files 8a/3; and Buchanan to Friley, 5/12/1944, *ibid*.



script was going to be published even though dairy interests still vigorously objected to it.<sup>87</sup>

The revised pamphlet was mailed on May 2, 1944. A corresponding news release announced that readers would find it "an enlargement of the controversial first edition." Readers of the revised pamphlet discovered citations of an ample quantity of scientific findings to make the case for nutritional equivalence between margarine and butter. The nine data tables in the text of the original pamphlet were reduced to three in the text of the revised edition (with an additional ten tables in an appendix). The subject was treated delicately, putting it that "fortified oleomargarine is nutritious and acceptable by many consumers as a spread."<sup>88</sup>

In May 1944 the controversy was over almost as quickly as it began. Neither the AAUP nor the ACLU ever formally investigated. The ACLU's O'Neill, writing in *The New Republic*, criticized ISC, but officially the ACLU noted only that professors Schultz and Wilcox "were forced out because of their opinions."<sup>89</sup>

---

87. Buchanan offered at least a few dairy representatives an opportunity to read the revised manuscript. See Buchanan to Clarence Nielson, 3/22/1944, Buchanan Files 8a/8. Representatives of the dairy group subsequently called on Friley and Buchanan to suggest that the revision not be published. Buchanan to Albert Hart, 3/27/1944, Buchanan Files 8a/8. Dairy representative Clarence Nielson appreciated that Buchanan has "no doubt done the very best job" under tough circumstances. Nielson to Buchanan, 4/1/1944, Buchanan Files 8a/8. See also Buchanan to Nielson, 4/6/1944, Buchanan Files 8a/13; Nielson to Buchanan, 4/8/1944, *ibid.*; and William G. Murray to Buchanan, 4/14/1944, *ibid.*

88. "ISC Issues Revised Version of Dairying Pamphlet," Information Service, Iowa State College, Ames, 5/2/1944, Buchanan Files 8/14. The quoted words from Brownlee are on page 39 of the revised pamphlet. Brownlee cited supportive science on the subject: A. J. Carlson, "Some Obstacles in the Path Towards an Optimum Diet I and II," *Science*, 4/30/1943, and 5/7/1943, 389-90, 413; Council on Foods and Nutrition, "The Comparative Nutritional Value of Butter and Oleomargarine," *Journal of the American Medical Association*, 8/22/1942, 1425-27; "A Report on Margarine," Report of the Food and Nutrition Board, National Research Council, Reprint and Circular Series, vol. 118, Aug. 1943, 18. On the contents of "A Report on Margarine," see also Margaret G. Reid, "To the Editor," *Des Moines Register*, 9/22/1943. Seven copies of the revised pamphlet were mailed to the Rockefeller Foundation. William G. Murray to Joseph H. Willits, 5/13/1944, Buchanan Files 8a/13 (also in folder 42, series 218S, RG 1.1, RAC-RF).

89. "Correspondence: Academic Freedom and Oleomargarine," *The New Republic*, 5/1/1944, 606-7; Lucille B. Milner [for Roger N. Baldwin, chairman of the ACLU], to R. E. Buchanan, Edward S. Allen, and Elizabeth Hoyt, 6/13/

THERE WAS FAR MORE to the controversy than simply pressure applied by special interests, the national press, and watchdog organizations. At the time of ISC's butter-margarine controversy, a canyon of difference separated how physical scientists at ISC saw research in the social sciences and how the social scientists saw their own research. Even greater than this distance between 'two cultures' was the scale of separation between two other cultures: those emphasizing research in the "public interest" versus those pressuring in favor of "special interests." The U.S. Department of Agriculture, by showing confidence in social science research at ISC, made available a great opportunity for ISC to become a national leader in social science; the school was recognized as an academic institution capable of helping meet the goal that "food will win the war." The Rockefeller Foundation joined in elevating ISC to a high echelon of academic institutions by means of an esteemed grant. But Iowa special interests demanded that restraints be placed on the definition of social science research at ISC. President Friley and others in the ISC administration agreed with Iowa special interests, at least until embarrassing national pressure forced a reversal of course.<sup>90</sup>

None of the parties could have been satisfied with the overall results. Dairy interests could only have been content with

---

1944; Lucille B. Milner [for Roger N. Baldwin] to R. E. Buchanan, Edward S. Allen, and Elizabeth Hoyt, 6/16/1944, Buchanan Files 8a/4. After Baldwin notified Buchanan that the ACLU had decided not to investigate, Buchanan asked Baldwin to disregard certain comments in a letter Buchanan had just mailed, in which he had tried hard to establish O'Neill's complete incompetence by exposing seemingly every possible error he had ever made in order to establish that the ACLU committee "has disqualified itself by self-evident bias." Buchanan to Baldwin, 6/12/1944, Buchanan Files 8a/4; Buchanan to Lucille B. Milner [for Roger Baldwin], 6/17/1944, *ibid.* See also Baldwin to Buchanan, 6/21/1944, Buchanan Files 8a/4, Schultz Files-Chicago, 29/21; and Elizabeth Hoyt to Lucille Milner [for Roger Baldwin], 6/14/1944, Buchanan Files 8a/4. The ACLU's official report provided their conclusion that although "Schultz and Wilcox were forced out because of their opinions," realistically speaking, "no legal action was possible." "In Defense of Our Liberties: A Report of the American Civil Liberties Union in the Third Year of the War" (New York, 1944), 54-55 (copy in Schultz Files-Chicago 29/21).

90. On the subject of the idea that "food will win the war," see R. K. Bliss, Director of Extension Service, "The Iowa Extension Service in The War Program," Pamphlet 49, Nov. 1942.

complete suppression of the pamphlet. They did not anticipate that social scientists could shift society's comparative weighting of butter and margarine by adding the concern of a humanitarian cause. Many people at ISC were unsatisfied. President Friley wanted social science that would be objective and produce only raw facts, yet also support Iowa's interests. Such a goal was an untenable combination. Buchanan wanted research to serve special interests on whom the school depended for funding; but state and national media exposed the faults in such a view – which it appears Buchanan also came to recognize. Brownlee wanted to provide meaningful policy analysis; however, the only known recommendation ever coming from Iowa's Agricultural Extension Service was a four-page pamphlet for dairy farmers with an "8-point Dairy Program" and a narrowly targeted slogan, "Get that Extra Squirt at Every Milking." Schultz wanted social science allowing unbiased policy analysis in service to the public interest. Even though Schultz ultimately described the revised pamphlet as "no surrender," his ideal for social science was not met at ISC. Worst of all, perhaps, was that ISC's Department of Economics and Sociology was in shambles.<sup>91</sup>

Between 1943 and 1945, 16 of 26 ISC economists left the school. Still more departed over the next few years. By about 1948 the Ames School of economics had vanished. The campus-wide level of discontent turned so severe that in 1947 the ISC Alumni Association pleaded with the State of Iowa Board of Education to investigate President Friley's "management practices." The board commenced to "carefully" investigate Friley in March 1947, stamping their completed findings six days after announcing the beginning of the investigation. The board declared their "utmost confidence" in Friley, and stated that this should "end the controversy so far as the board is concerned." Friley remained ISC's president for six more years.<sup>92</sup>

---

91. "Get that Extra Squirt at Every Milking. Iowa's 8-Point Dairy Program Information Folder," Iowa Agricultural Extension Service, ISC, 3/20/1945 (copy in "Department of Agriculture" folder, box 280, governor's files, State Historical Society of Iowa, Des Moines); T. W. Schultz to J. H. Willits, 5/12/1944, folder 42, series 218S, R.G. 1.1, RAC-RF.

92. *Time Magazine* reported 20 protest resignations, including 13 economists. "Bull Butter," *Time*, 3/27/1944, 48. *Fortune* also reported 20 resignations; "Will Butter Win the Peace?" *Fortune Magazine*, Nov. 1944, 134. Raymond R. Beneke,

It took years for the social sciences to recover at ISC. Some departing economists followed Schultz to the University of Chicago, where a number of them reached great heights leading a "Chicago School" of economics. Two former ISC economists achieved the Nobel Prize while at Chicago, with Schultz's coming in 1979.<sup>93</sup>

Many parties share the blame for the mess at ISC. In the original Pamphlet No. 5, Brownlee did not need to declare the comparable nutritional qualities of margarine and butter by so provocatively adding that "dairy interests have been rather effective in suppressing" margarine's use. Schultz, who oversaw the pamphlet's publication, later admitted that he had a backup plan to allow him to push hard to turn social science at ISC into what he personally believed it should be. Director Buchanan perhaps persisted too long in holding to mismatched beliefs "that the results of our studies should be presented as objectively and as sincerely as possible," but "that in the last analysis the staff holds loyalty to and is responsible in a sense to the citizens of the State of Iowa inasmuch as this is a state institution." On the other side was a stubborn Iowa State Dairy Association led by Fred Larrabee, who admitted in the group's 1944 report that the major accomplishment of the organization "during the

---

a later economics department chair at ISC, reported that 15 social scientists resigned within a year of the controversy. "T. W. Schultz and Pamphlet No. 5: The Oleo Margarine War and Academic Freedom," *Choices*, Summer 1998, 4-8. According to my research, between 1943 and 1945, 16 of 26 faculty members in the Department of Economics and Sociology either left ISC or were listed as "on leave" and never returned. *Iowa State College Bulletin* (Ames, 1943-44), 183; *Iowa State College Bulletin* (Ames, 1945-46), 199. On the subject of alumni pressure for Friley's dismissal, the notice of investigation appears in the *Iowa State Daily Student*, 3/14/1947. Some faculty members responded with support for Friley. *Des Moines Register*, 3/15/1947. The press release ending the investigation was widely published in Iowa newspapers; clippings are in the Friley Files 1/8.

93. Departing ISC economists who ended up at Chicago included T. W. Schultz, D. Gale Johnson, Mary Jean Bowman, William Nicholls (later to Vanderbilt University), Oswald Brownlee (later to the University of Minnesota), Margaret G. Reid, and George Stigler (who left ISC prior to the Pamphlet No. 5 controversy, with an open invitation to return to ISC). In addition to Schultz's Nobel Prize, Stigler won the prize in 1982. Also departing the scene at ISC was the *Iowa Farm Economist*, which ceased publication in 1946 (becoming partially absorbed in a new journal, *Iowa Farm Science*).

last year had been to obtain retraction by Iowa State College of one of its pamphlets in which oleomargarine was compared favorably with butter."<sup>94</sup>

The situation at ISC was a battle between "two cultures" on two interconnected fronts. The battle was part of a complex, nationwide conflict. One national conflict, between physical scientists and social scientists, eventually led to C. P. Snow's famous *Two Cultures* essay in 1960. An additional confrontation within the social sciences was between serving special interests and serving the general public interest. In fact, a number of conflicts between special interests and the public interest took place in social science during the 1940s at such schools as the University of Texas, the University of Notre Dame, and the University of Montana. At Texas, for example, four economics professors were fired for advocating policies including "socialized" ownership of public utilities and a national "Wages and Hours Act." At Notre Dame and Montana, philosophy professors got in trouble for questioning the power of big business in determining public values.<sup>95</sup>

The unique aspect of the problem in Iowa was an institutional ambiguity about the role of social science at a land-grant institution. That ambiguity created broad uncertainty about the relationship between objectivity and advocacy in social science. On opposing sides were people who wanted social research to meet standards of objectivity suitable to physical science, and people who believed that social science was a different kind of science, one needing to perform interpretive work. A related line of cleavage was between people who believed that faculty at Iowa State College could only advocate policies directly supporting Iowa interests and people who believed that the primary goal for policy research should be to help win the war. Lessons

---

94. Brownlee, "Putting Dairying on a War Footing," 30; T. W. Schultz to Joseph H. Willits, 9/22/1943, Schultz Files-Chicago 29/23; R. E. Buchanan to John H. Powell, 8/12/1943, Buchanan Files 8a/15; Bernard Lewis, "Academic Freedom at Iowa State, Cont'd," *The New Republic*, 5/15/1944, 682 (see also R. E. Buchanan to Mrs. Hiram C. Houghton Jr., 2/28/1944, Buchanan Files 8a/13).

95. Snow, *Two Cultures*; Ronnie Dugger, *Our Invaded Universities* (New York, 1974); J. M. O'Neill, "Academic Freedom and the Catholics," *The New Republic*, 2/14/1944, 204-7; Carla Homstad, "Two Roads Diverged: A Look Back at the Montana Study," *Montana: Magazine of Western History* 53 (2003), 16-29.

learned in Iowa during 1943 and 1944 were tough ones, and they were learned at a price. But one benefit that came from the controversy was a national debate about safeguards for policy-oriented social science.

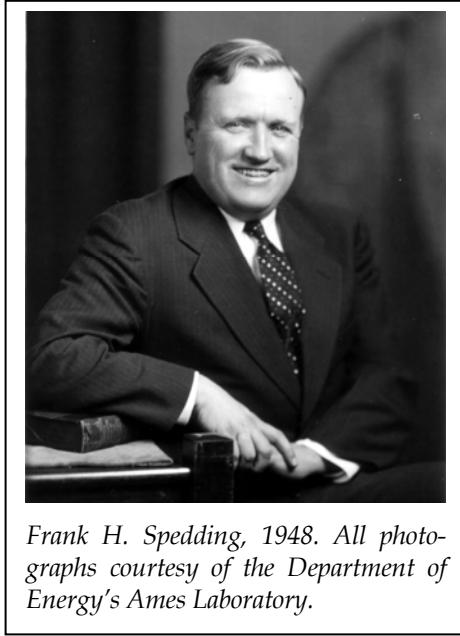
# Frank Spedding and the Ames Laboratory: The Development of a Science Manager

JOANNE ABEL GOLDMAN

FRANK SPEDDING, the first director of the Ames Laboratory, was a strong personality who had a lasting impact on the character and culture of the laboratory. He was one of only a few scientists who managed to leverage their expertise to build institutions that supported their interests. This new breed of scientist—a science manager—first emerged in the 1930s and 1940s. Historians Dominique Pestre and John Krige proposed that these science managers could be identified by a set of shared traits: physicist, conceiver, and entrepreneur. As physicists, they were trained in the “evolution of the discipline and its key theoretical and experimental issues.” As conceiver, they were resourceful, particularly with regard to acquiring the necessary skills, techniques, and equipment required to execute their research programs. As entrepreneurs, they served their laboratory by raising capital, assuaging external agencies, and maintaining internal harmony among their staff.<sup>1</sup>

---

1. Dominique Pestre and John Krige, “Some Thoughts on the Early History of CERN,” in *Big Science: The Growth of Large-Scale Research*, ed. Peter Galison and Bruce Hevly (Stanford, CA, 1992), 93; and Catherine Westfall and Lillian Hoddeson, “Thinking Small in Big Science: The Founding of Fermilab, 1960–1972,” *Technology and Culture* 37 (1996), 457–92.



*Frank H. Spedding, 1948. All photographs courtesy of the Department of Energy's Ames Laboratory.*

Frank Spedding fits the profile described by Pestre and Krige, albeit with one important difference—he was a chemist. His undergraduate degree in chemical engineering, M.S. in analytical chemistry, Ph.D. in physical chemistry, and postdoctoral work with theoretical physicists provided him with an extraordinary breadth of knowledge in his own and related disciplines. A creative and energetic spirit complemented his formal training, enabling him to acquire the technical skills, staff, and equipment required for his research program and the establishment of “his” laboratory. He was an entrepreneur who deliberately crafted an empire that fused Iowa State College (ISC) and the Ames Laboratory in a way that confirmed and maintained his authority, interests, and control. Spedding used his personal drive, aptitude, and professional experience to pursue his agenda, satisfy his ambition, and capitalize on his accomplishments. Deeper insight into Spedding’s development provides greater understanding of the Ames Laboratory and its unique place in the network of postwar national laboratories.

After World War II, the U.S. government established several national laboratories through which it supported science pro-



grams ostensibly in the federal interest. The directors of several of those laboratories became science managers who personally influenced the laboratory as they defined its programs, protocol, character, and culture. Ernest Lawrence was one of the earliest and perhaps the most celebrated of this genre. His personal ambition, creativity, and determination drove him to build his cyclotron center at the University of California Berkeley. His success might have inspired those around him, for his Berkeley Laboratory spawned several scientists who became science managers. Lawrence's student Robert Wilson, for example, would later direct Fermilab as physicist, conceiver, and entrepreneur.<sup>2</sup> Frank Spedding, though not Lawrence's student, was a student of a close colleague and collaborator of Lawrence and he apparently adopted the Berkeley model of management as well.

The character, culture, and agenda of the Ames Laboratory, like that of Lawrence's Berkeley Laboratory, must be attributed to its first director. Much has been written about the vision and tireless pace of Ernest Lawrence; relatively little has been written about the enduring legacy that Frank Spedding bestowed on the Ames Laboratory.<sup>3</sup> This article aims to correct that oversight.

THE AMES LABORATORY is one of several national laboratories created by the Atomic Energy Commission after World War II. Today, these laboratories come under the auspices of the Department of Energy (DOE). In some ways the Ames Laboratory is much like the other laboratories, particularly in administrative structure, function, and, broadly speaking, mission. Each of the laboratories is government owned but operated by a university, corporation, or conglomeration of the two types of insti-

---

2. Catherine Westfall, "A Tale of Two More Laboratories: Ready for Research at Fermilab and Jefferson Laboratory," *Historical Studies in the Physical and Biological Sciences* 32 (2002), 369-407.

3. Herbert Childs, *An American Genius: The Life of Ernest Orlando Lawrence* (New York, 1968); J. L. Heilbron and Robert W. Seidel, *Lawrence and His Laboratory: A History of the Lawrence Berkeley Laboratory* (Berkeley, CA, 1989); Joanne Abel Goldman, "National Science in the Nation's Heartland: The Ames Laboratory and Iowa State University, 1942-1965," *Technology and Culture* 41 (2000), 435-59; idem, "Mobilizing Science in the Heartland: Iowa State College, the State University of Iowa, and National Science during World War II," *Annals of Iowa* 59 (2000), 435-59.

tutions.<sup>4</sup> The federal government owns the Ames Laboratory, yet Iowa State University operates it. Its purpose, as with each of the laboratories, is to promote and produce science that fits an agenda the federal government defines. Initially, that was to promote and pursue atomic science. Today, the mission is broader: its pursuit of solutions to energy-related problems is central.<sup>5</sup>

Notwithstanding these characteristics that the Ames Laboratory shares with the other DOE laboratories, some differences – most notably its size, interdisciplinary approach to science, and symbiotic relationship with its contracting institution – set the Ames Laboratory apart from other national laboratories. Its operating budget is by far the smallest of all the DOE laboratories. For fiscal year 2006, the DOE funded \$26 million of its \$28 million in operational costs.<sup>6</sup> The smaller budget of the Ames Laboratory supports a smaller facility, and its staff of 315 full-time equivalent employees pales in comparison to Brookhaven Laboratory's 2,607 full-time employees.

In addition to the size and scale of the Ames Laboratory, its exceptional relationship with its contractor, Iowa State University, distinguishes it from the other DOE laboratories. Physically, the Ames Laboratory is completely integrated within the Iowa State campus. There are no fences separating the laboratory from the campus, and they share buildings and facilities. The laboratory's scientists use the roads, library, cafeteria, and sewage system of Iowa State University. The laboratory maintains a relatively small security force but does not operate its own fire department. Perhaps most important, the laboratory and the university staffs link these two institutions in an extraordinary way. Many of the scientists at the Ames Laboratory hold joint ap-

---

4. The National Energy Technology Laboratory is an exception to this pattern. See its Web site at [www.NETL.DOE.gov](http://www.NETL.DOE.gov) (accessed 10/30/2006).

5. See Ames Laboratory's mission statement at [www.ameslab.gov](http://www.ameslab.gov) (accessed 10/30/2006).

6. U.S. Department of Energy, "The U.S. Department of Energy's Office of Science: Steward of 10 World-Class National Laboratories," [www.sc.doe.gov/National\\_Laboratories/Draft\\_Labs%20Booklet.Pdf](http://www.sc.doe.gov/National_Laboratories/Draft_Labs%20Booklet.Pdf) (accessed 10/30/2006). The balance is derived from a range of non-DOE "Work for Others" contracts. The Princeton Plasma Physics Laboratory, with an operations budget nearly three times that of Ames Lab, is the next smallest DOE laboratory. The most expensive DOE laboratory is Oak Ridge National Laboratory with a budget of \$902 million, of which the DOE contributes \$712 million.

pointments in associated departments of the university. Those joint appointments provide a relatively stable base of funding for both institutions' research programs and, thus, an attractive package for recruiting high-quality faculty and staff. The shared labor force (faculty, postdoctoral staff, and students) and facilities dramatically increase the "purchasing power" of both institutions. Over the past 60 years, nearly 3,000 graduate students have completed degrees at Iowa State University within the Ames Laboratory. Those students have provided the requisite workforce for the scientific groups and, in turn, have benefited from a close mentoring relationship with senior scientists. Along with the shared infrastructure, this joint staffing defines the symbiotic relationship between Iowa State University and the Ames Laboratory.<sup>7</sup>

The Ames Laboratory carries out a varied program of scientific research. In this sense, it is an anomaly in the national laboratory system.<sup>8</sup> Although its program is not quite as diverse as those in "multiprogram" laboratories, such as Brookhaven and Argonne, it does embody a broad scope of interest and funding in energy sciences. Its scientific focus, however—with its relatively large programs in condensed matter physics, materials and engineering physics, and materials chemistry—has always been rooted in the realm of materials science. Those programs account for approximately 60 percent of its annual operating budget.<sup>9</sup> One of the hallmarks of these efforts and an important legacy of the laboratory's founding director, Frank Spedding, is the interdisciplinary approach to science—crossing the boundaries of physics, chemistry, and materials engineering—that was fundamental to his personal intellectual development.

---

7. Goldman, "National Science," 448–52.

8. National laboratory historian Peter Westwick recognized characteristics that set Frank Spedding and the Ames Laboratory apart from the other national laboratories. Specifically, sometimes the Atomic Energy Commission included the Ames Lab in its listing of multiprogram labs and Spedding was included in the exclusive "Lab Director's Club," whose membership was usually limited to the directors of the large multipurpose laboratories. Peter J. Westwick, *The National Labs: Science in an American System, 1947–1974* (Cambridge, MA, 2003), 9–10.

9. Ames Laboratory, Budget FY 2005–2006, Ames Laboratory Archives, Ames. The balance of the budget supports research in the chemical and biological sciences, advanced scientific computing, and energy research.

FRANK SPEDDING was a highly intelligent, curious, and ambitious student. During his formative years, he complemented those innate qualities with opportunities that came about both deliberately and fortuitously. As an undergraduate and graduate student, he took advantage of good fortune, emulated talented mentors, and built significant professional networks, all of which shaped his development.

He was born on October 22, 1902, in Hamilton, Ontario, Canada, to Howard L. Spedding, a photographer, and Mary Anne Elizabeth Marshall, the daughter of the mayor of Dummville, Ontario. While Frank was still a boy, the family moved to Illinois, where he attended grade school and began high school. In 1921 he graduated from high school in Ann Arbor, Michigan, and spent the twenties completing his education. After receiving his bachelor's and master's degrees at the University of Michigan in 1925 and 1926, he followed the advice of his undergraduate mentor, Moses Gomberg, and moved to Berkeley, where he earned his Ph.D. in 1929 under the guidance of G. N. Lewis.

Spedding's mentors at the University of Michigan and at University of California Berkeley provided him with a scientific and professional foundation that channeled and focused his interest in chemistry and fostered his analytical approach to problem solving. At Michigan he worked with Moses Gomberg and H. H. Willard. According to Spedding himself, Gomberg had a particularly important influence, inspiring his student to think critically and analytically. When Spedding questioned the validity of theories taught in class, Gomberg encouraged the young undergraduate's curiosity. Years later, in a letter to Gomberg upon his retirement, Spedding recalled the incident to his mentor: "Your attitude I shall always consider a model in such situations. You listened carefully, pointed out certain weaknesses in my theory which would have to be overcome, told me of sources of information which were unknown to me and encouraged me to go on with the problem."<sup>10</sup> That, Spedding claims, lit the fire within him to pursue basic research.

The influence of G. N. Lewis and the Berkeley environment on Spedding cannot be overstated. Lewis became a strong role

---

10. Spedding to Gomberg, 1/11/1935, Spedding Papers, Iowa State University (ISU) Archives.

model for his student, in terms of both academics and ambition.<sup>11</sup> Lewis had already built an impressive resumé by 1912, when Berkeley recruited him from the Massachusetts Institute of Technology (MIT) to become professor and chair of the chemistry department and dean of the College of Chemistry. While recruiting new faculty and reshaping the chemistry department, he remained active in research. He had published 39 articles by the time he arrived at Berkeley; between 1912 and the time Spedding graduated in 1929, he published an additional 64 articles.<sup>12</sup> In addition to his personal research program, Lewis's charge at Berkeley included building and shaping the chemistry program. In this he succeeded fabulously. Nobel laureate Glenn T. Seaborg recalled that a veritable who's who of scientists attracted him to Berkeley for his graduate training with Lewis just a few years after Spedding's arrival. These included the "legendaries" who wrote the textbooks that he had used at UCLA. "There were names such as Joel H. Hildebrand, Wendell M. Latimer, William C. Bray, C. Walter Porter, Gerald E. K. Branch, . . . and the rising young nuclear physicist Ernest O. Lawrence."<sup>13</sup>

The Berkeley chemists and physicists were not only accomplished but they also maintained strong, pioneering research programs that relied on talented students for their execution. Spedding became acquainted with a cadre of faculty and graduate students, many of whom he continued to associate with long after his student years through formal and informal

---

11. In 1915 the California Board of Regents created the Board of Research to provide support for faculty research projects. The notion of supplemental funding for research was a relatively new concept. In 1917 G. N. Lewis received \$1,000 to equip his low-temperature laboratory, the largest award granted to date. Lewis's ambitions in this regard provided a model for the entrepreneurial spirit that grew at Berkeley during the 1920s. See Verne A. Stadtman, *The University of California, 1868-1968* (New York, 1970), 212-13.

12. "Scientific Publications of Gilbert N. Lewis," in *In Honor of Gilbert Newton Lewis on his Seventieth Birthday* (Berkeley, CA, 1945), 9-19.

13. Glenn T. Seaborg, "Glenn T. Seaborg," in *There Was Light: Autobiography of a University, Berkeley: 1868-1968*, ed. Irving Stone (New York, 1970), 52. The chemists Seaborg cited were already there and well established when Spedding entered the program in 1927, seven years before Seaborg. Hildebrand and Bray began at Berkeley in 1912, Branch in 1915, and Porter and Latimer in 1917. Randall coauthored the classic textbook *Thermodynamics and the Free Energy of Chemical Substances* with G. N. Lewis in 1923.



*Frank Spedding reunited with his mentor, Ernest O. Lawrence, ca. 1955.*

networks. Perhaps most important, there were regular interactions between the graduate students and Berkeley's scientific superstars within disciplines and across disciplinary boundaries. Lewis himself collaborated with E. O. Lawrence so regularly that visiting physicist Emilio Segrè referred to Lewis as a chemico-physicist.<sup>14</sup> Although Glenn Seaborg did his graduate work under Lewis, he continued his postdoctoral work in Lawrence's laboratory.<sup>15</sup> Spedding's Ph.D. "sub-committee in charge" also reflected a cross-disciplinary approach. Lewis chaired the committee, with chemists Joel Henry Hildebrand and Rhorfin Rusten Hogness, physicist Raymond Thayer Birge, and botanist Sumner Cushing Brooks attending.<sup>16</sup> Therefore, although his

---

14. Emilio Segrè, *A Mind Always in Motion: The Autobiography of Emilio Segrè* (Berkeley, CA, 1993), 168. In 1936 the relationship between Lewis and Lawrence apparently soured after failed experiments and scientific disagreements. Heilbron and Seidel, *Lawrence and His Laboratory*, 181–82.

15. In 1937 Lewis's former student Glenn Seaborg became Lawrence's "most productive chemist." Heilbron and Seidel, *Lawrence and His Laboratory*, 259.

16. Department of Chemistry, University of California Berkeley, *Ph.D. Programme – F. H. Spedding, 1929*, "Sub-Committee in Charge," Spedding Papers.

degree was in chemistry, Spedding's exposure to Lewis's interdisciplinary approach allowed him to work comfortably and frequently with scientists in other disciplines. That is apparent during Spedding's postdoctoral experiences and, later, in the programs he directed at the Ames Laboratory. By the time Spedding retired from Iowa State University in 1968, he held faculty positions jointly in the departments of chemistry, physics, and metallurgy.

At Berkeley, both during his graduate years and after taking his degree, Spedding used spectroscopic techniques to study the structure and symmetry of atomic and molecular arrangement in materials, particularly the rare earth compounds. Scientists suspected that understanding the relationship between the properties of those metals and their electronic structures would be important, and Spedding's spectroscopic research furthered that understanding.<sup>17</sup> His early experiences in this field influenced his lifelong research program as well as that of the Ames Laboratory, the laboratory that Spedding would build and direct on the Iowa State campus. Ames Laboratory later became synonymous with the production and study of high-purity rare earth metals and compounds.

Although Spedding earned a graduate degree from a highly respected institution under the direction of an accomplished mentor, the year was 1929 and jobs were hard to find. Fortunately, his expertise and perseverance did attract soft money.

---

17. Although rare earths were so named because many believed that they were rare, in fact, they exist in significant quantities. Because of their close chemical similarity, however, the separation of one rare earth metal from another was an arduous task, and so they remained generally neglected. Separating the elements with any significant degree of purity required as many as 40,000 distinct operations. In fact, some scientists spent their entire professional lives refining a rare earth to 99 percent purity. Rare earths were first identified in 1787, but little work was done with them because of difficulties identifying them. In 1913–1914 Niels Bohr and H. G. J. Mosley demonstrated that 15 rare earths existed, but only 14 had been identified. During the 1920s a search for the missing elements ensued. See Frank H. Spedding et al., "Production of Pure Rare Earth Metals," in *Industrial and Engineering Chemistry* 44 (1952), 553; Frank Spedding, "The Significance of the Research Publications of Dr. F. H. Spedding over the Past Fifty Years," Spedding Papers; idem, "Progress in Rare Earth Chemistry," Spedding Papers; idem, "The Rare Earths," *Scientific American* 184 (Nov. 1951), 26–30; and Karl A. Gschneidner Jr., *Rare Earths: The Fraternal Fifteen* (Washington, DC, 1964), 1–11.

For the next seven years, Spedding was able to patch together a number of short-term, albeit low-paid, appointments that allowed him to continue his pathbreaking research into the rare earths and expand his network of professional contacts beyond the boundaries of Berkeley. In 1930 he received a National Research Council (NRC) Fellowship, followed by a Guggenheim Fellowship, and finally a Baker Fellowship from Cornell University. The NRC Fellowship provided the resources for Spedding to continue his research at Berkeley for two years. By incorporating the relatively new methods of quantum mechanics into his spectroscopic studies, he refined the means to determine the structure and symmetry of rare earth compounds by identifying and interpreting the spectra of their molecules.<sup>18</sup> Spedding recalled how he first acquired these "difficult" materials: "I practically went down on my knees to Dr. Hopkins [of the University of Illinois]."<sup>19</sup> His groveling paid off handsomely; his work on rare earth spectroscopy earned him the Langmuir Award in 1933, an award for outstanding work by a chemist under the age of 31.<sup>20</sup> The award prize of \$1,000, together with a modest stipend from Lewis, allowed him to remain at Berkeley for another year.

The American Chemical Society presented the Langmuir Award to Spedding in Chicago at the World's Fair, where a chance meeting profoundly influenced the course of Spedding's career. There, an old man, "a short fellow, like Santa Claus," approached Spedding and offered to send the young chemist several pounds of samarium and europium, "the rarest of the rare earths." Spedding accepted, but doubted the character's sincerity. To his surprise the rare earths arrived soon after he returned to California. Spedding later learned that the stranger was retired University of Chicago professor Herbert McCoy, who held the position of chief chemist at Lindsey Light and Chemical Company, the largest producer of rare earths at the

---

18. F. H. Spedding, "Instructions for Biographical Data," 2, Spedding Papers.

19. John D. Corbett, "Frank Harold Spedding," *Biographical Memoirs*, accessible at [www.nap.edu/html/biomems/fspedding.html](http://www.nap.edu/html/biomems/fspedding.html) (accessed 12/27/2005).

20. This was the third time the award was offered. Linus Pauling and Oscar Rice received the first and second awards.



time. His gifts to Spedding facilitated the young chemist's study of the materials over the next decade.<sup>21</sup>

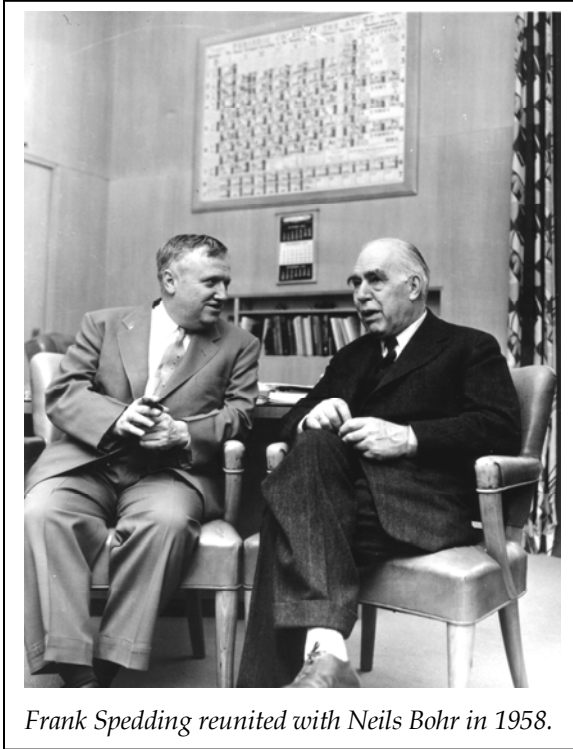
For the next year, 1934-35, however, Spedding's rare earth research program idled as a Guggenheim Fellowship provided the opportunity to travel extensively throughout Europe. Just a few years earlier, Frank had married Ethel Annie McFarlane, formerly of Victoria, British Columbia, and the two now looked forward to this adventure abroad. In a pattern that characterized much of Spedding's career, he made much of this opportunity in terms of both his personal intellectual growth and the development of his professional network. On the trip, the skills and traits of the entrepreneur and scientist were further molded.

The Speddings spent the bulk of their time in England as Frank worked at the Cavendish Laboratory. There, he conferred with the prominent physicists Ralph Fowler and John E. Lennard-Jones, attended lectures by the future physics Nobel Prize laureate Max Born, and worked with German physicist Francis Simon, who had just fled Hitler's Germany for England. In addition to his time at the Cavendish Laboratory, he traveled to visit other European facilities, including Kamerlingh Onne's low-temperature laboratory in the Netherlands and research laboratories in France, Germany, and Latvia. He found Nobel laureate Neils Bohr particularly warm and "brilliant" during his visit to his laboratory in Copenhagen. He spent a month there working with Bohr and passed "profitable" afternoons with another Nobel Prize recipient, James Franck, another Jewish scientist who had recently left Germany. Years earlier, Spedding had met Franck at Berkeley, and he took the opportunity in Copenhagen to renew the professional contact. At Berkeley he had also had the opportunity to work with Abram Joffe of the Physico-Technical Institute of Leningrad. Joffe, hearing of the young chemist's visit to Europe, invited the Speddings to visit the Soviet Union and lecture, with all expenses paid by his government.<sup>22</sup>

---

21. Spedding, "Instructions for Biographical Data," 4-5. McCoy explained that he provided these rare earths to chemists, physicists, and astronomers "each of whom has his own special field of work" but none of whom were intending to work along the lines of the research for which Spedding won the Langmuir Award. See McCoy to Spedding, 2/8/1937, Spedding Papers.

22. Spedding, "Instructions for Biographical Data," 6-7.



*Frank Spedding reunited with Neils Bohr in 1958.*

When the Guggenheim Fellowship ended in July 1935, the Speddings returned to his parents' home in Michigan, with life-long memories, stimulating experiences, numerous contacts, but still no job. Fortunately, soon after arriving back in the States, Cornell University offered Spedding its first George Fisher Baker Fellowship, a one-year appointment with a chance for renewal. Initially, Spedding was reluctant to accept the position because Cornell "lacked a first-rate reputation."<sup>23</sup> Furthermore, still ignited with a passion for research on rare earths, he desired the freedom to pursue his own research interests. At the urging of G. N. Lewis, he did finally accept the offer.<sup>24</sup> Apparently, he convinced Cornell to relax any prescribed research program, for he later reported to Lewis that the position prom-

23. Letter Draft, Spedding to Lewis (n.d.), Spedding Papers.

24. Telegram, Lewis to Spedding, 7/17/1935, Spedding Papers.

ised "complete freedom of research." In addition, his supervisor, Jacob Papish, professor and chair of the chemistry department, promised extensive institutional and laboratory support.<sup>25</sup>

At Cornell, he continued his spectroscopic research of rare earths, now also considering the effect of magnetic fields on the energy levels that gave rise to the transitions measured in absorption experiments. He also extended his professional network. He continued to collaborate with Berkeley graduate students George Nutting and Richard Bear. Although officially both Bear and Nutting were students of Lewis, graduating in 1933 and 1934, Spedding refers to Nutting as his first graduate student and lists both of them on his Ph.D. family tree.<sup>26</sup> Spedding continued to support their development even after they graduated. After earning his doctorate, Nutting remained at Berkeley and continued to work for Lewis. Apparently, at some point, Lewis complained to Spedding about their former student, for Spedding attempted to calm Lewis's concerns over Nutting's slow rate of publication. He also counseled his former student to hasten the pace.<sup>27</sup> In addition to maintaining his relationships with Berkeley colleagues, while at Cornell Spedding successfully collaborated with future Nobel laureate Hans Bethe.<sup>28</sup> He also began a lifelong friendship and collaboration with Harvey Diehl, whom he would recruit to Iowa State during the war years and who would remain there, as a close colleague, for decades.

As his research and collaborations apparently brought Spedding professional satisfaction, his relationship with his supervisor, Professor Papish, deteriorated soon after Spedding's arrival, much to his personal frustration. Although tensions between the two appear to have continued, Spedding and Papish did extend the fellowship for another year.<sup>29</sup> After that second

---

25. Spedding to Lewis, 8/13/1935, and R. C. Gibbs to Spedding, 8/17/1935, Spedding Papers.

26. Located in the Harley A. Wilhelm Papers, Ames Laboratory Archives.

27. Spedding to Lewis, 9/23/1936, Spedding Papers.

28. See F. H. Spedding and H. A. Bethe, "Absorption Spectrum of  $Tm_2(SO_4)_3 \cdot 8H_2O$ ," *Physical Review* 52 (1937), 454-55.

29. See Spedding's note on Jack Kirkwood, "We both left Cornell disgusted with Dr. Papish in 1937," and Harvey Diehl to Spedding, 10/2/1937, Spedding Papers.

year, however, it was time to move on. By the end of 1937 Spedding had published 33 articles, with eight in 1937 alone. His productivity, together with his fellowships, awards, and strong reputation as a spectroscopist and rare earth chemist presumably strengthened his marketability. He headed west to interview at Ohio State University, hoping for a permanent faculty position. Looking forward to settling down at last, Frank and Ethel drove to Columbus only to face disappointment. By the time the young couple arrived, the head of chemistry, W. L. Evans, had already filled the physical chemistry position for which Spedding had applied. Evans recommended that the unemployed chemist travel on to ISC to seek a position there. He knew that his friend and counterpart at ISC, Winfred Coover, was looking to replace a lost faculty member.

Spedding interviewed for the faculty position at ISC, and Coover, the head of the chemistry department, offered him an assistant professorship on a tenure track. Spedding, nearly 35 years old and tired of uncertainty, held out for a position with tenure. Coover, however, could not make such an offer without the approval of the Iowa State Board of Education, so he had to let Spedding walk—and walk he did. Some weeks later, while hiking in Yellowstone National Park, Spedding came upon a note from Coover that a local ranger had posted on the park bulletin board. The offer now included tenure.<sup>30</sup> Spedding's appointment as associate professor was unusual inasmuch as he had not previously held a faculty position and had no teaching experience. In terms of research, however, he had built an impressive resumé that presumably impressed Coover.<sup>31</sup>

BY THE TIME Spedding arrived at ISC in 1937, his inimitable personality had emerged. Spedding knew he was smart. After all, he had a Ph.D. from the University of California Berkeley, one of the pre-eminent universities for chemistry at the time. There he had worked with America's finest scientists. After that,

---

30. Corbett, "Frank Harold Spedding."

31. There is little indication that the appointment reflected any new initiative or policy change for the department. It did not usher in a period of sustained growth for the department, which was and remained the moderate size of 15 to 17 faculty members between 1934–35 and 1940–41.

he traveled the world, spending time in the company of premier scientists in England. He had been invited to visit the Soviet Union and studied under Nobel laureates in Copenhagen. Those experiences cultivated a self-confidence that provided the grounds for insisting on tenure at ISC. There his self-assurance matured further into the entrepreneurial spirit of a science manager.

Although Spedding was excited about the prospect of finally settling down at ISC, he was disenchanted with the caliber of the institution. He apparently expected ISC to be just the first step toward a home institution with more prestige. "I wouldn't normally have chosen the place, but I was desperate. I thought: I can go there and build up physical chemistry and when jobs really open up I can go to another school."<sup>32</sup> Until then, however, Spedding cast his new job in a most favorable light. In correspondence, he usually depicted the physical chemistry group as a relatively sizeable, substantial, and independent department with adequate resources and a supportive infrastructure.<sup>33</sup>

The reality differed significantly. In 1940 the physical chemistry group that he directed consisted of two faculty members, including himself. The department was under-equipped and underfunded, as compared to the laboratories that he had worked in at Berkeley and Cornell.<sup>34</sup> Moreover, neither the chemistry department nor ISC offered to improve the situation. Undeterred, he used creativity and ingenuity to equip his laboratory. In one instance, Spedding needed glass dewars of the sort that he had used in California, so he learned glass-blowing techniques to form them himself.<sup>35</sup> In 1940 Spedding received a spectrograph that lacked the peripheral equipment required for his research.

---

32. This statement was reportedly made to Harry Svec. "Obituary of Frank Spedding," Spedding Papers. It is also noteworthy that Spedding filed a civil service application with the U.S. government in 1938 for a position as principal chemist for the U.S. Department of Agriculture, a further indication of his lack of satisfaction. See Civil Service Application, Spedding Papers.

33. The university catalog lists two physical chemists, although Spedding cites three, and he lists eight students, three of whom worked directly under him. See for example, Spedding to Bethe, 9/29/1937, Spedding Papers; Spedding to Harold C. Urey (former student of Lewis), 10/1/1937, *ibid.*; and Spedding to Mr. Moe of the Guggenheim Award, 11/6/1941, *ibid.*

34. Spedding, "Instructions for Biographical Data," 8, Spedding Papers.

35. Miscellaneous note in Spedding Papers.

The problem was solved by collaborating with Professor R. M. Hixon from plant chemistry, a program with more discretionary money than physical chemistry. They acquired the resources to equip the spectrograph for the project, which, not so coincidentally, also served Spedding's personal research agenda.<sup>36</sup>

While Spedding continued his spectroscopic studies, however, the pace of the work on rare earths slowed because the elements remained difficult to obtain. His old benefactor, Herbert McCoy, continued to provide europium, but he could not provide those rare earths with higher atomic weights.<sup>37</sup> Recalling that a supply, albeit modest, remained at Berkeley, he appealed to his former adviser to loan him their thulium salt, and Lewis obliged.<sup>38</sup> Spedding's persistence paid off, and he resumed publishing. During his first five years at ISC, he authored or co-authored nine articles. In 1942 he published the last of his collaborative work with plant chemistry, and for the next five years he published nothing at all.<sup>39</sup> He was otherwise engaged.

IN EARLY 1942 Arthur H. Compton recruited Frank Spedding to join the federal initiative that he was organizing in Chicago to determine the feasibility of building an atomic bomb. That branch of the Manhattan Project sought to understand the properties of fissionable materials, assess the possibility of creating a self-sustaining chain reaction, and examine the possibility of manufacturing plutonium by means of nuclear chain reactions. As Compton assembled his Metallurgical Laboratory, he realized that he needed a rare earth specialist and a chemistry group to complement the group of physicists he had gathered in Chicago. He chose Spedding to provide that expertise and organize the Chemistry Laboratory.

Why Spedding? In Spedding's own words, "Look at the Periodic Table. . . . The uranium group is a second group of rare earths, and at the time almost no one in the country had much

---

36. Spedding, "Instructions for Biographical Data," 8, Spedding Papers.

37. McCoy to Spedding, 11/29/1937, Spedding Papers.

38. Spedding to Lewis, 1/13/1940, Spedding Papers; Lewis to Spedding, 1/29/1940, *ibid.*

39. "Bibliography of Articles by F. H. Spedding," Spedding Papers.

experience with them.”<sup>40</sup> There is a natural association of the lanthanide elements—the rare earths—with the actinide elements, such as uranium, that undergo nuclear fission. In the natural ore, rare earths are commonly found along with the actinides. The Metallurgical Laboratory required the actinides in an extremely pure form, so the lanthanide “contaminants” had to be removed. And when uranium and plutonium undergo nuclear fission, rare earths are generally found among the fission products. Finally, there are basic chemical similarities between the lanthanides and actinides, so that an understanding of the former might accelerate an understanding of the latter. Spedding’s formal training and experience encompassed an unusual breadth of knowledge. The host of awards, fellowships, and collaborations that complemented his training further enhanced his reputation. And, of course, when Compton turned to his former University of Chicago colleague Herbert McCoy for a recommendation of a rare earth chemist to join the laboratory, McCoy enthusiastically suggested his longtime beneficiary, Frank Spedding.

Spedding agreed to join the Metallurgical Laboratory in Chicago, and Compton appointed him to head the chemistry division. His first task was to organize the division itself. He recruited fellow Berkeley alumnus Glenn Seaborg to head the plutonium program. That appointment was an obvious choice as Seaborg had discovered plutonium in E. O. Lawrence’s laboratory just a year earlier. Seaborg accepted the post and brought some of his Berkeley research associates with him to Chicago in April 1942. UCLA chemist Charles Coryell agreed to head the fission product chemistry section; New York University chemist Milton Burton directed the radiation and radiation damage divisions; and the University of Chicago’s own George Boyd supervised the inorganic and analytical section.<sup>41</sup>

Assembling a laboratory took time, so, in the interest of moving the project along as expeditiously as possible, Spedding suggested to Compton that work begin in Ames on the ISC

---

40. Spedding, “Instructions for Biographical Data,” 8, Spedding Papers.

41. “Significance of [Spedding’s] Research Publications”; Carolyn Stilts Payne, “The Ames Project: Administering Classified Research as a Part of the Manhattan Project at Iowa State College, 1942–45” (Ph.D. diss., Iowa State University, 1992), 45–46.

campus, where equipment and talent already existed. Compton concurred, and in February 1942 ISC agreed to carry a federal contract for Spedding's new research program. That decision proved critical because the laboratory that Spedding assembled on the ISC campus would later become the foundation for the Ames Laboratory. He hired new scientists but also recruited ISC professors to work on this annex of the Manhattan Project. While these recruits agreed to devote considerable energy to the project, they remained ISC faculty as well.<sup>42</sup> Similarly, he acquired new instrumentation but also used ISC's resources. He distributed the research effort among laboratories and buildings around the campus that were modified to suit the needs of the project. In these ways and so many others, he capitalized on ISC's infrastructure to execute the demands of the Manhattan Project and to sow the seeds of his laboratory.

In Ames, Spedding set up an organization that would encompass areas of study parallel to those of the Metallurgical Laboratory in Chicago: a plutonium chemistry group, a fission products research group, a metallurgical group, and an analytical chemistry group. Spedding's direction of both sites facilitated communication between the laboratories, coordinated the lines of research, and kept duplication of effort to a minimum.<sup>43</sup>

He invited ISC colleagues Harley A. Wilhelm and Iral B. Johns to become associate directors of the laboratory, heading its two main divisions, metallurgy and the plutonium effort, respectively. Neither scientist was new to ISC. After a stint as a high school teacher, Wilhelm had enrolled in ISC's Ph.D. program in chemistry in 1927, inherited a spectrograph, and became an expert in spectrochemistry.<sup>44</sup> He graduated in December 1931 but remained at ISC for the next nine years as a non-tenure-track instructor. Inasmuch as ISC's policy frowned on inbreeding, the administration denied Wilhelm a faculty position, even though there had been exceptions made to the rule in the past.<sup>45</sup>

---

42. Goldman, "Mobilizing Science in the Heartland," 381.

43. Payne, "The Ames Project," 53, 54.

44. *Ibid.*, 49.

45. W. Bernard King graduated from Iowa State in 1930 and became assistant professor there the next year.



When appropriately motivated, however, the administration proved flexible. In 1940, when Wilhelm threatened to abandon academia for industry, the chair of the chemistry department offered him an assistant professorship. Wilhelm accepted the position with the understanding that his research focus had to change. It had already begun to do so. Although Wilhelm had been at ISC for nearly a decade, Spedding's appointment in 1937 established the Berkeley graduate's seniority. Wilhelm was trained in spectrochemistry, but Spedding became the resident spectrochemist, and Wilhelm turned his attentions to metallurgy. That proved to be fortuitous: Wilhelm's experience in that field made him an obvious choice to head the metallurgical program for the Ames annex of Chicago's Metallurgical Laboratory.<sup>46</sup>

In addition to Wilhelm, Spedding appointed plant chemist I. B. Johns to head the plutonium project at Ames. Another ISC alumnus, he had graduated in 1930, a student of Spedding's former collaborator R. H. Hixon. After several years at Monsanto Chemical in Boston, he returned to his alma mater to assume a faculty position. Presumably, in his case, the years away from ISC offset concerns about inbreeding, and he became an associate professor in 1937, at the same time as Spedding.

With Spedding at the helm and Wilhelm and Johns next in command, a pyramidal structure began to take shape.<sup>47</sup> During the war years the number of people filling staff positions to execute the scientific research program peaked at more than 90.<sup>48</sup> The two associate directors managed eight section chiefs who directed numerous chemists and physicists. Junior scientists, research assistants, and junior research assistants supported the senior scientific staff.

The hierarchical model facilitated cooperation and the coordination of work between Ames and Chicago. It defined responsibilities at the laboratory and confirmed the authority of

---

46. Payne, "The Ames Project," 50.

47. Johns left the Ames program in 1944 to join the group of Manhattan Project scientists in Los Alamos. With his departure, Wilhelm became the second in command and continued in that capacity until his retirement in 1966.

48. This figure does not include clerical or maintenance staff. See "List of Scientific Personnel of the Ames Project under the Manhattan District," Friley Papers, Iowa State University Archives, Ames.

the director, but released him from supervising the daily operations.<sup>49</sup> Thus Spedding could balance the work of groups at ISC with those at the Metallurgical Laboratory in Chicago with minimum upset to either laboratory. On Sunday mornings, the senior members of the Ames group would meet to review the past week's work and plan the next week's goals.<sup>50</sup> Spedding maintained that these early "Speddinars," modeled after Lewis's seminars at Berkeley, generated ideas that were not specific to any one individual but were a consequence of the free and spontaneous interchange of knowledge.<sup>51</sup> After the meetings, Spedding would leave for Chicago, and the group leaders would carry out the agreed-upon lines of research.

Although Spedding's frequent trips took him away from the day-to-day activities in Ames, his supervision of the research programs remained clear. Spedding's colleague Harry Svec noted, "The breadth of the work is such that the coworkers were many but the inspiration and drive to do the work was largely due to Spedding's perception of what needed to be done, how it should be done and when it should be accomplished."<sup>52</sup>

The greatest success at Ames arose from an idea credited to Spedding but executed by Wilhelm and his group at the laboratory. Inasmuch as the "purified" uranium sent to Chicago for study continued to be of disappointing quality and very expensive, a bottleneck to the uranium work resulted. Spedding hypothesized that reducing uranium tetrafluoride, rather than the current process using uranium oxide, might produce a purer and cheaper metal. The idea came to Spedding while at a meeting in Chicago when such a briquette "manufactured for industry" was passed around the table. "So he took a block back to Ames and asked Dr. Wilhelm and [Ames associate] Dr. Keller

---

49. In the late 1920s and 1930s, Lawrence's laboratory at Berkeley became the prototype of this organizational scheme for academic research. The hierarchical structure defined relationships, responsibility, and authority, presumably increasing the pace and efficiency of directed research. Heilbron and Seidel, *Lawrence and His Laboratory*, 228-29.

50. Frank Spedding, Harley Wilhelm, and Adrian Daane, interview, May 1967, transcript in Spedding Papers.

51. Payne, "The Ames Project," 55.

52. Harry Svec, prologue to *Handbook on the Physics and Chemistry of Rare Earths*, ed. Karl A. Gschneidner Jr. and LeRoy Eyring (New York, 1978), 17.

to try using it in place of the oxide." The experiment worked, and Wilhelm and staff produced enough metal for an eleven-pound ingot.<sup>53</sup>

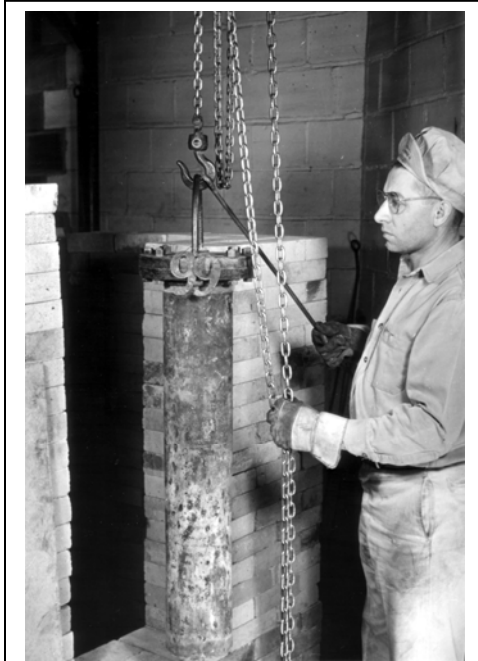
Years later, Wilhelm recalled how he took the ingot in his traveling bag to the Ames depot, where he boarded an overnight train to Chicago. He arrived in the morning and went directly to Spedding's office. During the trek his traveling bag had broken, and he arrived at Spedding's office with the uranium ingot clutched under his arm. Spedding and Wilhelm took the ingot to Compton, who "had never seen such a big piece of uranium. . . . Anyway, he looked at it and said, 'I bet there's a hole inside.'" There was not.<sup>54</sup> The process was successful. By September 1942, Ames scientists routinely extracted uranium metal with a purity averaging 90 percent, and by the end of the year they were sending 100 pounds of uranium to Chicago each week. The price of processing uranium fell from one thousand dollars to about one dollar per pound.<sup>55</sup>

---

53. Spedding, "Significance of [Spedding's] Research Publications"; H. A. Wilhelm, "A History of Uranium Metal Production in America," December 1947, 7-8, Spedding Papers. The Ames Process or "bomb reduction process" began by heating together uranium tetrafluoride and calcium in a refractory-lined iron capsule to melt the materials. The reaction produced calcium fluoride and uranium metal, which, being denser, sank to the bottom of the bomb. They separated the "slag" of calcium tetrafluoride from the metal and then cast the uranium into ingots. These experiments were modeled on those first attempted in the 1920s. Since then the calcium reduction of uranium tetrafluoride had seemed the most promising technique, but a scarcity of high-quality materials prevented this line of research from advancing. Instead, scientists attempted to reduce uranium oxide to the metal, with little success. During the war, government contracts prompted companies such as Metal Hydride to produce high-quality calcium and spurred the Harshaw and DuPont Corporation to step up production of uranium tetrafluoride from uranium dioxide. The availability of these basic materials allowed the Ames group to return to the abandoned research effort. J. C. Goggins and others at the University of New Hampshire had carried out uranium tetrafluoride reduction experiments that showed promise. See Richard G. Hewlett and Oscar E. Anderson, *A History of the United States Atomic Energy Commission*, vol. 1, *The New World, 1939-1946* (Berkeley, CA, 1990), 87-88; and Payne, "The Ames Project," 69-70.

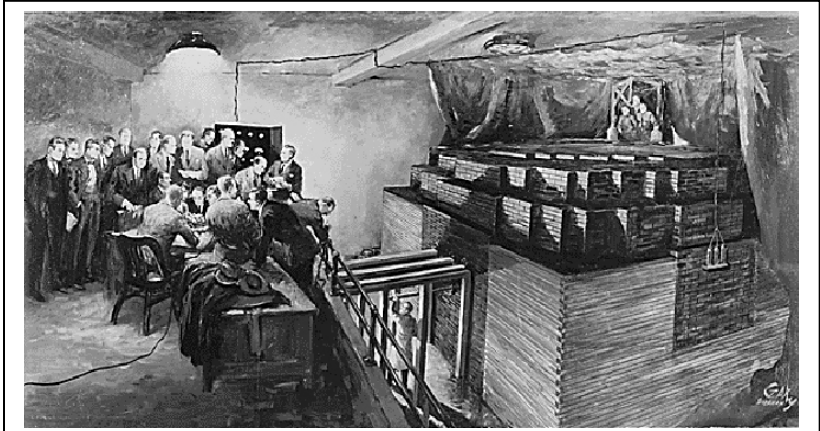
54. Harley Wilhelm, interview with author, 9/29/1990, Ames.

55. Ames *Daily Tribune*, 2/17/1962; "History of Iowa State College Contract W 7406 eng-7," Department of Energy Archives, Washington, DC; F. H. Spedding, "The Operation and Scope of the Ames Laboratory of the Atomic Energy Commission," Spedding Papers.



*Fritz Hemness uses a bomb hoist to place uranium reduction bomb 399 in a gas-fired furnace in the "Little Ankeny" building on the ISC campus, ca. 1942-1945.*

On December 2, 1942, a successfully controlled chain reaction in Chicago, using Ames purified uranium metal, confirmed the promise of fission and the potential of an atomic bomb. In his capacity as director of chemistry of the Metallurgical Laboratory in Chicago, Spedding witnessed the successful chain reaction. Soon afterwards he stepped down as director of the chemistry division, and James Franck, his former colleague at Berkeley and Copenhagen, assumed the role. That shift of responsibility allowed Spedding to concentrate on executing the scientific program in Ames, as ISC continued to receive government contracts for its wartime research program. Spedding continued to coordinate the work in Ames with that in Chicago and remained an associate of the Metallurgical Laboratory as well as director of the laboratory in Ames.



*An artist's depiction of the first controlled chain reaction in Chicago in 1942.*

In the immediate aftermath of the war, the U.S. government continued to let contracts to ISC to fund research in Spedding's laboratory. Those contracts called for continued metals production and purification, with an increased emphasis on the rare earths, those metals that had initially brought Spedding to Compton's attention. In 1946 the government created the Atomic Energy Commission (AEC) to organize and implement a program of atomic energy research.<sup>56</sup> The following year, the AEC established the Ames Laboratory as one of its laboratories to execute its national science program.

Spedding was proud of the work he directed at the Metallurgical Laboratory. He recognized that he had contributed to ending the war, and he thought the peaceful uses for atomic energy would be revolutionary.<sup>57</sup> From every indication, science rather than international politics drove his work. Publicly, he made few comments about the war, the peace, or the politics of science. The only political issue that appears to have riled him was the secrecy of the atomic program, and on that he was

---

56. Gilman G. Udell, comp., *Atomic Energy Act of 1946 and Amendments* (Washington, DC, 1971), 1.

57. See F. H. Spedding, "A Chemist's View of Some Aspects of the Atomic Energy Problem," speech to be delivered at the Presentation of the Iowa Medal of the American Chemical Society in Iowa City, 12/3/1948, Spedding Papers; idem, "Atomic Energy – A Review of Fundamentals," n.d., *ibid.*

rather vocal.<sup>58</sup> He served on the national committee headed by Manhattan Project scientist Richard C. Tolman that developed the postwar declassification policy, and he continued to lobby independently for increased accessibility to atomic research. However, on the major issues of the day, such as the Oppenheimer security hearings or the growing tensions of the Cold War, Spedding had nothing to say, at least publicly. Professionally, although his work with the Chicago group continued during the last years of the war, Spedding's energies primarily focused on building up the laboratory and management infrastructure that would house the Ames Laboratory.

ON MAY 17, 1947, the AEC awarded the contract to manage the Ames Laboratory to ISC, and Frank Spedding was appointed the director of the Ames Laboratory.<sup>59</sup> In spirit, the program and protocol of the new laboratory remained similar to those adopted by Spedding's group during the war. The laboratory remained on the ISC campus. ISC faculty and graduate students constituted much of the scientific staff, and Spedding controlled the contracted research program. The laboratory continued its

---

58. See, for example, F. H. Spedding, "What is the Atomic Secret? Iowa Scientist Analyzes Problem" (newspaper clipping, 1949), Spedding Papers; and idem, "Chemical Aspects of the Atomic Energy Problem," *Bulletin of Atomic Scientists* 5 (Feb. 1949), 48-50.

59. According to Spedding, the AEC designated the Ames Laboratory as one of its federally funded facilities in recognition of the work done there under Spedding's leadership during the war and in the interest of continuing such research for the foreseeable future. See, for example, F. H. Spedding, "A Chemist's View," 28. Another factor may help explain the designation of the laboratory in Ames: In January 1947 Iowa's U.S. Senator Bourke B. Hickenlooper was selected to chair the Joint Congressional Committee on Atomic Energy. Hickenlooper had earned his undergraduate degree from Iowa State College, although he graduated from the law school at the University of Iowa. In addition to his personal associations with the two Iowa institutions, he genuinely admired Spedding. See his praise for Spedding in Bourke B. Hickenlooper, "A Look at the Past and a Plan for the Future," in "Ninetieth Anniversary Celebration of the Iowa State College," March 22, 1948, Spedding Papers. This formal but warm relationship continued. In 1960 Spedding invited Hickenlooper, still U.S. senator from Iowa, to visit the new Metals Development Building of the Ames Laboratory that had been constructed with congressional funds. See Spedding to Hickenlooper, 9/26/1960, in Hickenlooper Papers, Herbert Hoover Presidential Library, West Branch.

research program focused on materials, including developmental work with materials such as thorium and beryllium. That work involved "studies in metallurgy, radio-chemistry, chemical engineering, physics, chemistry, etc."<sup>60</sup> Although its organizational chart distinguished the metallurgy, chemistry, physics, and engineering "sections," strong interdisciplinary efforts became the hallmark of the Ames Laboratory, in accord with Spedding's experience and preference.<sup>61</sup>

This interdisciplinary nature as well as the quality of the work in Ames reflected Spedding's strong leadership skills. But Spedding's brilliance extended beyond science. A year and a half before the Atomic Energy Commission established the Ames Laboratory, Spedding began to establish an ingenious managerial infrastructure, the Institute of Atomic Research (IAR), to manage the flow of outside resources to ISC. On November 1, 1945, the Iowa State Board of Education established the IAR and named Spedding its director. The IAR became a clearinghouse for nuclear research on campus; a public resource for atomic energy consultation; a liaison between ISC, Argonne National Laboratory, and its "associated 25 midwestern universities"; a mecca for graduate students; and an administrative hub for processing federal and private funds as they became available.<sup>62</sup> In addition, ISC delegated the responsibility for administering the contract for the Ames Laboratory to the IAR. Furthermore, the federal government paid overhead costs to ISC to compensate the university for indirect costs that it bore administering its contracts. Those resources provided the bulk of the

---

60. Contract #W-7405-eng-82 between ISC and the Atomic Energy Commission, 7/1/1948, Friley Papers. Thorium was of prime interest because once it was understood that "the element could extend the available sources of fissionable material," basic knowledge of the properties of the element became a priority. Beryllium, with its high melting point, became a useful "refractory vessel" that held the "bombs." See E. I. Fulmer, "History of the Ames Project under the Manhattan District to December 31, 1946," Iowa State College, 12/9/1947, 25, 38, Friley Papers.

61. This strong tradition continues to the present. For example, an interdisciplinary team of chemists, physicists, and materials scientists was awarded the DOE Outstanding Accomplishment in Materials Chemistry in 1998 for its research on quasicrystal surfaces.

62. Goldman, "National Science," 447.

IAR's operating expenses as well as discretionary money for Spedding's use.<sup>63</sup>

As director of both the IAR and the Ames Laboratory, Spedding's authority was extensive. As a new administrative mechanism, the IAR challenged the traditional mode of academic governance, and its "science manager" defined new roles for and relationships among faculty. Inasmuch as the IAR administered all research that involved atomic energy throughout the campus, including programs in the departments of engineering, agriculture, and veterinary medicine in addition to those in the physical sciences, its programs crossed departmental boundaries. Moreover, in Spedding's capacity as director of both the IAR and the Ames Laboratory, he approved the scientific staff appointments and had some influence over the AEC-related research agenda of these departments.

Within the physical sciences, an especially close bond between the academic departments and the laboratory divisions was forged. In fact, until 1970, the heads of each laboratory division also chaired the corresponding academic departments. Department chairs thus found themselves under the administrative umbrella of the IAR and the authority of Spedding as well as the university. Interestingly, despite the clear potential for conflict, both the academic departments and the laboratory divisions appear to have flourished. Particularly during the laboratory's first decade, as Spedding's authority solidified, the associated science departments enjoyed a period of significant growth, and the scientists he recruited shared his interests, respected his accomplishments, and recognized his authority.<sup>64</sup>

---

63. In 1957, for example, the federal government paid \$79,678 in overhead costs to ISC, which in turn reapportioned \$75,000 to the institute. In 1964 the university realized an overhead of \$255,750, of which about \$115,000 provided the institute's budget. See Goldman, "National Science," 447-48.

64. Consider that many of the employees of the Ames Laboratory were attracted to the laboratory because they shared Spedding's interests. See Goldman, "National Science," 450-51. It is also important to realize that several of these new appointees were former students of Spedding and Wilhelm or newly minted Ph.D.s handpicked by Spedding. For example, David Peterson, Adrian Daane, Paul Porter, James Wright, and Jack Powell were Spedding's students who were hired upon graduation. Velmer Fassel was Wilhelm's student. Spedding recruited Harvey Diehl from Cornell—they were colleagues before Spedding went to ISC. Richard Bear had been a student of Lewis and





*The Institute for Atomic Research, also known as The Link, was built to house the IAR's administrative offices, which physically connected the chemistry and physics departments.*

That may account for the relative calm in light of newly defined lines of authority.

Generous funding, steady growth, and shared interests helped enable Spedding to create positive relations with the directors of the other federally supported laboratories that were created in the wake of World War II. The directors of the Ames Laboratory, Argonne, Oak Ridge, Brookhaven, Berkeley, Los Alamos, Hanford, and the Knoll Atomic Power Laboratory in Schenectady and Sandia formed the "Directors Club" and met annually in the years after the war.<sup>65</sup> Like the Ames Laboratory, most of the other laboratories had their roots in the Manhattan Project. Spedding credited that shared memory for the good will that at least the first generation of directors enjoyed. Their annual

---

had collaborated with Spedding while the latter was at Cornell. Spedding recruited Adolf Voigt in 1942 and Dan Zaffarano in 1949. It is important to recall that Spedding preceded the laboratory and built it to capitalize on his interests, which during his tenure were largely shared by the federal government. Those whom he recruited shared his interests, and many remained at the Ames Laboratory for the remainder of their careers. Of those scientists mentioned above, Wilhelm, Peterson, Powell, Fassel, and Diehl retired from the laboratory after long and distinguished careers.

65. See, for example, letters sent from Spedding to the directors of each of those laboratories inviting them to Ames for such a meeting, 8/31/1959, Spedding Papers.

meetings provided opportunities for the scientists to have open discussions without bureaucratic oversight. In addition, they promoted unity that empowered the laboratories to call for change when the directors were dissatisfied with AEC policies.<sup>66</sup>

Spedding's amicable relationships with the directors of the other national laboratories were indicative of his support for the growth of the whole national science initiative. He set up the IAR to facilitate cooperation between the laboratories and ISC, and he enthusiastically endorsed the proposed, though never realized, Midwest Universities Research Association laboratory that was to be built in Madison, Wisconsin.<sup>67</sup> Notwithstanding such support, occasionally tensions did rise and turf battles did surface, such as in 1945 when the government decided to transfer the uranium turning and casting program from Ames to the Hanford Engineering Works.<sup>68</sup> However, such tensions appear to be the exception rather than the rule, most likely because Spedding's research program was secured. The separation and study of the rare earths took center stage by the mid-1950s, and in that realm Spedding had little competition. Rather, cooperation and consultation with other laboratories, both within and outside of the national system, seem to have prevailed.<sup>69</sup>

FRANK SPEDDING secured the future of the Ames Laboratory and his authority over its research agenda by virtue of his talents as a science manager—the new sort of scientist that

---

66. Leland J. Haworth (director, Brookhaven) to Spedding, 12/13/1957 and January 1958, including draft report, "Relationships between the Atomic Energy Commission and the National Laboratories," Spedding Papers.

67. F. H. Spedding, "The History and Purposes of the Iowa State College Institute for Atomic Research," an address given at the dedication ceremony of the Iowa State College Institute for Atomic Research, 5/17/1947, p. 7, Friley Papers; Spedding to D. J. Zaffarano, 7/19/1963, Spedding Papers; Spedding to Dr. George A. Kolstad (AEC), 7/24/1963, *ibid.*

68. Contract No. W-7405 eng-7, 6/25/1945, Friley Papers.

69. Both Spedding and Wilhelm, for example, worked with scientists at Clarendon Laboratory, Philips Petroleum Laboratories, Westinghouse Electric Corporation, and Hanford throughout the 1950s. Spedding to Dr. F. Simon (Clarendon Laboratory), 8/17/1948, 9/19/1950, Spedding Papers; Spedding to R. L. Doan (Philips Petroleum Laboratory), 3/7/1955, *ibid.*; Spedding to William W. Mullins (Westinghouse), 7/5/1955, *ibid.*; "Outline of Research Problems to be Investigated in Support of the Hanford Fuels Development Operation," 9/2/1958, *ibid.*

emerged in the United States during the 1930s and 1940s—a scientist, a conceiver, and an entrepreneur. First and foremost, Spedding was an accomplished scientist as attested to by the plethora of awards and fellowships bestowed on him during his career.<sup>70</sup> His innovative Ames Process furthered his scientific reputation and very likely earned him the Ames Laboratory. It appears that the laboratory, which was conceived and built on his interests and under his direction, satisfied his entrepreneurial ambitions.

After the war, materials development related to the national interest in atomic energy continued to take center stage at the laboratory.<sup>71</sup> Over the course of the next two decades, however, research increasingly turned to the purification and study of rare earths metals and compounds because of their relevance to the field of atomic energy as well as their industrial applications.<sup>72</sup> In the 1950s interest in the study of rare earths rose because they can absorb neutrons and thus control the rate of fission. In addition, rare earths also found early application in the optical industry for camera lenses, color television tubes, and lasers, as well as batteries. For all of these reasons, scientists sought to increase their understanding of the properties of rare earths. In 1945 Spedding and other members of his group de-

---

70. His awards are numerous. In addition to those already mentioned, they include LL.D., Drake University, 1946; Iowa Medal of the American Chemical Society, 1948; D.Sc., University of Michigan, 1949; Nichols Medal of the New York Section of the American Chemical Society, 1952; election to the National Academy of Science, 1952; D.Sc., Case Institute of Technology, 1956; Distinguished Professor of Science, Iowa State University, 1957; Honorary Member, Verein Osterreichischer Chemiker, 1958; James Douglas Gold Medal of American Institute of Mining, Metallurgical and Petroleum Engineers, 1961; Distinguished Citizen Award of the State of Iowa, 1961; Faculty Citation by the Alumni Association of Iowa State University, 1964; Honorary Member, Phi Lambda Upsilon, 1966; Atomic Energy Commission Citation Award for meritorious contributions to the nation's atomic energy program, 1967; American Chemical Society Midwest Award, 1967; Honorary Member, Applied Spectrographic Society, 1969; Honorary Member, Applied Spectrographic Society, 1969; Francis J. Clamer Medal of the Franklin Institute, 1969; Award of Merit, Iowa Academy of Science, 1974; Distinguished Fellow, Iowa Academy of Science, 1975. See Frank Spedding, "Biographical Data Form," Spedding Papers.

71. For example, the first contract awarded to the Ames Laboratory provided for continued research in thorium and beryllium. Contract #W-7405-eng-82.

72. See Gschneider, *Rare Earths*, 39–42.

veloped a process that isolated rare earth metals at 99.99 percent purity with respect to other rare earth impurities.<sup>73</sup>

During the period immediately after the war, most of the purified rare earth metals available nationally were separated at ISC. A pilot plant was constructed in 1945 to produce the metals until industry took over production in the 1950s and 1960s. Afterwards, although no longer in the business of production, Ames Laboratory scientists continued their study of the rare earths and even established a loan program to supply materials for basic research to other scientists.<sup>74</sup> In 1966 the AEC expanded the laboratory's ability to support research into rare earths by authorizing the creation of the Rare-Earth Information Center. And in 1981 the DOE established the Materials Preparation Center (MPC) at the Ames Laboratory. The MPC provides rare earth elements of the highest purity by the so-called "Ames Process" to reduce the oxygen, nitrogen, and carbon content of the metals by a factor of ten beyond what is commercially available. In the decades following the war, the Ames Laboratory gained an international reputation for the study of rare earths.

While Spedding's own interests and experiences found expression within the science programs of the Ames Laboratory, Spedding as a conceiver forged an unusually close union of the Ames Laboratory and its contractor, Iowa State College. The laboratory remained on the Iowa State campus and took full advantage of the university's resources. At the same time, the university benefited from Ames Laboratory resources in terms of both financial windfalls and the personnel it attracted. In 1948 W. W. Waymack of the AEC laid the cornerstone for a new metallurgy building, financed by the government at an estimated cost of \$1.5 million. Another \$350,000 was promised to outfit the laboratories. The purchase of a synchrotron further illustrates the "porous" boundaries between ISC and the Ames Laboratory. The college-owned synchrotron began operation in 1950. Research overhead funds paid for its construction, and the annual rental fee from the AEC provided its operating costs, since the AEC-sponsored research program was the sole user of the ma-

---

73. E. I. Fulmer, "History of Ames Project," 12/9/1946, 41-42, Spedding Papers.

74. Goldman, "National Science," 451.

chine.<sup>75</sup> Spedding pointed out the hefty dividends the facility paid for science at ISC: "It is the having of this synchrotron at Iowa State College which makes it possible for us to attract the type of staff and graduate students in Physics which we need to carry out our work."<sup>76</sup> Likewise, the tradition of joint appointments established during the Manhattan Project continued, effectively reducing costs for both the university and the laboratory while holding great appeal for faculty and students.

Spedding, as an entrepreneur, established the IAR as the managerial mechanism that joined the Ames Laboratory and ISC. It provided Spedding with extraordinary autonomy and authority to direct the Ames Laboratory and to realize his own professional ambitions. Spedding secured the bulk of his resources from overhead generated by the contracts that supported the Ames Laboratory. In addition to discretionary income that, in and of itself, became a source of control, the IAR defined a managerial role for Spedding within the university that enhanced his authority. The IAR created a new tier in university administration and allowed Spedding to expand his role as science manager beyond faculty and administrators associated with the Ames Laboratory to those involved with AEC-related programs outside of the laboratory.

There is little question that Spedding strongly influenced the development of the physical science and engineering programs at Iowa State. The Ames Laboratory itself certainly owes its existence and niche to its founding director. Constantine Stassis, now retired from the laboratory and Iowa State University, recalled that Spedding made it clear that the Ames Laboratory was "Spedding's Laboratory," the scientific programs were *his* scientific program, and his name appeared on virtually all of the laboratory's publications during that era.<sup>77</sup> Indeed, almost 40 years after Spedding's retirement in 1968, the laboratory still bears the indelible mark of its creator.

---

75. "Memo on Proposed Expenditures for Institute of Nuclear Physics, in Order of Preference," Friley Papers; Spedding to ISC President Friley, 9/20/1950, *ibid.*; David Saxe, director, Development Contracts Division, COO, USAEC, to Spedding, 8/12/1955, Spedding Papers.

76. Spedding to Friley, 9/20/1950, Friley Papers.

77. Constantine Stassis, conversation with author, Ames, 8/15/1998.

# Mastering the Vocabulary of Meat: A Review Essay

MARK FINLAY

*Tied to the Great Packing Machine: The Midwest and Meatpacking*, by Wilson J. Warren. Iowa City: University of Iowa Press, 2007. xii, 317 pp. Illustrations, graphs, tables, notes, bibliography, index. \$39.95 cloth.

*Putting Meat on the American Table: Taste, Technology, Transformation*, by Roger Horowitz. Baltimore: Johns Hopkins University Press, 2006. xiii, 170 pp. Illustrations, graphs, notes, index. \$35.00 cloth, \$19.00 paper.

THESE DAYS, mastery of a new vocabulary is necessary to understand American meat. Terms such as *E.coli* 0157:H7, bovine spongiform encephalopathy, LDL cholesterol, *halal* and kosher butchers, *taquería*, and others are now commonly associated with American meat, its producers, and its consumers. Such language suggests that issues surrounding American meat production have become increasingly complex and contentious. Meat now has plenty of critics: works such as Jeremy Rifkin's angry *Beyond Beef*, Eric Schlosser's muckraking *Fast Food Nation*, Marion Nestle's alarmist *Safe Food*, and Michael Pollan's sobering *In Defense of Food* have brought debates about meat processing and its related industries into the national spotlight. Similarly, Deborah Fink's daring and pioneering anthropological study of an Iowa packing plant, *Cutting into the Packing Line*, deserves special attention for readers of this journal.<sup>1</sup> In this mi-

---

1. Jeremy Rifkin, *Beyond Beef: The Rise and Fall of the Cattle Culture* (New York, 1992); Eric Schlosser, *Fast Food Nation: The Dark Side of the All-American Meal* (Boston, 2001); Marion Nestle, *Safe Food: Bacteria, Biotechnology, and Bioterrorism*

lieu, it is fortunate that two fine new books, Roger Horowitz's *Meat for the American Table* and Wilson Warren's *Tied to the Great Packing Machine*, provide historical background that helps unpack some of these important and controversial developments.

HOROWITZ'S BOOK offers the broader introduction to the topic. Using Siegfried Giedion's 1947 book, *Mechanization Takes Command*, as a framework, Horowitz is especially interested in connections between technology and humans' desire to seize control of nature.<sup>2</sup> Mastery of meat production is no easy prospect, however, since nature ensures that individual animals come in different shapes and sizes, and since physical decay begins from the moment of slaughter. Much of Horowitz's study traces intense efforts to industrialize and standardize animals' bodies so that they correspond with new technologies designed to streamline killing, butchering, packaging, and transportation operations. Although predating Henry Ford by decades, the "disassembly lines" of antebellum Cincinnati (known as "Porkopolis") were an early step in the creation of a highly mechanized industry. Local slaughtering operations disappeared from places such as Manhattan (still the nation's largest beef production center in 1880) and evolved into a highly centralized market epitomized by the Chicago stockyards of Upton Sinclair's *The Jungle*.<sup>3</sup> In the twentieth century, technological developments brought continual changes to the butchering and slaughtering trades, so that plants now use hydraulic pressure to separate the last scraps of meat from bone.

Horowitz also focuses on American consumers, seeking to explain how and why they became such enthusiastic consumers of meat. The book offers valuable insights into changes in marketing techniques, showing, for example how new technologies such as refrigeration, self-serve meat counters, and polyvinyl chloride (PVC) wrapping films made it possible for meat to fit

---

(Berkeley, CA, 2003); Michael Pollan, *In Defense of Food: An Eater's Manifesto* (New York, 2008); and Deborah Fink, *Cutting into the Packing Line: Workers and Change in the Rural Midwest* (Chapel Hill, NC, 1988).

2. Siegfried Giedion, *Mechanization Takes Command: A Contribution to Anonymous History* (Oxford, 1948).

3. Upton Sinclair, *The Jungle* (New York, 1906).

cultural standards of modernity. Meats themselves have changed, as we now have fresh pork instead of brine-cured scraps, boneless chicken parts rather than “New York dressed” birds with gizzards and feet attached, and name-brand, mass-produced hot dogs instead of sausages handmade at corner butcher shops.

The chapter on chicken is especially interesting. Once a rare meal, the postwar chicken has been at the center of both a radical change in the nature of the animal and a conceptual shift in the American diet. Horowitz describes “Chicken of Tomorrow” and similar campaigns that brought together supermarket operators, government agricultural promoters, university scientists, and others who helped design an animal that could be bred, fed, slaughtered, and marketed from egg to home meal in just seven weeks. These cases show how Americans have increasingly demanded cheap and convenient meat products, even if it means tolerating hidden issues such as the antibiotics and other additives that go into livestock feeds, ignoring the ethical questions associated with keeping thousands of animals in confined and polluted spaces before killing them, and failing to seek an answer to one common question – what actually goes into a hot dog?

WILSON WARREN asks somewhat different questions. Using William Cronon’s *Nature’s Metropolis*, as well as works of the economic geographer Brian Page as a framework, Warren is most interested in the relationship between the rural and urban places where meat has been produced, the people who have worked in the processing plants, and the industry’s impact on the upper Midwest.<sup>4</sup> Warren successfully demonstrates that the midwestern packing industry offers insights into the overall destabilization of American industry and labor in the late twentieth and early twenty-first centuries.

Warren divides the history of midwestern meatpacking into four distinct but overlapping phases. First was the “merchant wholesaling” phase, from about 1820 to 1865, when Cincinnati

---

4. William Cronon, *Nature’s Metropolis: Chicago and the Great West* (New York, 1991). Among Brian Page’s works, see “Across the Great Divide: Agriculture and Industrial Geography,” *Economic Geography* 72 (1996), 376–97.



and other Ohio River towns dominated the trade. It was a seasonal industry, often supplied by individual farmers who drove their own hogs to the slaughterhouses that built links to networks of grocers and merchants.

The “terminal marketing phase,” dominant in many places from 1865 to 1950, emerged as new technologies such as refrigerated railcars and sophisticated ice storage systems allowed railroad terminal towns to become centers of slaughtering and packing operations. Challenging an assumption that Chicago’s stockyards and its oligarchy of the “Big Four” producers were prototypical for the entire industry, Warren devotes considerable attention to other towns—such as Omaha, Kansas City, Milwaukee, Topeka, Sioux City, and St. Joseph, Missouri—that also were profoundly affected by the daily arrival and slaughter of hundreds of cattle and pigs. Although Warren acknowledges some differences, his findings essentially confirm Upton Sinclair’s brutal exposé of a century ago.

Phase three, “early direct marketing,” emerged from the 1920s to 1950s, as smaller and independent packers recognized that they could purchase hogs directly from farmers. This system relied on trucks rather than railroads to bring animals to the packing plant. Such animals lost relatively less weight from the stress of transportation and thus required less time on the feedlot before slaughter. This system cut into the Big Four’s oligarchy, and allowed for the emergence of a number of smaller packing towns, such as Ottumwa, Cedar Rapids, Dubuque, and Waterloo in Iowa; Madison, Wisconsin; and Austin, Minnesota. This era also produced a relatively favorable climate for union activity, which helped ameliorate the harsh labor conditions of the Chicago stockyards.

The final, “modern direct marketing phase” brought a paradigm shift that has revolutionized midwestern meatpacking. It began in 1961, when two executives at Swift broke away to establish Iowa Beef Packers and a new plant near Denison, Iowa. IBP (now part of Tyson Foods) and its remaining competitors (ConAgra, now part of Swift, and Excel, now part of Cargill) in this new oligopoly have been committed to industrializing the cattle and hog organism so that every specimen is nearly identical. These firms employ new technologies that replace skilled

butchers and others tradesmen and tradeswomen, and increase line speeds in ways that leave workers at the mercy of the machines. Most significantly, the firms have consolidated cutting and packaging operations so that vacuum-packed and boxed meat can be marketed directly to grocers and food brokers. As a part of these changes, the beef packing industry rapidly moved farther west, closer to the feedlots that hover near small towns such as Garden City, Kansas, where labor unions have no presence. More recently, the pork-producing industry has shifted in similar ways, away from the decentralized and often unionized packing plant operations that once dotted the Iowa landscape to states such as North Carolina that have allowed the modern industry to become a prototype of vertical integration.

A native of Ottumwa, Warren is especially interested in the shift from the third to the fourth phase. His earlier scholarship, which includes several articles published in the *Annals of Iowa*, establishes that he is an expert on Ottumwa's prominence as a meatpacking town and workers' struggles there to gain union representation. Warren reveals some sympathy for the bygone days when the stench of meatpacking operations represented the "smell of money" (166). Although far from ideal, meatpacking jobs offered an opportunity for many midwesterners to gain a foothold in the middle class. Ottumwa and similar towns became magnets for workers from surrounding rural areas, supported decent manufacturing jobs in ancillary industries, permitted relatively high levels of home ownership, and fostered a sense of community. In contrast, Wilson contends that the fourth phase "benefited neither workers nor the larger communities" (43). Oligarchic firms employ a largely immigrant workforce, one that generally has been unable to win the attention of weakened regulatory agencies, to move from mobile homes into more permanent residences, or to build the strong communities that once characterized the midwestern town. The newer packing towns such as Denison, Iowa; Liberal, Kansas; and Lexington, Nebraska, experience relatively high rates of petty crime, teen pregnancy, and drug abuse. In contrast to the Ottumwa of Wilson's parents' generation, modern meatpacking towns have been shaken by rapid demographic upheavals, overburdened hospitals and schools, and fractured communities. Meanwhile,

the same shifts brought lasting unemployment, poverty, and depopulation to old packing towns such as Ottumwa.

In the remainder of the book, Warren offers informative but somewhat disjointed chapters that address the role of women in the meatpacking industry, debates over the ethics of animal slaughter, the environmental hazards associated with meat processing, and a brief history of some animal byproducts industries. One traces changing patterns in American meat consumption, although Warren's discussion is not as comprehensive or as engaging as Horowitz's treatment of similar material.

This points to a larger difference between the two books. Already buttressed with 20 pages of appendixes and tables, Warren's text is overloaded with additional data on nearly every imaginable aspect of the industry—local unemployment rates, per capita rates of meat consumption, changes in consumer purchasing power, decennial shifts in local ethnicity, and more. Such data provide plenty of supporting evidence, but at the cost of a strong narrative. Furthermore, the work's organizational structure leads to excessive repetition. For instance, we are told three times (44, 70, and 94) that many workers in Marshalltown, Iowa, immigrated from Villachuato, Mexico; four times in three pages (157, 158, and 159) that hamburgers claim a fast-growing segment of the American diet; and twice (142 and 160) that Chicken McNuggets were introduced in 1983. In contrast, Horowitz has a lively writing style and delivers his message with a narrative verve. His book is far too brief to fully address any of the topics that it introduces, he allows a few errors to appear in the text, and his index is quite poor, but *Putting Meat on the American Table* probably will be a standard introduction to this topic for decades to come.

BOTH BOOKS are valuable and somewhat complementary. Horowitz shows why meat is so central to the American experience and why Americans crave meats that are relatively inexpensive, safe, and predictable. Warren, on the other hand, has more to say about the costs of these developments, particularly on the communities of the rural Midwest. Horowitz explicitly avoids any condemnation of meat producers and suggests that consumer behavior rather than corporate greed has shaped

many of the unsavory developments. In contrast, Warren is more blunt in condemning the current situation and challenges readers to employ “diligent public pressure” (98) and “consumer pressure to change workplace conditions” (138). Although neither book scolds those who choose to eat meat, both encourage readers—meat-eaters and non-meat-eaters alike—to learn the vocabulary associated with modern meat, and to think more carefully about the historical, economic, cultural, social, and cultural circumstances that have made the United States a meat-eating nation.

Wilson J. Warren won the 2008 Benjamin F. Shambaugh Award for *Tied to the Great Packing Machine: The Midwest and Meatpacking*. With this award, the State Historical Society of Iowa recognizes the most significant book on Iowa history published each year.

— Editor

## Book Reviews and Notices

*A Dictionary of Iowa Place-Names*, by Tom Savage. Iowa City: University of Iowa Press, 2007. xxiv, 349 pp. Notes, sources, index. \$19.95 paper.

Reviewer Sarah S. Uthoff is a reference librarian at Kirkwood Community College.

In his *Dictionary of Iowa Place-Names*, Tom Savage shows how much of Iowa's history is revealed on a map. There are waves of town incorporation. A single man, railroader John Blair, left his mark by naming a large number of towns. Early mail delivery was problematic because many towns changed names to be distinct. Some Iowans didn't want a town named after them and suggested friends, hometowns, or even first names of children as alternatives. Others openly sought the honor. The impact of the war with Mexico is evident in the number of names from people and events in that war.

The book's format follows that of the earlier *From Ackley to Zwingle*, by Harold Dilts et al. (1975), but Savage greatly expands on that previous work. Dilts cited 127 sources; Savage cites 598. Many libraries were consulted, but the work cries out for more primary research. It's more of a starting place than a definitive reference. The main section of both works is a listing of towns in alphabetical order with information about each name. Entries may discuss previous names for a town and why it changed and any interesting stories or legends associated with the name. However, what is included is uneven, and several interesting stories that I'm aware of are not included. When several possible stories exist, Savage seldom attempts to judge between them. Unlike Dilts's previous work, Savage's includes county names, what happened to former counties, lists of former towns, and changed names. This book belongs in every Iowa history collection.

*Native American Placenames of the United States*, by William Bright. Norman: University of Oklahoma Press, 2007. xviii, 600 pp. References. \$29.95 paper.

Reviewer W. Raymond Wood is professor emeritus of anthropology at the University of Missouri-Columbia. His most recent book is *Prologue to Lewis and Clark: The Mackay and Eoans Expedition* (2003).

If you are curious about the origin of that odd-sounding name for a local town or landmark, this is the place to start, particularly since

Virgil J. Vogel's *Iowa Placenames of Indian Origin* (1983) is now out of print. The chances are good that the name is based on a Native American name or term. Iowa—and indeed every state—is replete with such place names. Here at long last is a comprehensive, up-to-date, scholarly inventory of such names for each of the 50 states. Iowa is of course a prominent contributor to that inventory, for the Indian tribes that lived here provided a long register of place names, beginning with the state's namesake. The Sauk and Meskwaki are of course represented in those names, specifically by Keokuk, Keosauqua, Keota, and Tama, but greater numbers are based on sources from outside the state. The Algonquin Mascouten and Potawatomi are represented in county names, but there are numerous and unlikely entries that include such alien ones as Camanche, Chillicothe, Dakota City, Hiawatha, Mineola, Mingo, Nodaway, Okoboji, Rock River, Shenandoah, Titonka, and Wahpeton, to name only a few. Many of these are based on words in eastern languages, but some are based, for example, on Dakota Sioux terms. The entries are alphabetized in one unit, for any breakdown by state would have been impossible. This scholarly book is eminently usable by anyone seeking to understand the cultural setting of a geographic place name. You will find the book an education in itself.

*An Honest Calling: The Law Practice of Abraham Lincoln*, by Mark E. Steiner. DeKalb: Northern Illinois Press, 2006. x, 272 pp. Tables, notes, bibliography, indexes. \$42.00 cloth.

*Lincoln the Lawyer*, by Brian Dirck. Urbana: University of Illinois Press, 2007. xiv, 228 pp. Notes, bibliography, index. \$29.95 cloth.

Reviewer Kenneth Winkle is the Thomas C. Sorensen Professor of American History at the University of Nebraska-Lincoln. He is the author of *Young Eagle: The Rise of Abraham Lincoln* (2001).

Abraham Lincoln practiced law for a quarter-century and considered it his primary profession, yet we know relatively little about his legal career and its impact on his political views and his presidency. Most biographers have slighted or even ignored this dimension of Lincoln's life simply because they lacked sufficient documentation of the thousands of legal actions that involved him in some way. Previous studies typically highlighted a few memorable but unrepresentative cases, including the famous "almanac trial," the wreck of the steamboat *Effie Afton*, the Manny Reaper patent case, the notorious Matson slave case, and Lincoln's litigation for the Illinois Central Railroad. The result was a fragmentary and skewed portrait of Lincoln the lawyer that often

misrepresented the scope of his practice and clientele, the principles behind his legal philosophy, and the social and political context of his role within the antebellum legal system. With the publication of *The Law Practice of Abraham Lincoln: Complete Documentary Edition* on CD-ROM in 2000, however, historians gained digital access to more than 100,000 documents detailing more than 5,000 cases involving Lincoln and his partners. Mark E. Steiner and Brian Dirck have tapped this significant new resource to begin the process of rendering a more comprehensive, systematic, and accurate portrait of Lincoln as a lawyer. Both have produced essential studies on Lincoln's legal career while pursuing dramatically different approaches to the subject.

Steiner, professor of law and legal historian at South Texas College of Law and former associate editor of the Lincoln Legal Papers, provides a firm foundation for understanding antebellum legal culture and the scope and import of Lincoln's law practice. He begins by evaluating Lincoln's education, including Lincoln's declaration that he "studied with nobody," within the broader context of antebellum legal training. Rather than attending a law school (there were none in Illinois) or pursuing law-office study along with most of his peers, Lincoln chose to study alone and taught himself to read law. Within a legal culture that relaxed entry standards to facilitate admission to the bar, Lincoln's self-education proved no deficiency at all and supported a "relatively ordinary law practice" (55). After gaining experience in brief partnerships with John Todd Stuart and Stephen Logan, Lincoln settled into longtime practice with a junior partner, William Herndon, who performed the essential but tedious legal research—in the firm's library of 200 treatises, digests, law reviews, and legal reporters—while Lincoln argued the cases and rode the circuit.

The bulk of Steiner's book surveys and contextualizes the kinds of cases that Lincoln handled during his 25-year career, primarily suits over land, animals, assault, slander or libel, and debt, befitting a largely agricultural and rural society. He argues that as a typical Whig Lincoln viewed the legal system primarily as a mechanism to uphold the rule of law by resolving disputes. To that end, he was willing to represent any and all clients regardless of the character or validity of their grievances or his own personal beliefs about the issues at stake. Viewing himself as a mediator as much as an advocate, his highest goal was not winning judgments but rather maintaining community order, and he frequently urged clients to avoid litigation by settling out of court.

Steiner devotes two chapters to case studies of lawyer Lincoln's attitudes toward slavery and the railroads to emphasize his commitment to represent all interests equally without reference to his per-

sonal and political beliefs. He portrays Lincoln's role in the Matson case as an extreme example of his willingness to suspend his own moral judgment in the impartial service of a client. Similarly, far from acting as a "railroad lawyer," Lincoln took no consistent stand for or against railroads, including the Illinois Central, which he successfully sued on his own behalf. Unlike some lawyers, he compartmentalized his legal and political careers, never using his practice to pursue political ends. Simply put, Lincoln was committed to representing all of his clients as faithfully as possible without reference to his own moral principles, in the name of the rule of law, which he revered above all else.

Steiner's last chapter ruminates on the shifting legal environment of the 1850s, when an emerging national economy put new demands on lawyers to represent out-of-state clients to the detriment of local community values. Lincoln disliked these increasingly impersonal proceedings that emphasized winning judgments rather than resolving disputes. He avoided the new corporate mentality to the point of turning down attractive career opportunities in Chicago and New York in favor of continuing his more mundane, community-centered practice in Springfield.

In *Lincoln the Lawyer*, Brian Dirck, a history professor at Anderson University, fleshes out a more personal and social perspective on lawyer Lincoln, plumbing the impact of his legal practice on his broader development as a person, a politician, and a president. In the process, Dirck ponders Lincoln's motives for pursuing a legal career, puts a very human face on his three law partners, paints a vivid portrait of the everyday workings of the Lincoln-Herndon law office, assesses Lincoln's oratorical skills in the courtroom, and follows him across the Eighth Judicial Circuit, where he spent up to three months at a stretch arguing and sometimes judging law cases. Recreating the contours of courtroom culture as Lincoln knew it, Dirck examines the role of economic development in reshaping the legal, political, and social terrain of antebellum Illinois. While concluding that "Lincoln was not a 'corporate lawyer,' at least not on a regular basis" (91), Dirck nevertheless portrays him as a consistent champion of the railroads. In this respect, he is more willing than Steiner to connect Lincoln's political interest in economic development with his legal support for corporate capitalism. Overall, Dirck joins Steiner in depicting Lincoln as "a pretty ordinary attorney" (142) yet draws more links between Lincoln's legal career and his presidency, particularly his ability to defuse emotional conflicts, such as the debate over slavery, through legalistic language, his renowned penchant for magnanimity as commander-in-chief, and his desire to mediate rather than to escalate disputes whenever possible.



Dirck postulates that Lincoln and other antebellum lawyers performed a vital social and economic function, mediating conflicts by providing personal, emotional, and legal “distance” between contending interests. In this sense, Lincoln and the legal system represented a form of “grease” that allowed America’s moving parts to mesh more efficiently as the country developed and grew. Dirck agrees with Steiner that Lincoln the lawyer’s greatest achievement was to mediate minor disputes on a daily basis before they could become major ones, and Dirck argues that Lincoln’s legal instincts and his personal demeanor helped him fulfill that function.

Rarely are two books so complementary in rounding out a neglected subject to such good effect. Steiner’s *An Honest Calling* offers a legal historian’s soundest judgments about the foundations of Lincoln’s legal philosophy and law practice. Dirck’s *Lincoln the Lawyer* puts a more social, political, and personal face on Lincoln’s legal career and the antebellum legal fraternity writ large. Together, they set the stage for the further task of connecting Lincoln’s political and legal careers more seamlessly together within an overarching social, economic, and cultural portrait of antebellum America.

*The Rescue of Joshua Glover: A Fugitive Slave, the Constitution, and the Coming of the Civil War*, by H. Robert Baker. Athens: Ohio University Press, 2006. xiv, 260 pp. Illustrations, notes, index. \$38.95 cloth.

*Finding Freedom: The Untold Story of Joshua Glover, Runaway Slave*, by Ruby West Jackson and Walter T. McDonald. Madison: Wisconsin Historical Society Press, 2007. xii, 158 pp. Illustrations, notes, index. \$18.95 cloth.

Reviewer Rebekah Mergenthal is a Ph.D. candidate in history at the University of Chicago. She is working on a dissertation titled “The People of the Lower Missouri River Valley and the Expansion of the United States, 1803–1855.”

On the night of March 10, 1854, Joshua Glover was arrested in Racine, Wisconsin, for being a fugitive slave. Glover, who had run away from Missouri two years before, was taken to a Milwaukee jail. As Glover’s master sought to regain his property, a crowd in Milwaukee helped Glover escape from jail and flee to Canada.

This thrilling story is the common point of departure for two recent books, *The Rescue of Joshua Glover*, by H. Robert Baker, and *Finding Freedom*, by Ruby West Jackson and Walter T. McDonald. But the approaches to Glover’s story in the two books are vastly different. For Jackson and McDonald, Glover himself is the primary focus, and they

painstakingly recreate what can be known of his life both before and after the exciting events of March 1854. Baker, on the other hand, traces the important constitutional and legal ramifications of Glover's liberation that stemmed from the court cases brought against two of his rescuers. Whereas Jackson and McDonald provide a narrative of the life of this particular runaway slave, Baker analyzes antebellum conceptions of citizenship and the relationship between popular resistance and the rule of law. These two books operate on very different scales and likely were intended for different audiences. Yet together they expand our understanding of the antebellum Midwest and the role of slavery within it.

Jackson and McDonald are not unmindful of the larger context of the story they tell, but their goal is to recenter the story of Glover's capture and escape on Glover himself. Instead of leaving Glover when he escapes to Canada and focusing on "the political effects of 'the Glover affair' on Wisconsin as well as the country as a whole" (131), *Finding Freedom* traces Glover from slavery in St. Louis, Missouri, to his death in 1888 in Newmarket, Ontario, Canada. Jackson and McDonald have done an admirable job of piecing together Glover's life from glimpses in censuses, city directories, court cases, and account books. Their brief but engaging afterword tells about their painstaking work and the fortuitous breaks that allowed them to tell "the story of one illiterate man who had committed the illegal act of stealing himself from his owner" (131). This, as well as scattered references throughout the text, might prove of particular interest and inspiration to genealogists and others who are pursuing their own research on "average people" (111) in the nineteenth century.

What *Finding Freedom* leaves implicit, however, is analysis of the kind of freedom Glover found. The stories of the life he made in Racine before his capture and in Etobicoke (outside of Toronto) after his escape to Canada might have been fruitfully compared with those of other runaways to help us better understand how "the promised land" (90) was constituted. Readers might also wonder how Jackson and McDonald think their deeper perspective on Glover's life might change or complicate the usual stories of "the Glover affair."

*The Rescue of Joshua Glover* is part of a new approach to constitutional history that examines legal texts with sensitivity to the context in which they were created and debated. Baker emphasizes the Wisconsinites' "belief that the Constitution belonged in the last instance to the people" (xii). He shows how that belief is crucial to understanding how and why the Fugitive Slave Act of 1850 was declared unconstitutional in Wisconsin as a result of Glover's rescue. Throughout the book

Baker is attuned to the “dialogue between the people and the courts” (131) and finds the meaning of the Constitution there, not in the intent of those who composed it.

Baker’s complex and compelling book is about legal ramifications of the rescue of Joshua Glover more than it is about the man himself. Glover largely disappears from Baker’s text as he escapes into Canada, an approach that seemingly would not satisfy Jackson and McDonald. That absence mirrors Glover’s disappearance in the 1850s, however. While white Wisconsinites continued to talk of Glover’s rescuers, the man himself disappeared from their awareness once he was no longer in the state. In a fascinating chapter, Baker astutely analyzes this displacement and its implications. The third chapter focuses on the ways that minstrel shows and sentimental literature, such as *Uncle Tom’s Cabin*, helped shape white Wisconsinites’ racial understandings, enabling them to debate the implications of the rescue of a now-removed fugitive slave even as they continued to deny full citizenship to the free blacks who remained in Wisconsin. This discussion could be helpful in comprehending the limits of antislavery developments in other midwestern states during the same period. *The Rescue of Joshua Glover* will be of particular interest to constitutional and legal historians and historians of the antislavery movement, but the density of its argument may make it inaccessible to most undergraduates.

*The Border between Them: Violence and Reconciliation on the Kansas-Missouri Line*, by Jeremy Neely. Columbia: University of Missouri Press, 2007. xvi, 305 pp. Maps, notes, tables, bibliography, index. \$39.95 cloth.

Reviewer Derek R. Everett received his Ph.D. from the University of Arkansas, where he currently teaches and researches the political and geographical history of the American West. His article on the border dispute between Missouri and Iowa will appear in a forthcoming issue of the *Annals of Iowa*.

Historians often consider the “border war” between Missouri and Kansas in the 1850s as a prelude to the Civil War, a microcosm of the myriad problems facing the United States in the mid-nineteenth century. After secession and the fall of Fort Sumter, though, the perils of this boundary region all but disappear from scholarship. Refusing to allow the spotlight to move away, Jeremy Neely has produced a solid, compelling work that spans the 1800s, shedding light on the area’s complex long-term story.

Neely received his doctorate from the University of Missouri, and he lives on a farm in rural Vernon County, Missouri, one of six counties that form the core of his research area. Neely’s personal connection to

the area undoubtedly inspires his pursuit of its more complete tale, and his proximity to local archives allows him to incorporate a vast array of sources. Indeed, one of the great strengths of *The Border between Them* is the exhaustive primary research that accompanies every page, from census and tax records to letters and diaries, from government and military reports to newspaper accounts. Neely also actively engages the secondary literature of both the boundary and the two states that meet there. He successfully pursues many avenues to tell the area's story.

Neely traces how the importance of the region spanning the border between Missouri and Kansas evolved throughout the nineteenth century. Because that border is one of the most controversial internal boundaries in the United States, he has decades of materials to inform his study. He begins with the original inhabitants of the area, the Osages, showing how their authority gradually weakened with the influx of Euro-American settlers. He traces the introduction of a slave economy, and how its presence was complicated by the imposed political boundary that separated Missouri and Kansas. The mid-century conflict between Free Soilers and slave interests, whether involving the two large polities or within counties and towns, necessarily forms a significant portion of the book. The most original aspect of his work, however, is Neely's willingness to take the story beyond the sack of Lawrence and the depopulation of the Missouri border counties. He demonstrates the challenges faced by freed African Americans who sought entrance into the political and social structure in both Missouri and Kansas. He illustrates how economic factors such as commercialized agriculture and the railroads brought both opportunities and difficulties to the area. Finally, he offers a glimpse of the emotional struggle on the part of Missourians and Kansans, Unionists and Confederates, to put their divisive past behind them and confront the postwar nation's new economic, political, and social realities together.

At times Neely's zeal to narrate a complete story of the Missouri-Kansas boundary leads him to neglect broader forces in the region and nation. The work would have benefited from further comparison between the affairs of the region and contemporary trends in other parts of the United States. Such a contrast would help show the region's connection to the nation at large as well as its unique challenges and ways of dealing with them. Additional reactions from outside the region to the issues faced along the border throughout the 1800s would also have helped to place the Missouri-Kansas area in its national context. Did sources in Kansas City or St. Louis, in Jefferson City or Topeka, in Chicago or Washington treat the famous boundary zone as an exception or a rule?

The controversies surrounding the Missouri-Kansas boundary call out for scholarly attention, and many other lines deserve similar research. *The Border between Them* offers a useful structure to understand countless regions divided by a political barrier throughout the United States. State and regional historians would benefit by applying some of Neely's tactics to their own communities, observing the consequences of imposed divisions on an otherwise homogenous geography. By incorporating the most famous years along the Missouri-Kansas line into a broader historical context, Neely's *The Border between Them* tells a much-needed comprehensive story about a particularly contested region, and by extension demonstrates the long-lasting complications of political boundaries in the United States.

*Zoar in the Civil War*, by Philip E. Webber. Kent, Ohio: Kent State University Press, 2007. vi, 130 pp. Illustrations, notes, index. \$18.95 paper.

Reviewer Kristen Anderson is a Ph.D. candidate at the University of Iowa. Her research and writing focus on German Americans and African Americans in nineteenth-century St. Louis.

In *Zoar in the Civil War*, Philip Webber examines the German Pietist communal society of Zoar Village, Ohio, during the Civil War. For their longevity and their beliefs, the Zoar Separatists are often compared with another German communal society, the Amana Inspirationists, who eventually settled in Iowa. Because one of their major principles was nonviolence, the war posed a dilemma for this group. Their hatred of slavery led many members of the community to sympathize with the Union cause. The community expressed more uncertainty about actual military service by its members, however. A few young men volunteered for service in the Union Army, while others in the community sought to avoid a draft by agreeing to pay penalties. Webber argues that the Civil War was one of the Americanizing factors that ultimately led to the dissolution of the society in 1898.

Webber examines the experiences of both those who went to war and those who stayed home through a detailed investigation of the documents and photographs in the Zoar Collections at the Ohio Historical Society and the Western Reserve Historical Society. He translates significant portions of these documents, providing a useful resource for non-German speakers. By determining that the Civil War was a central experience in the lives of the Zoar Germans, both because of and in spite of their dedication to nonviolence, Webber contributes to a better understanding of Germans in the Civil War and to a better understanding of the war in the Midwest.

*Confederate Rage, Yankee Wrath: No Quarter in the Civil War*, by George S. Burkhardt. Carbondale: Southern Illinois University Press, 2007. xiii, 338 pp. Illustrations, maps, notes, bibliography, index. \$37.95 cloth.

Reviewer David Brodnax Sr. is associate professor of history at Trinity Christian College. He is the author of "Will They Fight? Ask the Enemy": Iowa's African American Regiment in the Civil War," *Annals of Iowa* (2007).

After the Battle of New Market Heights in September 1864, one Confederate soldier happily reported the massacre of African American soldiers, writing, "We killed in our front about a million dollars worth of niggers, at current prices" (178). This view of black soldiers as property unworthy of being taken prisoner is the focus of George Burkhardt's *Confederate Rage, Yankee Wrath*, the culmination of 20 years of research on Civil War atrocities. Although many scholars and Civil War enthusiasts will already be familiar with Fort Pillow, Fort Wagner, and other interracial conflicts, Burkhardt has brought these events together in his book to show the "pervasive pattern" of violence against African American soldiers and their white officers, which "stemmed from Southerners' common desire to defend and protect their heritage and society" (1). This pattern was made possible not only by the actions of southern politicians and soldiers, he argues, but also by the indifference of Northerners, who had ambivalent feelings about black soldiers and were unwilling to respond to their murder with the execution of captured Confederates.

A journalist by trade, Burkhardt draws primarily on military records and the writings of soldiers and politicians, including (among many quotes from Iowans) Samuel J. Kirkwood's infamous statement: "When this war is over . . . I shall not have any regrets if it is found that a part of the dead are niggers and that all are not white men" (25). The research is remarkable, considering that Federal records on African American regiments are often incomplete, while many Confederate accounts either exaggerated or covered up the events. Burkhardt's chronological, battle-by-battle account begins with a discussion of how both Northern and Southern whites felt about black enlistment and emancipation. For Confederates, he argues, these were apocalyptic changes that would destroy the South itself. Given their antebellum views on violence, slavery, and race, executing African American men who had dared to put on military uniforms and engage in manly combat was the only appropriate action; taking them prisoner was not an option. Even so, black troops were sometimes sold into slavery rather than murdered when they were captured in larger numbers; that, Burkhardt shows, was another manifestation of the Southern desire to maintain traditional racial dynamics in the midst of massive wartime

change. As the South became increasingly desperate towards the end of the war, white soldiers on both sides did begin to engage in “no quarter” conflict, although their shared racial, religious, and cultural heritage prevented this from becoming widespread.

Overall, Burkhardt has provided a comprehensive, well-written account of racial violence during the war, definitively showing that it was not random but rather the result of an intentional Southern policy. In his discussion of the Fort Pillow massacre, he argues that newly uncovered letters and diaries provide irrefutable proof that Nathan Bedford Forrest’s troops did in fact massacre black soldiers. Unfortunately, the value of that discussion is diminished by the failure to explain in the endnotes what those sources are or why they have become available after so many years. The excellent analysis of antebellum white racial attitudes also begs for more exploration of this same issue among black soldiers, who on several occasions retaliated in kind, and among Native American Confederates, who seemingly treated black troops much as their white allies did. These minor issues aside, *Confederate Rage, Yankee Wrath* is an essential addition to Civil War scholarship, recommended to anyone interested in that topic or more generally in the ways that race, class, and violence intersect.

*History’s Shadow: Native Americans and Historical Consciousness in the Nineteenth Century*, by Steven Conn. Chicago: University of Chicago Press, 2004. xii, 276 pp. Illustrations, notes, bibliography, index. \$35.00 cloth.

Reviewer Michael J. Sherfy is visiting assistant professor of history at Western Illinois University. His dissertation (University of Illinois, 2006) is “Narrating Black Hawk: Indian Wars, Memory, and Midwestern Identity.”

*History’s Shadow*, despite its subtitle, is not about Native Americans. Nor is it really about how Native American people came to be represented as “Indians.” It is instead an intellectual study of those who studied Indians and an examination of how, over the course of the nineteenth century, Native people were effectively removed from history—and contemporary relevance—and persisted in “the American mind” only as exemplars of an ancient past. Conn’s work, therefore, charts the trajectory of historical thinking about Indians until, by the end of the period he discusses, disciplinary experts had stripped Native people of history (a changing and dynamic past) and left them only with culture (something unchanging and timeless). That is, Conn explains, “Native Americans could very well have a past, but they did not, by and large, have a history. In this sense, Native Americans constituted history’s shadow” (6).

Conn begins by examining images of Indians in visual art, then shifts to the development and professionalization of academic disciplines: linguistics, archaeology, ethnology, and anthropology. His conclusion considers the development of “historical writing proper” in the United States and the assumptions that came to undergird the discipline in this country (including the privileging of written texts over other types of evidence and the dismissal of Native oral accounts as little more than myths). Obviously, such a broad and interdisciplinary approach makes it impossible for Conn to be comprehensive in his coverage. By including such a variety of intellectual pursuits, however, he clearly demonstrates that his central premise of Indian removal applies not only to historians, but to Americans across a wide intellectual spectrum.

At the heart of the book are three chapters on the development and institutionalization of academic disciplines. Each details the early years of a particular field and explains how its practitioners began by seeking to confirm biblical assumptions, came to adopt and employ scientific principles, and eventually embraced the study of the “Old World” as its mainstream. The study of Native American languages, archaeology, and culture was relegated to backwaters, too often ignored by the leaders in the field.

Conn’s discussion of how linguistics developed in the United States illustrates his approach. He tells us first of those early missionaries and traders who studied Native languages for very practical reasons. Later, learned amateurs and early professionals collected their grammars and vocabularies—and conducted fieldwork with living Native people—in hopes of finding connections between Native tongues and Old World languages. But once it became apparent that no connections existed between Ojibwe, Lakota, or Salish and Hebrew, Welsh, or Sanskrit, linguists lost interest. The public, interested in connecting the Americas to classical antiquity, did so as well. Leading American linguists began establishing reputations in the European-dominated academy, which demanded the study of Old World antiquity. The study of American languages fell out of linguistics and became part of anthropology—and only anthropology—by the end of the nineteenth century. The public, interested in the romance of ancient connections rather than mere migrations of Natives, paid little attention.

The same trajectory, Conn explains, can be found in American archaeology. His most interesting discussion concerns the mound builders, who stand “if not precisely as the greatest discovery of nineteenth-century American archaeology, then as its greatest invention” (121). The presence of mounds and complex artifacts posed a problem



in that, when compared to the “savagery” of Indians of the historical period, they challenged the notions of linear progress that underpinned American notions of history. To address this problem, experts peopled the Americas with a “lost race” — which both inspired feelings of pride in America’s ancient past and justified treatment of contemporary Native people. But once archaeologists applied scientific principles and rigor to their work, amateurs were excluded from the conversation, mound builders were recognized as fabrications, and Indians came to be viewed as belonging to a separate (and less interesting) historical trajectory than those who studied them.

As fascinating as this book is, it has some problems. Chief among these is Conn’s selection of examples. He effectively demonstrates his points, but he does so by idiosyncratically selecting those works that best fit his premise. Any art historian could cite works that confound his schema, and most linguists, archaeologists, historians, and anthropologists could provide dissonant examples from their own disciplines. Conn also fails to include Native scholars who operate within the fields he describes — and who, by their very presence, complicate this story of removal.

Nonetheless, Conn’s work is important. Despite exceptions, his premise rings true: For all the gains that have been made, Native people remain marginal to most historians and other scholars — and to most Americans as well. Conn’s work helps explain why and how this happened. Understanding this problem is the first step toward addressing it.

*Gateway to the Northern Plains: Railroads and the Birth of Fargo and Moorhead*, by Carroll Engelhardt. Minneapolis: University of Minnesota Press, 2007. xx, 366 pp. Illustrations, maps, tables, notes, index. \$29.95 cloth.

Reviewer Eric J. Morser teaches history at the University of Florida. His research and writing have focused on the relationship between business and government in nineteenth-century LaCrosse, Wisconsin.

In this thoroughly researched and panoramic book, historian Carroll Engelhardt explores the influence of railroads on North Dakota’s Twin Cities, Moorhead and Fargo, during the nineteenth century. In the book’s first half, Engelhardt examines how local boosters and railroad corporations, most notably the Northern Pacific, helped make the two cities commercial hubs on the Great Plains. Early boosters, such as Thomas Hawley Canfield of Moorhead and James B. Power of Fargo, realized that attracting railroads was key to urban prosperity. To that end, they negotiated with politicians, business leaders, and railroad managers to attract lines, which helped each city take root and blos-

som in the 1870s. Railroads also shaped the competition between Moorhead and Fargo to become the gateway to the northern plains. While Moorhead's boosters tried and failed to develop home industries, Fargo's three railroads drew in wholesalers eager to pay lower shipping rates. Thus, the economic origins of both cities were inseparable from the history of railroads. In the author's words, big railroads "put Moorhead and Fargo on the map" (280).

Engelhardt's argument about the railroads' overarching impact on the Twin Cities takes a fascinating turn in the book's second half. Moving beyond boosters' dreams and economic questions, he explores how railroads shaped the social and cultural worlds of Moorhead and Fargo residents well after the first trains steamed into town. He traces how rails remade the ethnic character of each community when they transported a wide range of settlers, from Yankee merchants to Scandinavian farmers to eastern European Jews, to the Dakotas. The iron horse set the stage for other changes. By paving the way for local commercial success, railroads laid a foundation for a new middle class devoted to a Protestant moral order that celebrated domesticity and traditional gender norms. By carrying migrant workers west, railroads sparked labor activism and class strife in both cities before 1900. Finally, railroads created a powerful booster ethos that encouraged municipal leaders to invest in public works, such as water plants, electric lights, and city railways, that altered the physical geography of the cities. While the railroads fundamentally determined Moorhead and Fargo's economic success, they were just as essential to the cultural, political, and social development of the two neighboring communities.

Engelhardt is at his best when he maps out how railroads shaped the social history of the cities. He highlights, for example, how rail lines fostered middle-class culture when they donated land for churches and public schools. In this and other instances, he makes a persuasive case that scholars of the American West need to pay even greater attention to railroads in order to understand how the cultural and physical geography of frontier cities took shape before 1900. At times, however, the book seems less a narrative of railroads directly framing the lives of city residents and more a story of plains folk who lived in towns served by trains. It is not always clear, for example, how big railroad companies continued to shape domesticity in the two communities or how iron rails may have influenced local calls for good government during the 1890s. Engelhardt does well to pinpoint links between railroads and city building. Yet he could shed greater light on these important connections to make his compelling argument even more convincing.

Ultimately, Engelhardt has much to offer professional scholars, genealogists, and general readers. His book is exhaustively researched, crisply written, and packed with arresting maps and photographs that help cement his dual urban saga in a distinct time and place. It should appeal to anyone who cares about railroads and the growth of cities on the Great Plains and elsewhere in the nineteenth-century West.

*Frontiers: A Short History of the American West*, by Robert V. Hine and John Mack Faragher. Lamar Series in Western History. New Haven: Yale University Press, 2007. vii, 248 pp. Illustrations, maps, bibliography, index. \$28.00 cloth.

Reviewer Mark R. Scherer is associate professor of history at the University of Nebraska at Omaha. He is the author of *Imperfect Victories: The Legal Tenacity of the Omaha Tribe, 1945–1995* (1999).

*Frontiers: A Short History of the American West* is an abridged edition of Robert Hine and John Mack Faragher's narrative survey text titled *The American West: A New Interpretive History* (2000). In the eight years since its publication, Hine and Faragher's text has become one of the standards in the field, widely used by teachers and highly praised by reviewers for its graceful narrative flow and its deft fusion of traditional analytical approaches with the revisionist perspectives of the "New Western History." Here the authors have condensed and updated their original work, seeking to make it more accessible to "the general reader" (vii). That goal is admirable on its face (anything that brings more readers to history is, by definition, a good thing), but one wonders in this particular case whether the result is worth the effort—not because the new book isn't well done, but because the original was already attractive to both academic and general readers.

Like the larger work from which it is derived, *Frontiers* presents western American history as "the story of where and how cultures meet" (5). To the extent that Hine and Faragher use—and overtly adopt as their title—this notion of a "frontier process" as the unifying theme for their narrative, they are consciously resurrecting Frederick Jackson Turner's familiar (and now somewhat tarnished) analytical model. Their contribution to what remains of the debate over Turnerian theory is to demonstrate that Turner's frontier paradigm, despite its well-recognized deficiencies, remains a useful organizational concept for analyzing western history. The multiple stories of cultural interaction that the authors describe do not produce uniform results, nor do they occur within neatly defined geographical or chronological boundaries. Some result in triumphant and uniquely American success stories; oth-

ers produce conquest, subjugation, and environmentally destructive extractive industry; still others result in various forms of adaptation, accommodation, merger, and persistence. Moreover, these frontier processes have unfolded at various times and in various places throughout American history, and they continue to play themselves out to this day. Thus, the plural “s” used in the title of this new edition cannot be ignored—it is absolutely essential to the authors’ fundamental point.

Although Hine and Faragher employ an expansive definition of “the West,” including within their treatment most of the trans-Mississippi region, readers searching for Iowa content will be disappointed. Other than a few brief references to Iowa’s demographic changes in the 1840s and ‘50s, there is almost no commentary on specifically Iowa topics. Still, *Frontiers* is valuable for students of Iowa history if only for its lucid and thorough synthesis of western regional history—a history in which Iowa has played an undeniably important role.

Although this condensed version is considerably shorter than the authors’ original text, I doubt that it will prove to be significantly more attractive to a “popular” audience. It does include four photo galleries with more than 70 illustrations, but the original edition contains an even more extensive and far richer collection of colorful photos and maps interspersed throughout the text at relevant points. Similarly, academic endnotes have been replaced by lists of “further readings,” but it is hard to discern how that editorial decision would necessarily increase the book’s marketability to its intended audience. Thus, the reaction to *Frontiers* will likely be mixed. Compared to the original, it is a watered-down product that does not offer any compelling justification for its creation other than its brevity. On the other hand, considered on its own terms and without comparison to the original, it is highly recommended and would make a valuable addition to any library. All things being equal, I’ll take the original.

*Jacob Weidenmann, Pioneer Landscape Architect*, by Rudy J. Favretti. Hartford, CT: Cedar Hill Cemetery Foundation; distributed by Wesleyan University Press in association with University Press of New England, 2007. 196 pp. Photographs, illustrations, plans, notes, appendixes, bibliographic references, index. \$49.95 cloth.

Reviewer Heidi Hohmann is associate professor of landscape architecture at Iowa State University. She has published a number of articles on biographical subjects in landscape architecture.

Better known for its rural, vernacular landscape of farms, fields, and small towns, Iowa is not particularly recognized for its historic de-

signed landscapes. Yet Iowa has an important heritage of designed landscapes—including parks, cemeteries and courthouse squares—that deserve acknowledgment and documentation. A few of the earliest and most significant of these landscapes receive attention in Rudy Favretti's book, *Jacob Weidenmann, Pioneer Landscape Architect*. A biography of the landscape architect who originally laid out the Iowa state capitol grounds, this book also sheds new light on the early history of landscape architecture and the built heritage of Iowa.

Chapter one of *Jacob Weidenmann* covers the landscape architect's "formative years," including his artistic education in Switzerland, youthful travels in Europe, North America, and South America, and emigration to New York in 1856. The rest of the book portrays Weidenmann's productive yet rocky career as a landscape architect designing estates, cemeteries, subdivisions, parks, and gardens in Connecticut, New York, Illinois, and Iowa. Embedded in the book's chronological narrative is a comprehensive catalog of Weidenmann's known built works, with descriptions of their historic and existing conditions. Photographs, illustrations, and Weidenmann's own plans and architectural drawings, many reproduced in color from his long-out-of-print book *Beautifying Country Homes*, help readers understand these designs as well as Weidenmann's design influences and philosophy.

For scholars of landscape architecture, this comprehensive record of Weidenmann's career serves to better illuminate the products and methods of the early practice of landscape architecture in America. Although the second half of the nineteenth century was a time of rapid expansion for landscape architecture, the history of the field has tended to narrowly emphasize the contributions of a few key figures (such as A. J. Downing and Frederick Law Olmsted), largely because of a dearth of information about other practitioners of the time. Favretti's meticulous research on the previously unexamined Weidenmann begins to redress this deficiency. Unfortunately, the book stops short of fully contextualizing Weidenmann's work in the larger realm of late nineteenth-century landscape architecture. Although the brief conclusion at the end of the last chapter compares Weidenmann's contributions with those of Olmsted, Olmsted's original partner Calvert Vaux, and H. W. S. Cleveland, the assessment seems somewhat perfunctory. Furthermore, Favretti's positioning of Weidenmann as the "father" of landscape architectural education seems like a misdirection of Weidenmann's obvious significance as a designer, especially given that he died prior to the establishment of formalized landscape architectural education. The book's other scholarly weaknesses are an unwieldy referencing system and the author's unfortunate tendency to

paraphrase Weidenmann's motivations and intentions, when direct quotations from the primary sources might provide a clearer account of events.

However, Favretti's apparent affinity for Weidenmann and the book's conversational tone should make it appealing for a lay audience interested in landscape design. For readers in Iowa, especially, the book is not only accessible, but also provides new and surprising details about the design and construction of some beloved Iowa landmarks, such as the state capitol grounds, state fairgrounds, and Terrace Hill. Weidenmann's work on the fairgrounds and Terrace Hill are interesting, but they pale beside his work on the capitol grounds, which he began in 1884 and completed in 1890. Interestingly, Weidenmann had worked on portions of the U.S. Capitol grounds in 1874, drawing and rendering plans for Olmsted during their years of collaboration. Weidenmann's own plans for the Iowa state capitol, with its sweeping walkways, lush picturesque plantings, and great stairway leading from the western façade to the Des Moines River, seem to recall Olmsted's earlier design, a fact that goes unnoted in the text. However, Favretti's otherwise detailed account and images of Weidenmann's design do reveal that the capitol grounds were as carefully and ornately designed as the building, with the same intention of elevating the art and culture of a frontier state.

Sadly, little of Weidenmann's landscape design for the Iowa state capitol remains extant today, with the exception of the grand stairway. Indeed, as the book makes clear, most of Weidenmann's works are lost or substantially altered, a fact that highlights the book's real value. By documenting Weidenmann's landscapes, Favretti makes them live again, at least in text and pictures, and ensures their inclusion as an important part of our national and state history. This book should inspire citizens and historians to seek out Iowa's other designed historic landscapes as places worthy of serious study.

*Iowa State Fair: Country Comes to Town*, by Thomas Leslie. New York: Princeton Architectural Press, 2007. 142 pp. Illustrations (many in color), notes. \$19.95 paper.

Reviewer Chris Rasmussen is associate professor of history at Fairleigh Dickinson University. He is the author of a Ph.D. dissertation on the Iowa State Fair as well as "Progress and Catastrophe: Public History at the Iowa State Fair, 1854-1946," *Annals of Iowa* 63 (Fall 2004).

Thomas Leslie's *Iowa State Fair* offers a succinct, informative, and enjoyable account of the annual exhibition, now more than 150 years old.

Leslie's narrative is organized chronologically, and traces the fair from its origins to the present. As he observes, the fair has throughout its history been a spur to progress while at the same time celebrating Iowa's agrarian heritage. As Iowa became more urbanized, the fair's managers strove to appeal to a changing audience while remaining true to the state's rural heritage. This paradoxical commitment to both modernization and tradition has always been the fair's hallmark.

Leslie, an architectural historian, builds his case for the fair's significance by examining the layout of the fairgrounds and its buildings. In recent years, architectural historians have moved beyond a consideration of great architects, focusing instead on institutional and vernacular architecture, and Leslie's discussion of the development of the fairgrounds is the strongest chapter in this fine book. As he observes, the layout of the permanent fairgrounds, created in the 1880s, clearly divides the fair's activities into domestic crafts, agriculture, machinery, commercial exhibits, and entertainment (51). The development of fairground architecture, which rapidly progressed from hastily constructed wood-frame buildings to the substantial brick exhibition buildings familiar to most Iowans, suggests the fair's tremendous significance in the early twentieth century. Between 1900 and the onset of the Great Depression, the state of Iowa transformed the fairgrounds, funding construction of the fair's Livestock Pavilion, Grandstand, and nearly all of its permanent exhibition buildings. These brick and steel buildings, Leslie notes, "reflected the grand civic aspirations of the fair" in the early twentieth century (57). Even more attention to the scores of booths, tents, and kiosks that also dotted the grounds during the fair would be a welcome addition to this architectural history.

Buildings alone cannot tell the fair's story, of course, so Leslie recounts the many activities that took place in these buildings and on the grounds. Although the fairgrounds and exhibition buildings are permanent, the fair itself is fleeting and boisterous. Leslie discusses the many exhibits, entertainments, and activities that enliven the fair. Readers seeking a detailed history of midways, the 4-H, or horse racing will not find it here, but this book does offer a wide-ranging and informative overview of the state fair.

World War II marked a watershed in the fair's history. In the postwar years, the fair no longer played a central role in developing Iowa's agricultural economy, and state funding for fair buildings dried up. Rapid technological and cultural change impelled the fair board to scramble to make the fair seem contemporary by building "Teen Town" in 1964, embarking on a string of themed fairs (the 1973 fair beckoned Iowans to "Discover Hawaii" on the fairgrounds), and

booking country and pop concerts. As Leslie terms it, recent fairs have offered “new traditions,” a paradoxical term that encapsulates the fair’s longstanding tension between promoting innovation and hailing the virtues of traditional rural life. Today, Leslie writes, the fair “has become a touchstone throughout the country for the largely lost connection to our agrarian past” (21).

*Iowa State Fair* is beautifully produced and lavishly illustrated, with more images than pages. Leslie makes good use of photographs, postcards, and advertisements to evoke vividly the fair’s growth. His additional evidence consists primarily of journalistic accounts of the fair and the fair’s own promotional material. Historians will note the absence of archival sources and historiographic debates, but general readers will find Leslie’s narrative engaging.

*One Day for Democracy: Independence Day and the Americanization of Iron Range Immigrants*, by Mary Lou Nemanic. Athens: Ohio University Press, 2007. xvii, 252 pp. Map, illustrations, color plates, notes, bibliography, index. \$39.95 cloth.

Reviewer Frank Van Nuys is associate professor of history at the South Dakota School of Mines and Technology. He is the author of *Americanizing the West: Race, Immigrants, and Citizenship, 1890–1930* (2002).

Mary Lou Nemanic’s brief study of how immigrants alternately shaped and were shaped by Fourth of July celebrations in the Iron Range communities of northern Minnesota is both a personal and scholarly work. She and her husband, a native of the area, have devoted years to traveling the region collecting the photographs and oral histories that provide the foundation for this engaging book. Nemanic draws on a variety of disciplines, including anthropology, cultural studies, folklore studies, history, mass communication, and sociology, to examine a century of Front Range Independence Day celebrations. For her, the Fourth of July is “a cultural text or cultural artifact” (17) that demonstrates how immigrant groups have developed American identities that strongly reflect ethnicity and class while also making accommodations to the unrelenting pressures of mass culture.

The author uses the historical background of the American Revolution and early nineteenth-century Independence Day festivities to situate her twentieth-century Iron Range celebrations within rowdy Old World carnival traditions of resistance. Native-born members of the middle class were equally determined to transform the holiday into a venue of unity and decorum, an impulse given significant impetus during an era of labor strife in the first two decades of the 1900s.



"In this repressive era," she writes, "the Fourth of July was indeed a day of democracy when workers could freely express themselves, control the public streets, invert the order of everyday life, make fun of the privileged, and get gloriously drunk" (84). By the time of the Great Depression, however, Fourth of July celebrations in the Iron Range had become decidedly less connected to carnival traditions, increasingly patriotic, and more heavily influenced by mass culture and consumerism, with activities centered on children and families. Mass culture affected the region even more profoundly after World War II, signified by Independence Day queen contests that affirmed "values that equated democracy with capitalism and conflated citizenship with consumption" (133). As working-class immigrant generations gave way to middle-class ethnics, the desire to reflect shared national values as good Americans affected the tone of Fourth of July activities in the Iron Range.

Yet here is where Nemanic's investigation turns postmodern scholarly assumptions about the overwhelming power of mass culture on their heads. Despite the massive pressures to conform to acceptable middle-class consumerism and consensus, the boisterous and irreverent legacy of earlier celebrations survived and adapted. "Callithumpian parades," clown bands, and cross-dressing have persisted right up to the present day as essential parts of Iron Range Independence Day rituals. Even the intensification of national security concerns in the wake of the September 11, 2001, terrorist attacks elicited humorous and sarcastic portrayals reminiscent of the Old World carnival traditions of the Iron Range.

For scholars and anyone interested in Iowa and the Midwest, *One Day for Democracy* should inspire reflection on the meanings we attach to commemoration of Independence Day and other holidays. Is the Iron Range unique in its enduring carnivalesque traditions, or have other places also maintained alternative ways of interpreting American identity? I am uneasy with Nemanic's characterization of "Progressive reform" as "a major movement to Americanize immigrants" (88) when Americanization was but a small part of the vastly complex phenomena historians have labored to describe as Progressivism. The author also tantalizingly includes Native Americans' participation in Iron Range Fourth of July celebrations in the 1890s, yet does not carry that theme into the twentieth century. These minor quibbles aside, *One Day for Democracy* is an exciting contribution to our evolving understanding of how Americans of all backgrounds celebrate themselves and their sense of nationality.

*Laura Ingalls Wilder, Farm Journalist: Writings from the Ozarks*, edited by Stephen W. Hines. Columbia: University of Missouri Press, 2007. xi, 330 pp. Notes, bibliography, index. \$34.95 cloth.

Reviewer Pamela Riney-Kehrberg is professor of history at Iowa State University. Her most recent book is *Childhood on the Farm: Work, Play, and Coming of Age in the Midwest* (2005).

In *Laura Ingalls Wilder, Farm Journalist*, editor Stephen W. Hines has brought together all of the known writings by Laura Ingalls Wilder to appear in the *Missouri Ruralist*. She was a quite active author for the publication between 1911 and 1924 and even had her own byline, an unusual feature in a farm paper. Hines has reproduced each of these writings in its entirety, providing the only complete collection of the pre-Little House publications available.

For anyone interested in Laura Ingalls Wilder, or in rural women's history, this should be interesting reading. Fans of Wilder's children's books will easily spot the stories that appeared later in the Little House series. That, however, is just a minor part of the book's appeal. Wilder's columns tackled a wide variety of subjects, helping to illuminate the issues concerning rural women in the early years of the twentieth century. Neighboring, successful parenting, and community development all appear in the volume. Farm politics and farm prices are much in evidence, including discussions about the necessity of child labor on the farm and the improvidence of state legislation against agricultural child labor. There is a lot of interesting commentary on farm women and the necessity, or even advisability, of their vote. It is difficult in places to tell what is editorial comment and what is Wilder's position, but Wilder was apparently no suffragist in the early years. By the time women received the vote, however, Wilder was arguing for the education of women voters and a strong presence at the polls. World War I is also prominent during those years, with Wilder promoting farm activities as the front line of the domestic war effort.

What will be particularly interesting to many are the detailed discussions of just how to accomplish many farm tasks. Wilder wrote extensively on cooking, food preservation, garden planning, care of poultry, and many other farm household tasks. With the hows and whys of many of these tasks long since lost to new technology and modernization, Wilder's articles provide an important link to a nearly forgotten past. Her discussions of designing the farm home and the farm kitchen to better serve the needs of the homemaker are very much in line with home extension efforts of the same era.

Not all parts of *Laura Ingalls Wilder, Farm Journalist* are equally useful or interesting, but it is, on the whole, a rich compilation. Hines

has pulled together all of the writings from a single (very famous) columnist and followed the development of her ideas over more than a decade. The book will be interesting to the casual reader, but it is also useful to scholars who wish to know more about female opinion from the early twentieth-century countryside. Wilder's pieces about travel may have limited usefulness, but her writings about farm life and farm politics are worth reading and using again and again.

*A Sesquicentennial History of Iowa State University: Tradition and Transformation*, edited by Dorothy Schwieder and Gretchen Van Houten. Ames: Iowa State University Press, 2007. xvi, 368 pp. Illustrations, notes, index. \$49.99 cloth.

Reviewer John L. Rury is professor of education at the University of Kansas. He has written extensively about secondary and higher education.

This well-conceived collection of essays commemorating the 150th anniversary of the founding of the Iowa Agricultural College and Farm, the predecessor of today's Iowa State University, will appeal to a wide range of readers. Although alumni and present and former staff members of the university will doubtless find it most interesting, it also will prove illuminating to anyone interested in the development of American higher education, particularly land grant institutions. The rise of Iowa State from a small and highly specialized institute for aspiring farmers to a world-renowned research and training center is a vital chapter in Iowa's history. Dorothy Schwieder, Gretchen Van Houten, and the other contributors to this book have helped to document the university's many contributions to Iowa and to the world.

Unlike traditional institutional histories, which often focus on administrative issues and "bricks and mortar" campus enhancements, the authors of this book paint a variegated picture of campus life as it evolved over the years. Separate chapters deal with such topics as student life, athletics, the faculty, cooperative extension and the physical development of the campus, along with accounts of presidential leadership during various eras in the institution's history. This approach results in overlapping accounts of some events and a certain degree of repetition, but it also offers compelling portraits of the diverse constituencies that a modern state university inevitably comes to serve. Each of the book's ten chapters is written by a different author, bringing special expertise and perspective to the task and adding to the book's originality and depth of insight. Brief "vignettes" about various events, personalities, and accomplishments add zest and variety to the mix.

The opening section of the book, comprising the first four chapters, breaks the institution's history into identifiable eras linked to particular university presidents. Those accounts provide a helpful overview of the university's development across the entire period, highlighting the contributions of its principal leaders. Some played more critical roles than others, depending on the challenges and opportunities that each period presented. If there is a weakness in this approach, it is that it tends to favor the later presidents, those who helped to transform Iowa State into a major research institution. The first chapter, for instance, deals with the first 50 years of the university's existence and dwells on various facets of student life as well as administrative and faculty concerns. The chapters that follow provide more detailed accounts of the campus leaders who helped move the institution forward. Like many other universities, Iowa State muddled through the Great Depression and World War II and grew rapidly in the postwar era. Charles Friley (1936–1953) and James Hilton (1953–1964) led the institution through these crucial decades, and they were succeeded by Robert Parks, who served as president until 1986. The Parks years were especially tumultuous, encompassing the student unrest of the 1960s and the various fiscal and political challenges of the years afterwards. The presidents that followed, Gordon Eaton and Martin Jischke, sustained the institution through subsequent decades.

These chapters help to identify critical issues in the university's development that receive attention in later parts of the book. The chapter on student life, for instance, expands on themes introduced in the discussions of the Friley, Hilton, and Parks years, such as student social activities and political activism. The popular VEISHEA festival, a celebration of spring that eventually evolved into a cause for confrontation with authorities, marked the emergence of a distinctive and independent student culture on the campus, parallel to national trends. The chapter on faculty provides insight into the tensions created by presidential efforts to expand the university's curricular emphasis from agriculture and related sciences to include the humanities and social sciences. Individual accounts of distinguished researchers and teachers are featured as well. Chapters on athletics and extension point to the many ways that Iowa State reached out to the public beyond the campus through instructional programs and feats of athletic prowess that inspired fans across the state and nation. The many details included in these accounts are far too numerous to recount here; the book is a veritable treasure trove of information on Iowa State's accomplishments in these realms.

In sum, this book is a celebration of a distinctive national university's coming of age, while reflecting the growing sophistication of its state as a site of excellence in faculty research and scholarship, student learning and achievement, and athletic triumph. While rarely critical, it highlights the many contributions that Iowa State has made over the past 150 years, growing from humble origins to become a great center of academic and cultural accomplishment. One can only hope that the university's future is as bright as its past.

*Banned in Kansas: Motion Picture Censorship, 1915–1966*, by Gerald R. Butters Jr. Columbia: University of Missouri Press, 2007. xvi, 348 pp. Illustrations, notes, table, appendix, bibliography, index. \$44.95 cloth.

Reviewer Jerold Simmons is professor of history at the University of Nebraska at Omaha. He is the coauthor of *The Dame in the Kimono: Hollywood, Censorship, and the Production Code from the 1920s to the 1960s* (1990).

Those of us who work in the field of film history owe a debt of gratitude to Gerald Butters and the University of Missouri Press for producing *Banned in Kansas*. This fine work is the first fully developed scholarly history of a state censoring agency, and it fills a serious gap in the literature. As Butters points out, earlier studies of censorship have generally concentrated on the Motion Picture Association's Production Code Administration or the Catholic Legion of Decency, devoting only an introductory chapter or two to the creation of the state censors before moving on to their central subject. Aside from two master's theses centering on the Pennsylvania and Kansas boards of censors and Laura Wittern-Keller's excellent dissertation on legal challenges to the state boards, we know very little about the staffing, operations, or regulations governing the state agencies that censored America's movies. Butters has taken a large step toward filling that void.

The Kansas State Board of Review, like similar boards in Pennsylvania, Ohio, Maryland, Virginia, and New York, was a product of the progressive impulse to protect the public from harmful products and ideas. As this carefully researched study illustrates, progressives such as William Allen White and Arthur Capper joined with clubwomen, ministers, and other concerned Kansans in an effort to convince the legislature to create an agency to prevent the poisoning of young and impressionable minds. The Kansas State Board of Review was the result of their efforts. Established in 1913, it only began functioning in 1915 after the U.S. Supreme Court upheld state authority to censor. For the next half-century, before Kansans could watch any motion picture, that feature had to be inspected and approved by the State Board of Review.

Through most of its history, the Kansas Board of Review was composed of three middle-aged, married women appointed by the governor. They possessed no particular qualifications for the post or any special appreciation of film. They were chosen for their financial contributions to or political work for the governor who appointed them. They were paid a modest salary (\$1,800 per year in the 1930s) to protect Kansas theater patrons from film content that was "cruel, obscene, indecent or immoral," or that could "tend to debase or corrupt morals" (186). Those standards, though hardly precise, allowed the censors to remove any film content they found objectionable. Their work was conducted in a small screening room on the upper floor of a Kansas City firehouse, where they spent each day sitting in overstuffed chairs viewing three or four motion pictures. Beside each chair was a buzzer that, if pushed, would alert the projectionist to mark an offending scene or passage for later deletion by the distributor.

Butters devotes a majority of his account to the initial decades (1915-1934) when the board buzzed the projectionist frequently. It routinely eliminated scenes of drinking, women smoking, gambling, unmarried or married couples in suggestive postures, gangsters killing policemen, and virtually anything that might threaten "Christian" values. Between June 1924 and May 1925, the board required cuts in 18 percent of the films and special features it watched. Relatively few pictures were banned outright, and those that were nearly always conveyed the story of a young woman's fall from virtue. During those early years, the board's authority went virtually unchallenged. Distributors cut their films without protest, and most Kansans seemed barely aware of the board's activities.

With the creation of the Production Code Administration in 1934, motion picture decency was enforced in Hollywood. Joseph Breen and his staff were empowered to remove the sex, violence, and other offensive content from studio productions before the film could be released. Breen's effectiveness left little for state censors to do. After 1934 their work was largely confined to foreign films and independently produced exploitation pictures that sought to cloak sexual content under the cover of public health.

By the 1950s, the buzzers had nearly fallen silent. In 1953 the board ordered cuts in only three films. It prohibited the exhibition of three others, but the U.S. Supreme Court overturned the decision on one of those films (*The Moon Is Blue*). Butters does a solid job of guiding readers through the litigation and court rulings that eventually brought an end to film censorship in Kansas.

*Cinematic Journeys: An Uncommon Guide to Classic Movie Theaters: Missouri, Kansas, Nebraska, Iowa*, by Mike and Vicki Walker. Kansas City: How High the Moon Publishing, 2007. xi, 158 pp. Illustrations, maps, index. \$14.95 paper.

Reviewer Jennifer Fleeger is a Ph.D. candidate in film studies at the University of Iowa. Her research focuses on sound and music in American cinema.

*Cinematic Journeys* does not claim to be a comprehensive survey of classic midwestern movie theaters, yet it does serve as an introduction to the region's cinematic heritage by providing a photo, list of historical facts, and descriptive paragraph for 63 operational cinemas in four states. The inclusion of several theaters under the heading "classic," however, remains something of a mystery; although many of the houses were constructed well before the 1940s, the list extends to cinemas built in this century. The book's pages are divided equally among the theaters, but the inconsistency in the level of detail devoted to each belies an uneven research method. Uneasiness about the authors' approach is exacerbated by the insertion of anecdotes about film going on pages with little historical text. Such "movie memories" are usually unrelated to the cinema under discussion and often either originate with the authors themselves or come from anonymous sources.

These criticisms aside, the size and organization of *Cinematic Journeys* make it a handy accompaniment to weekend trips around the Midwest. The theaters are arranged by state and further broken down by region, allowing the traveler to tack a visit to the cinema onto a trip designed for another purpose. Moreover, to supplement the descriptions of many of the houses, the authors offer recommendations for nearby food and attractions. The text includes 12 theaters located in north central and eastern Iowa.

*Diaspora in the Countryside: Two Mennonite Communities and Mid-Twentieth-Century Rural Disjuncture*, by Royden Loewen. Statue of Liberty-Ellis Island Centennial Series. Urbana and Chicago: University of Illinois Press, 2006. xv, 331 pp. Maps, photos, notes, bibliography, index. \$75.00 cloth, \$25.00 paperback.

Reviewer Steven D. Reschly is chair and associate professor of history at Truman State University. He is the author of *The Amish on the Iowa Prairie, 1840 to 1910* (2000).

Roy Loewen has produced a string of books and articles rooted in his comprehensive research on the Kleine Gemeinde (KG) Mennonites in Kansas and Manitoba. In *Family, Church and Market: A Mennonite Com-*

*munity in the Old and New Worlds, 1850–1930* (1993), he traced the KG from the Ukraine to Canada and the United States; and in *Hidden Worlds: Revisiting the Mennonite Migrants of the 1870s* (2001), he proposed “regrafting” as an image to explicate migration, in a sense combining “uprooted” and “transplanted.” *Diaspora in the Countryside* extends Loewen’s purview to Mexico and Belize. Research in five nation-states offers powerful potential for comparative history. Loewen addresses theoretical issues in migration, ethnicity, agriculture, gender, political economy, and theology through finely grained accounts of daily life in multiple locations, with special focus on Meade County, Kansas, and the Rural Municipality (RM) of Hanover in Manitoba.

Loewen uses two controlling rubrics to make sense of this complex international research: diaspora, and John Shover’s “Great Disjuncture” thesis. Classically referring to the scattering of Jews in the ancient Mediterranean world, *diaspora* later came to mean almost any extensive dispersal of populations, such as the African Diaspora, whether by coercion or choice. Loewen applies the term to the massive movement of rural populations in North America to small towns, cities, and even foreign countries. As with other diasporas, Loewen finds not only fragmentation and depopulation, but coalescing and creative cultural recreation in new locations.

To explain why so many people were moving about and remaking identities, Loewen borrows historian John Shover’s “Great Disjuncture” term, developed in *First Majority–Last Minority: The Transforming of Rural Life in America* (1976). A mid-twentieth-century perfect storm of political, economic, and cultural shifts produced a radically altered rural landscape: scientific farming with herbicides and synthetic fertilizers; farmland commodification; disparities of wealth and class conflict; consumer culture and its emphasis on individualism; assimilative imperatives in wartime and aggressive nationalism that pressured ethnic farm communities to become less different; specialized and mechanized farming to produce marketable commodities; and intrusive government policies. Historians and rural sociologists have documented the disintegration of rural communities; not many have asked what happened to those displaced people.

Loewen’s answer is fourfold. First, those KG Mennonites who stayed behind, in Hal Barron’s phrase, reformatted their farm economies, by growing larger and growing wheat in southwestern Kansas, and by accepting more government supply and price controls on mixed crops in southern Manitoba. Those directions had much to do with environment (dust versus snow) and with political differences between the United States and Canada, but also with ethnically differ-



entiated responses to the strains placed on ingrained communitarian values.

Second, KG Mennonites who moved to nearby small towns—Meade in Kansas and Steinbach in Manitoba—created new ethnic cultures rooted in consumption, travel, and individuality (58). Particularly in postwar Meade, a reinvented Mennonite ethnicity ironically opened the rural migrants to an “assimilative vortex” of civic, nationalist, and militarist symbols (76). Here Loewen makes his most creative and tightest connection between economic and social change, on the one hand, and ecclesiological and theological shifts, on the other. The increasing dislocation, individualism, and assimilation brought about by the Great Depression, World War II, and the Great Disjuncture supported a reformulation of church life toward mainstream American evangelical faith and away from an Old Order reliance on submission to community authority. Mennonites became “an institution that would compete for individuals” (90), a church built on personal salvation, which in turn required a revamping of programs and leadership (89). Evangelical purity became the new distinction, replacing Low German and plain clothing (94). In Manitoba, however, a critical mass of Old Order people who migrated to Mexico in 1948 preserved communitarian solidarity against the onslaught of individual choice (109, 113).

These cultural and institutional changes also appear in gender identities. Discussing womanhood in Meade County and masculinity in RM Hanover, Loewen shows a keen eye for the revealing representation: diary and account books for farm women; newspaper columns for 1950s “happy homemakers”; and family biographies for professional women. Chapter 7, on manhood in Manitoba, is one of the few extant discussions of masculinity in Mennonite historiography and deserves more attention than a brief review can give.

Third, Loewen follows KG Mennonite migrants to large cities—Winnipeg and Denver—and the coalescing of social fragments into reinventions of evangelicals, neo-Anabaptists, and secularists. Finally, some Canadian KG Mennonites moved to Mexico and Belize, where they paradoxically created modern high-technology farms “to sustain antimodern culture” (188). They changed location to resist cultural change. Both of these are rich stories that deserve more reflection than can be offered here.

There are some minor errors, not surprising in a work of this complexity, but the bibliography is thorough, and the index is helpful, not least in tracking family names.

Roy Loewen is constructing a record as the most innovative historian in the Mennonite and Amish world. *Diaspora in the Countryside* is so meticulous that it may lead to interrogation of the very assumption of "Great Disjuncture," despite Loewen's reliance on that thesis. In the larger sweep of Mennonite history since the sixteenth century, and of rural history in general since that time, "disjuncture" begins to seem the norm. Persecution, migration, wars, agricultural transformations, complex ambivalences toward technology, cultural fragmentation: these have occurred often, almost constantly, over the past five centuries. Perhaps it is the illusion of stability that must be scrutinized. The constant that Loewen identifies most clearly is "a multifaceted story of cultural creativity" (17), illuminating the delicious irony of intentional change to remain the same, or to maintain the fiction of an unchanging social order. Comparative history across national borders, such as this book, can remove many blinders and open new vistas for scholarly creativity in all histories, not merely the history of a tiny group located in two corners of the North American grasslands.

*Lucky Man: Memories of a Life in Communications*, by William Barlow Quarton III. West Branch: Herbert Hoover Presidential Library Association, 2005. xii, 131 pp. Illustrations, appendix, index. \$20.00 cloth.

Reviewer Steve Coon is a communications consultant and emeritus associate professor and former coordinator of electronic media studies in the Greenlee School of Journalism and Mass Communication at Iowa State University.

It would be difficult to name anyone who has contributed more to the development and growth of broadcasting in Iowa than William Barlow Quarton III. An Iowa native, Quarton remained firmly rooted in the Hawkeye State despite his larger roles on the national stage. As he writes in his short autobiography, *Lucky Man*, Quarton made his reputation and fortune in Cedar Rapids at WMT radio and television in a career that spanned six decades. At the same time, he rubbed shoulders with many broadcast legends of the second half of the twentieth century. As early as the mid-1940s, Quarton contracted with Walter Cronkite to deliver Washington news to WMT. It was one of numerous decisions that would elevate Quarton to the forefront of broadcast pioneers. For his part, Cronkite, in his foreword to the book, writes, "I was blessed, because Bill Quarton was one of the best bosses I ever had."

Iowa's rich broadcast history boasts such luminaries as B. J. Palmer, the Cowles family, and sports announcer Ronald "Dutch" Reagan. Quarton describes them all as he modestly understates his

own career as entrepreneur, educational leader, and philanthropist. He chaired the CBS Television Affiliates Board, helped create Iowa's Public Broadcast Service, and—although a college dropout—ascended to membership on the Iowa Board of Regents. Although Quarton's descriptions of his many travels late in life seem gratuitous, his entertaining reflections on Iowa broadcast history make *Lucky Man* a satisfying read.

*Iowa City's Irving Weber: A Biography*, by Lolly Parker Eggers. Victoria, BC: Trafford Publishing, 2006. xii, 402 pp. Illustrations, notes, bibliography, index. \$22.00 paper.

Reviewer Jan Olive Nash is principal of Tallgrass Historians L.C. In that capacity, she has visited and studied the history of Iowa towns for 15 years and has made close studies of several Iowa City properties. She also recently completed a Ph.D. dissertation at Loyola University Chicago on the survival of small towns in Iowa.

Lolly Parker Eggers is clearly Irving Weber's biggest fan, for who else could muster the stamina needed to research the minutiae contained in her biography of Iowa City's beloved official historian? Covering everything from Weber's 1839 genealogical roots in rural Johnson County to his boyhood neighborhood gang, his successful business career, and, finally, his retirement years spent writing local history, Eggers documents Weber's long life (1900–1997) with organizational skill and clear prose. While placing her subject within a strong community history, little broader context emerges to understand Weber within the larger patterns of the twentieth century, although he experienced most of it. Some historical generalizations are overstated, and the book lacks footnotes, but Eggers includes paragraphs of specific chapter sources for those wanting more detail. An extensive bibliography and useful index promise user-friendliness for researchers.

This book is really a nostalgic social history of a small midwestern city, wrapped around the biography of a prolific local historian. As the former, it recalls Lewis Atherton's *Main Street on the Middle Border* (1954) and largely repeats work already in general circulation. It is also a case study of a local historian, in which Irving Weber emerges as one of the last of his type—the well-mannered gentleman historian raised by Victorian parents. Weber epitomizes a segment of civil society and a manner of behaving unfamiliar to many today. Modest and soft-spoken, Weber did an immense service to his hometown. With the help of this biography, he will forever be a fixed part of this community's memory.

*Not Just Any Land: A Personal and Literary Journey into the American Grasslands*, by John Price. Lincoln: University of Nebraska Press, 2004. xiv, 225 pp. Notes, bibliography. \$20.00 cloth.

Reviewer Thomas K. Dean is special assistant to the president of the University of Iowa and the founder of the Iowa Project on Place Studies. He has written about midwestern and Native American literature and about nature writing.

One way that ecocriticism strives to distinguish the relatively new field from other types of literary criticism is its goal to connect literature and its analysis to more real-world issues. In an age when the degradation of the planet itself is only accelerating, ecocritics feel that mere intellectual arguments are more a part of the problem than a solution. Ecocriticism plays on a wider field than environmental catastrophe, however. For example, many of its practitioners believe that it is necessary to connect both self and readership to place for humanistic reasons. If literature is about the human condition, especially as it relates to living in real places, why attempt to separate the critic and reader from the author, the text itself, and both of their connections to place? John Price answers this question in *Not Just Any Land* by saying, "Let's not even try."

This is not the first attempt at a more personalized literary criticism. Sherman Paul, for example, challenged critical boundaries several decades ago with experiments in more personalized, impressionistic readings of literary works. Price tries something even more different, however. He offers not just personal feelings, but connects his literary analysis with his own quest to connect to place. A native Iowan, Price uses his study—which originated as a doctoral dissertation—to answer some of his own personal questions about his relationship to his native region, why where to live is a major life decision, the relationship between work and home, and the implications of commitment to place for environmental stewardship. Price also connects the writers themselves more intimately to the place-based writing they practice by visiting them in their home locations and interviewing them. The result is a combination of personal memoir, author interview, and literary analysis of several contemporary midwestern writers: Dan O'Brien, Linda Hasselstrom, William Least Heat-Moon, and Mary Swander.

As with a *bildungsroman*, Price's encounters on his personal and literary journey are often not the ones he thought he sought. He seems rather intimidated, for example, by Dan O'Brien's falconry and the author/rancher's philosophy that puts predation at the center of existence. But Price grows to understand and appreciate it in the course of his interview and works to incorporate it into his own ideas about place. Rancher Linda Hasselstrom gently challenges Price's academic

pursuits as inadequate to the task of place building, but Price responds with a defense of his work and a rationale for the changes in literary criticism that he is trying to enact: "That's what I'd like to see the work of writing and the academy become," he says. "One of the reasons I'm in South Dakota is to talk with writers who, just like you said, can't separate their writing from their place" (88).

In the end, Price does not manage to create a wholly new, amalgamated method. Throughout the book, the varying approaches usually remain distinct, alternating between personal memoir, author interview, and literary analysis. Those seeking a memoir may feel that the literary talk interrupts the personal exploration, and vice versa. But Price is to be applauded for his work in making the case for a more immediate and personal criticism, and the links between his methodologies do occur at times. Ultimately, he fashions a compelling new way to encourage his readers to think about their relationships with place, region, and environmental responsibility, and he offers revealing sketches of writers and their ideas about what it means to live in the plains and prairie regions.

## New on the Shelves

"New on the Shelves" is a list of recent additions to the collections of the State Historical Society of Iowa. It includes manuscripts, audio-visual materials, and published materials recently acquired or newly processed that we think might be of interest to the readers of the *Annals of Iowa*. The "DM" or "IC" at the end of each entry denotes whether the item is held in Des Moines or Iowa City.

### Published Materials

*Abridged Edition of the New Song Book and Music Reader*, by Charles A. Fullerton. Cedar Falls: Fullerton & Gray, 1920. iv, 60 pp. DM.

*American Architectural History: A Contemporary Reader*, edited by Keith L. Eggener. New York: Routledge, Taylor & Francis Group, 2004. xiv, 449 pp. DM.

*The American Game: A Celebration of Minor League Baseball*, by Ira Rosen. New York: CollinsReference, 2006. xv, 171 pp. DM.

*American Red Cross Home Service for Servicemen, Veterans, and their Dependents*. Washington, DC: American National Red Cross, [195-?]. 12 pp. IC.

*Atlas of American History*, by Gary B. Nash and Carter Smith. New York: Facts on File, 2007. 346 pp. DM.

*Atlas of North American Railroads*, Bille Yenne. St. Paul, MN: MBI, 2005. 176 pp. DM, IC.

*Basic Iowa Materials*, by Betty Jo Buckingham. Des Moines: Iowa Dept. of Education, 1990. 22 pp. *Bibliography for teachers (especially upper elementary) of Iowa history and literature*. DM, IC.

*The Battle of the Wilderness*, by Morris Schaff. Boston: Houghton Mifflin Co., 1910. 345 pp. DM, IC.

*The Black Debacle: From a Thundering Voice to a Confused Whisper: Recollections and Observations on the United Mine Workers and Collective Bargaining in the Coal Industry*, by Melvin Triolo. Parsons, WV: McClain Print. Co., 1991. v, 311 pp. IC.

*The Blue, the Gray & the Red: Indian Campaigns of the Civil War*, by Thom Hatch. Mechanicsburg, PA: Stackpole Books, 2003. xi, 274 pp. DM.

*Burlington Lines Standard Track Signs*. Chicago: Burlington Route Historical Society. 111 pp. DM.

*City Lights: Illuminating the American Night*, by John A. Jakle. Baltimore: Johns Hopkins University Press, 2001. x, 292 pp. DM.

*Civil War Days: Discover the Past with Exciting Projects, Games, Activities, and Recipes*, by David C. King. New York: Wiley, 1999. 98 pp. DM.

*Collier's New Photographic History of the World's War, Including Sketches, Drawings and Paintings Made by Artists at the Front.* Photographs by the official photographers accompanying each army, collected and arranged by Francis J. Reynolds and C. W. Taylor. New York: P. F. Collier & Son, 1918. 128 pp. DM, IC.

*Common Landscape of America, 1580 to 1845*, by John R. Stilgoe. New Haven, CT: Yale University Press, 1982. xi, 429 pp. IC.

*Cost of War in Treasure and Men.* [New York: Fidelity-Phenix Fire Insurance Co., 1917?] 1 sheet. *World War I*. IC.

*Diary of Walter C. Laughead, Company D, 50th Iowa Volunteer Infantry, Saturday, 21 May–Thursday, 11 August, 1898*, edited by Judy M. Holzmer and Michael W. Vogt. Johnston: Iowa Gold Star Military Museum, 2007. 39 pp. DM, IC.

*Displaced Persons and the International Refugee Organization: Report of a Special Subcommittee of the Committee on Foreign Affairs . . . Eightieth Congress, First Session.* Washington, DC: U.S. Govt. Print. Off., 1947. iii, 88 pp. IC.

*Displaced Persons and U.S. Immigration Policy.* Washington, DC: League of Women Voters, [1947.] 12 pp. IC.

*Du Pont, the Autobiography of an American Enterprise: The Story of E. I. du Pont de Nemours & Company, Published in Commemoration of the 150th Anniversary of the Founding of the Company on July 19, 1802.* Wilmington, DE: distributed by Scribner, New York, 1952. 138 p. DM.

*Fireside Poems*, by Irving J. A. Miller. Marshalltown: Miller Brother Pub. and Job Printing House, 1887. 146 pp. IC.

*The First Hundred Years: A Brief History of Iowa*, by Ruth A. Gallaher. [Iowa City: State Historical Society of Iowa, 193-?]. Reprinted from *Iowa Journal of History and Politics* 31 (1933), 531–75. 47 pp. DM.

*500 Bungalows*, by Douglas Keister. Newtown, CT: Taunton Press, 2006. 508 pp. DM, IC.

*The Forgotten Frontier: Urban Planning in the American West before 1890*, by John W. Reps. Columbia: University of Missouri Press, 1981. viii, 169 pp. DM, IC.

*Funerals, Cemeteries and Grave Markers: A Select Bibliography*, by Loren N. Horton. n.p., [199-?]. 15 pp. DM, IC.

*The Gazette Family of Companies: Media Force of the Future.* [Cedar Rapids: Gazette Company, 1997 or 1998?]. 24 pp. IC.

*Generation on Fire: Voices of Protest from the 1960s: An Oral History*, by Jeff Kiseloff. Lexington: University Press of Kentucky, 2007. 284 pp. IC.

*Gout: The Patrician Malady*, by Roy Porter and G. S. Rousseau. New Haven, CT: Yale University Press, 1998. xiv, 393 pp. DM.

*Grange Melodies: Published by the National Grange of Patrons of Husbandry, For Use in the Granges of the United States*, compiled and edited by James L. Orr. Philadelphia: G. S. Ferguson Co., 1900. 200 pp. IC.

*The Greatest Generation Comes Home: The Veteran in American Society*, by Michael D. Gambone. College Station, TX: Texas A & M University Press, 2005. x, 271 pp. DM.

*Guide to Political Campaigns in America*, edited by Paul S. Herrnson. Washington, DC: CQ Press, 2005. xviii, 457 pp. DM.

*Hawkeye Itasca Silvers: "Foxes Extraordinary."* Vinton: Hawkeye Itasca Silver Fox Co., [1925?] 11 pp. IC.

*Hayes of the Twenty-Third: The Civil War Volunteer Officer*, by T. Harry Williams. 1965. Reprint. Lincoln: University of Nebraska Press, 1994. xii, 324 pp. DM.

*Hello Gorgeous!: Beauty Products in America, '40s-'60s*, by Rachel C. Weingarten. Portland, OR: Collectors Press, 2006. 175 pp. DM, IC.

*Historical Atlas of U.S. Presidential Elections, 1788-2004*, by J. Clark Archer et al. Washington, DC: CQ Press, 2006. xi, 164 pp. DM.

*The Hummer Bell*, by Loren N. Horton. N.p., 2006. 27 pp. IC.

*I Wish I'd Been There: Twenty Historians Bring to Life Dramatic Events that Changed America*, edited by Byron Hollinshead. New York: Doubleday, 2006. xi, 338 pp. DM.

*Immigration and Population Policy*. New York: National Committee on Immigration Policy, 1947. 56 pp. IC.

*In the Wake of Disaster*. Washington, DC: American National Red Cross, [1949.] 9 pp. Pamphlet describing the Red Cross's disaster relief program. IC.

*An Intimate Chronicle: The Journals of William Clayton*, edited by George D. Smith. Salt Lake City: Signature Books in association with Smith Research Associates, 1995. lxxii, 580 pp. *Mormon diary*. IC.

*Iowa Historic Property Study: Chicago, Burlington & Quincy Railroad Bridge No. 89 over the Raccoon River, City of Des Moines, Polk County, Iowa*, by Jan Olive Nash. [Iowa City: Tallgrass Historians, L.C., 2005.] 55 pp. DM, IC.

*Iowa Historic Property Study: Manthei Ford Garage (Inventory No. 33-00530), Maynard, Iowa, Fayette County*, by Camilla Deiber. Marion: Louis Berger Group, Inc., 2006. IC, DM.

*Jesse James: Last Rebel of the Civil War*, by T. J. Stiles. New York: Vintage Books, 2003. xiii, 510 pp. DM.

*Just Heat It 'n' Eat It!: Convenience Foods of the '40s-'60s*, by Adeena Sussman. Portland, OR: Collectors Press; distributed by Publishers Group West, 2006. 175 pp. DM, IC.

*Kanawha's Black Gold and the Miners' Rebellions*, by V. B. Harris. [Ann Arbor, MI], 1987. xiv, 302 pp. IC.

*Law and Order vs. The Miners, West Virginia, 1907-1933*, by Richard D. Lunt. Hamden, CT: Archon Books, 1979. 223 pp. IC.

*A Legacy of Excellence: The History of Des Moines Funeral Service*, by Mary Halstead. 2nd ed. Des Moines: Hamilton's Funeral Home, 2003. 114 pp. + CD-ROM. DM.

*Medical Lexicon: A Dictionary of Medical Science . . . with French and Other Synonyms*, by Robley Dunglison. Rev. ed. Philadelphia: Blanchard & Lea, 1860. 992 pp. IC.



*Memorial Addresses on the Life and Character of Rush Clark (a Representative from Iowa): Delivered in the House of Representatives and in the Senate, Forty-Sixth Congress, Second Session.* Washington, DC: Gov. Print. Off., 1881. 52 pp. DM, IC.

*Missouri Then and Now*, by Perry McCandless and William E. Foley. Rev. ed. Columbia: University of Missouri Press, 2001. ix, 407 pp. IC.

*The National Security League: Its Past, Present, and Future Work.* New York, [1918]. 7 pp. IC.

*Nehemias Tjernagel's Music: An Album*, by Peter Tjernagel Harstad. Lakeville, MN: Jackpine Press, 2006. 84 pp. IC.

*New Industries Advanced by the O. S. Kelly Western Mfg. Co., Iowa City, Iowa.* [Iowa City: O. S. Kelly Western Mfg. Co., between 1901 and 1907.] 10 pp. IC.

*Oklahoma, Land of the Fair God*, by Odie B. Faulk. Northridge, CA: Windsor Publications, 1986. 341 pp. DM.

*One Day in History – December 7, 1941*, edited by Rodney P. Carlisle. New York: Collins, 2006. xv, 272 pp. DM.

*Orchids in Your Pocket: A Guide to the Native Orchids of Iowa*, by Bill Witt. Iowa City: University of Iowa Press, 2006. 1 folded sheet (14 pp.). DM, IC.

*Panoramic Maps of Anglo-American Cities: A Checklist of Maps in the Collections of the Library of Congress, Geography and Map Division*, compiled by John R. Hébert. Washington, DC: Library of Congress, 1974. v, 118 pp. DM.

*A Place Not a Place: Reflection and Possibility in Museums and Libraries*, by David Carr. Lanham, MD: Rowman & Littlefield Publishers, 2006. xviii, 151 p. DM, IC.

*Played Out: The Jean Seberg Story*, by David Richards. New York: Random House, 1981. 386 pp. DM, IC.

*Preparing the Next Generation of Oral Historians: An Anthology of Oral History Education*, edited by Barry A. Lanman and Laura M. Wendling. Lanham, MD: Rowman & Littlefield, 2006. xxiv, 483 pp. DM, IC.

*The Preservation Program Blueprint*, by Barbra Buckner Higginbotham and Judith W. Wild. Chicago: American Library Association, 2001. xiii, 151 pp. IC.

*Private's Manual: Co. E. 109th Engineers.* El Paso, TX: Ellis Bros. Printing Co., n.d. 83 pp. IC.

*Pythian Knighthood, Its History and Literature: Being an Account of the Origin and Growth of the Order of Knights of Pythias*, by James R. Carnahan. 2nd ed. Cincinnati, OH: The Pettibone Manufacturing Co., 1889. xvi, 671 pp. IC.

*The Refugees Are Now Americans*, by Maurice R. Davie and Samuel Koenig. [New York]: Public Affairs Committee, Inc., 1945. 32 pp. *Jewish refugees during World War II.* IC.

*Russia in Revolution and its Lessons to America: An Address Delivered Before the Union League Club of Chicago, Dec. 12th, 1918*, by Ralph B. Dennis. Chicago: Union League Club of Chicago, 1919. 15 pp. IC.

*Sergeant Rose and the 15th Iowa in the War of the Rebellion*, by A. Patrick Rose, M.D. Charlestown, MA: Acme Bookbinding, 2006. ix, 222 pp. DM.

## Contributors

MARK FINLAY is professor of history at Armstrong Atlantic State University. His research and writing focus on the history of agricultural science and technology.

JOANNE ABEL GOLDMAN is associate professor of history at the University of Northern Iowa, where she directs the public history program. Her research interests are in the history of science and technology. Her book, *Building New York's Sewers* (1997), has been followed by several articles on the history of the Ames Laboratory. Her most recent research is on the history of Atomic Energy Education.

DAVID L. SEIM is visiting assistant professor of history at Texas A & M University. He discovered the episode described in his article in this issue while a doctoral student at Iowa State University. He is now developing a larger study of agricultural economics through the first half of the twentieth century.

## The State Historical Society of Iowa

*The Annals of Iowa* is published quarterly by the State Historical Society of Iowa, the Historical Division of the Department of Cultural Affairs of the State of Iowa. The society operates from two centers, Des Moines and Iowa City. A museum, research library, state archives, special collections, community programming, and historic preservation, are located at 600 East Locust Street, Des Moines, IA 50319, phone 515-281-5111. Publications, a research library, special collections, and membership programs are located at 402 Iowa Avenue, Iowa City, IA 52240, phone 319-335-3916. The society also operates several historic sites across the state.

## Subscriptions

Subscriptions to *The Annals of Iowa* are \$24.95 per year; single copies are \$7. Contact Publications, State Historical Society of Iowa, 402 Iowa Avenue, Iowa City, Iowa 52240.

The *Annals* is available on microfilm from Xerox University Microfilms, 300 N. Zeeb Road, Ann Arbor, Michigan 48106.

## Submissions

*The Annals of Iowa* invites the submission of articles on Iowa history and on subjects concerning the nation and the Midwest with an Iowa focus. State, local, and regional studies of political, economic, social, cultural, intellectual, institutional, ethnic, religious, material culture, archeological, and architectural history are welcome. The *Annals* also reviews significant books on related topics. A detailed set of editorial guidelines is available on request. All correspondence concerning editorial matters should be addressed by e-mail to [marvin-bergman@uiowa.edu](mailto:marvin-bergman@uiowa.edu) or by U.S. postal mail to:

Marvin Bergman, editor  
*The Annals of Iowa*  
State Historical Society of Iowa  
402 Iowa Avenue  
Iowa City IA 52240

*The Annals of Iowa* is a participating member of the Conference of Historical Journals.



Printed on  
Recycled Paper



The acid-free paper used in this publication meets the minimum requirements of the American National Standard for Information Services—Permanence of Paper for Printed Library Materials, ANSI Z739.48B1984.