

# The Annals of Iowa

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## In This Issue

JOANNE ABEL GOLDMAN, associate professor of history at the University of Northern Iowa, describes the five volumes published by Iowa's Department of Public Instruction in the early 1950s that provided a comprehensive plan for education about atomic science, including the threat of nuclear war, for Iowa citizens of all ages. Individual volumes provided curricula for elementary school, secondary school, and college and university students and educational programming for adults. The plan was praised at the time as the most comprehensive statewide plan for atomic education in the nation.

DEREK ODEN, associate professor of history at Del Mar College in Corpus Christi, Texas, recounts the hazards faced by family farmers in Iowa and the Midwest as the use of sophisticated technological equipment on the farm increased dramatically in the decades after 1940. He argues that the combination of increasing use of new technologies with the unique setting in which Corn Belt farmers worked, where the home intersected with a highly industrialized workplace, resulted in hazards for the entire family.

## Front Cover

The daughter of a Henry County farmer plays in a wagon filled with soybeans. Although this photograph was probably intended only as a cheerful image associated with the fall soybean harvest, it also illustrates a real farm hazard for farm children, as playing in modern gravity-flow wagons and grain bins could cause death by suffocation. For more on the farm hazards associated with new technology on family farms in Iowa and the Midwest, see Derek Olson's article in this issue. Photo from the A. M. "Pete" Wettach Collection, State Historical Society of Iowa, Iowa City.

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# First in the Nation: The Iowa Plan for Atomic Education

JOANNE ABEL GOLDMAN

IN 1948 the State of Iowa's Department of Public Instruction established the Iowa Committee of Atomic Energy Education to develop a curriculum for the study of atomic science. Between 1950 and 1952, the department published the nation's first comprehensive plan for atomic energy education, *The Iowa Plan for Atomic Energy Education* (hereafter *The Iowa Plan*) and distributed it throughout the state.<sup>1</sup> The first of its five volumes introduced *The Iowa Plan*; each of the subsequent four volumes provided curricula for elementary, secondary, college, and adult education, respectively. In addition to explaining the science of atomic energy, these programs promoted discussion of its political, social, and ethical dimensions. Although several other classrooms and schools around the nation introduced independent programs for atomic energy education, the Iowa Committee of Atomic Energy Education intended *The Iowa Plan* to be implemented statewide. It rested on the premise that an educated public can create responsible policy to manage the momentous implications of atomic energy, a necessary prerequisite for maintaining a healthy democracy in an increasingly global community.

The State of Iowa published the five volumes of *The Iowa Plan* between 1950 and 1952. Almost immediately it drew the attention of those actively engaged in national atomic energy

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1. *The Iowa Plan for Atomic Energy Education*, 5 vols. (Des Moines, 1950-1952).

THE ANNALS OF IOWA 73 (Summer 2014). © The State Historical Society of Iowa, 2014.

policy. David E. Lilienthal, the first chairman of the federal Atomic Energy Commission (AEC) called it “one of the most heartening and imaginative programs in the entire country.” Brien McMahon, former chairman of the Joint Congressional Committee of Atomic Energy, praised the program’s dimensions and objectives. The AEC itself reported that “there is probably a more coordinated effort being carried forward in Iowa to integrate atomic energy into the classroom at all levels of education than in any other area.” *Newsweek* reported that it was “the best . . . being done and that it stood ‘far in front’ of any other statewide attempt to promote atomic education.”<sup>2</sup>

At the forefront of atomic energy education, *The Iowa Plan* reflected the complexity of emotions that the public experienced at the dawn of the atomic age and considered subjects that would only later become the focus of federal policy. Initially, immobilizing terror gripped the public’s imagination, evolving toward the more constructive emotions of fear, and then hope, as citizens sought some degree of control over this powerful new force. During the 1950s, the federal government promoted programs for civil defense, furthering the belief that the public could manage the unmanageable—a nuclear war.<sup>3</sup> Each volume of *The Iowa Plan* discussed the dangers inherent in the atomic age in light of the age of the intended audience. Civil defense protocol, described in some detail for older students, provided at least the

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2. David E. Lilienthal, frontispiece, in *The Iowa Plan*, vol. 5, *Iowa Citizens Investigate the Atom: What Adult Iowans Have Done and May Do to Prepare Themselves for the Atomic Age*; Brien McMahon, frontispiece, *ibid.*; *Waterloo Daily Courier*, 1/9/1950; *Mason City Globe Gazette*, 9/27/1950; *Newsweek*, 7/31/1950, 75. See also *Pella Chronicle*, 11/9/1950.

3. Spencer R. Weart, *Nuclear Fear: A History of Images* (Cambridge, MA, 1988), 129–37; Paul Boyer, *By the Bomb’s Early Light: American Thought and Culture at the Dawn of the Atomic Age* (1984; reprint, Chapel Hill, NC, 1994), 320–33; JoAnn Brown, “‘A is for Atom, B is for Bomb’: Civil Defense in American Public Education,” *Journal of American History* 75 (1988), 68–90; Guy Oakes and Andrew Grossman, “Managing Nuclear Terror: The Genesis of American Civil Defense Strategy,” *International Journal of Politics, Culture, and Society* 5 (1992), 361–403. For civil defense activities in Iowa specifically, see Jenny Barker Devine, “‘Mightier Than Missiles’: The Rhetoric of Civil Defense for Rural American Families, 1950–1970,” in *The Atomic Bomb and American Society: New Perspectives*, eds. Rosemary B. Mariner and G. Kurt Piehler (Knoxville, TN, 2009), 184–209; and *idem*, “The Farmer and the Atom: The Iowa State Cooperative Extension Service and Rural Civil Defense, 1955–1970,” *Annals of Iowa* 66 (2007), 161–94.

perception of recourse, and thus control, in the event of the unthinkable. The tone of the volumes of *The Iowa Plan* also evolved along with the age of the intended audience. The early volumes, aimed at younger students, portrayed a decidedly optimistic view of life in the atomic age, whereas later volumes, targeted toward adults, emphasized concerns and warnings about the conundrums and contradictions that atomic energy introduced.

While civil defense planning may have eased fears of the physical dangers posed by the atomic bomb, concerns about the threat of communism, both to the U.S. government and to the American way of life, grew during the 1950s. Indeed, personal survival became a metaphor for the very existence of the nation, and the condemnation of communism became inextricably bound to American loyalty and patriotism.<sup>4</sup> The animosities between the Soviet Union and the United States permeated the content of *The Iowa Plan* to varying degrees, again relative to the age of the audience, with the college and adult volumes containing the most explicit anti-Soviet rhetoric. Nevertheless, each volume emphasized the importance of international cooperation to both further the science of atomic energy and to monitor international nuclear capabilities. Widespread support in the popular media during the late 1940s and early 1950s for international control of atomic energy suggested that much of the nation also looked to the global community to prevent an atomic arms race and to reduce the threat of war, despite waning support for international control among policy makers.<sup>5</sup>

As a counterpoint to the fear and uncertainty accompanying the new atomic age, the promise of a better life through the peacetime capabilities of atomic science became topics of national discussion both informally, in social groups and club

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4. Ferenc M. Szasz, "Atomic Comics: The Comic Book Industry Confronts the Nuclear Age," in *Atomic Culture: How We Learned to Stop Worrying and Love the Bomb*, eds. Scott C. Zeman and Michael A. Amundson (Boulder, CO, 2004), 18-20; Robert A. Jacobs, *The Dragon's Tail: Americans Face the Atomic Age* (Amherst, MA, 2010), 82; John L. Rudolph, *Scientists in the Classroom: The Cold War Reconstruction of American Science Education* (New York, 2002), 89; Boyer, *By the Bomb's Early Light*, 70, 326-27; Weart, *Nuclear Fear*, 123, 127, 156.

5. Boyer, *By the Bomb's Early Light*, 36, 68, 76-80; Weart, *Nuclear Fear*, 115-17, 126, 142, 157.

programs, and through classroom education.<sup>6</sup> Early on, Iowans incorporated these subjects into their conversations and, subsequently, their school curricula. Even before President Dwight D. Eisenhower extolled the peaceful uses of atomic energy in his 1953 “Atoms for Peace” speech, *The Iowa Plan* explored the potential for atomic science to revolutionize agriculture and medicine and eradicate energy shortages.<sup>7</sup>

Earlier, between 1945 and 1950, the Iowa Department of Public Instruction had recommended that teachers increase their focus on science and mathematics inasmuch as the recent war demonstrated a need for mathematically and scientifically literate students.<sup>8</sup> The content of *The Iowa Plan* reflected this interest. It included a tutorial on basic atomic structure and chemical reactions for grade school students and a more complex treatment of the physics and chemistry of atomic science in the volumes for older students. This all took place well before the federal government codified an increased emphasis on mathematics and science education with the National Defense Education Act in 1958 in order to maintain U.S. preeminence with regard to scientific research and development.<sup>9</sup>

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6. Michael Scheibach, *Atomic Narratives and American Youth: Coming of Age with the Atom, 1945–1955* (Jefferson, NC, 2003), 34–56; Weart, *Nuclear Fear*, 156–69; Boyer, *By the Bomb's Early Light*, 109–21.

7. Dwight D. Eisenhower, *Atoms for Peace*, 1953, [http://www.iaea.org/About/atomsforpeace\\_speech.html](http://www.iaea.org/About/atomsforpeace_speech.html), accessed 7/23/2010.

8. Iowa Department of Public Instruction, *Issues Concerning the Secondary School Curriculum: A Study Manual* (Des Moines, 1945), 82, 85; idem, *Iowa Secondary School Cooperative Curriculum Program*, vol. 2, *A Proposed Design for Secondary Education in Iowa* (Des Moines, 1947), 72, 83, 123; idem, *Iowa Secondary School Cooperative Curriculum Program*, Mathematics Series, vol. 19 (Des Moines, 1949),

8. Atomic energy was included in the physics section of *Chemistry and Physics for Secondary Schools* (Des Moines, 1950), 70, 74–77. All of these publications are in boxes 1–3, Malcolm Price Lab School Collection, University of Northern Iowa University Archives and Special Collections, Cedar Falls. In 1951 the Iowa Department of Public Instruction published the results of a survey of about 6,000 1946 and 1949 high school graduates who were asked what should be added to the high school curriculum; about 33 percent wanted additional science and math education. Iowa Department of Public Instruction, *Educational Needs: Iowa's Young Adults* (Des Moines, 1951), 17–18.

9. Diane Ravitch, *The Troubled Crusade: American Education, 1945–1980* (New York, 1983), 229; Carl F. Kaestle and Alyssa E. Lodewick, eds., *To Educate the Nation: Federal and National Strategies of School Curriculum, 1893–1958* (Boston, 1986), 264; Margaret Rossiter, “Science and Public Policy since World War II,”



Historians have explored the social implications of living in the atomic age: its effect on national demographics, the nuclear family, and the role of government and schools in everyday life.<sup>10</sup> In Iowa, as elsewhere, these matters carried significance. In 1950 the Iowa Department of Public Instruction proposed that the social studies curriculum be expanded to include the study of contemporary social, economic, and political issues.<sup>11</sup> It suggested that atomic science, the challenges of living in the atomic age, and peaceful uses of atomic energy be included in commencement exercises, oratory presentations, and theatrical performances.<sup>12</sup> Much of the content of the elementary education volume of *The Iowa Plan* focused on social and even political considerations of the atomic age; the other volumes divided their content fairly equally between science and social science content. The comprehensive curriculum that *The Iowa Plan* promoted put it on the vanguard of atomic science pedagogy during the early years of the Cold War.<sup>13</sup>

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in *Osiris: Historical Writing on American Science: Perspectives and Prospects*, 2d ser., vol. 1 (Baltimore, 1985), 285; Wayne J. Urban, *More Than Science and Sputnik: The National Defense Education Act of 1958* (Tuscaloosa, AL, 2010).

10. Allan M. Winkler, *Life under a Cloud: American Anxiety about the Atom* (New York, 1993), 109–35; Paul S. Boyer, “Sixty Years and Counting: Nuclear Themes in American Culture, 1945 to the Present,” in *The Atomic Bomb and American Society*, 3–9; Devine, “Mightier than Missiles,” 185–209; Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (New York, 2008), 1–173; David Monteyne, “Shelter from the Elements: Architecture and Civil Defense in the Early Cold War,” *Philosophical Forum* 35 (2004), 179–99; Matthew Farish, “Disaster and Decentralization: American Cities and the Cold War,” *Cultural Geographies* 10 (2003), 125–48; Joseph Masco, “‘Survival Is Your Business’: Engineering Ruins and Affect in Nuclear America,” *Cultural Anthropology* 23 (2008), 361–98; Kathleen A. Tobin, “The Reduction of Urban Vulnerability: Revisiting 1950s American Suburbanization as Civil Defense,” *Cold War History* 2 (2002), 1–32; Boyer, *By the Bomb’s Early Light*, 131–77; Weart, *Nuclear Fear*, 128–74.

11. Department of Public Instruction, *Iowa Secondary School Cooperative Curriculum Program*, vol. 2, *A Proposed Design for Secondary Education in Iowa*, 122.

12. Iowa Department of Public Instruction, *The Student Activity Handbook for Secondary Schools* (Des Moines, 1950), 98–101, in box 3, Malcolm Price Lab School Collection.

13. Andrew Hartman, *Education and the Cold War: The Battle for the American School* (New York, 2008), 138, insists that such science and social science content was replaced by “duck and cover” drills after the onset of the Cold War.

THE STATE OF IOWA experienced significant changes during the decade after World War II. During the middle decades of the century, Iowa's population increased slowly but steadily, by 3 percent between 1940 and 1950 to 2,621,073 persons, and by another 5 percent by 1960. During the same period, its rural character began to diminish as cities grew and the urban population rivalled that of the countryside. The increasingly industrial character of its economy furthered this trend. By 1955, the Iowa Development Commission reported that the number of manufacturing plants had increased by over 26 percent to 3,736 in the decade since the war's end.<sup>14</sup>

In response to the changing demographics, progressive reformers accelerated a statewide school consolidation program that had begun earlier in the century. In 1950 school-aged children made up 15 percent of the state's population, or just over 400,000 in total; just under 300,000 students went to elementary school (kindergarten through eighth grade), and just over 100,000 were enrolled in high school (grades nine through twelve). Almost 80 percent of the schools were one- or two-room schoolhouses, and the content and quality of education varied widely. The strong interest in school consolidation extended to the development of standardized school curricula. It is in this context that during the fall of 1950 the Department of Public Instruction marketed *The Iowa Plan* to the larger districts as well as the remaining rural schools; its comprehensive curricula furthered the objective of standardization.<sup>15</sup>

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14. Dorothy Schwieder, *Iowa: The Middle Land* (Iowa City, 1996), 288–89.

15. Iowa Department of Public Instruction, *56th Biennial Report for the Two Years Ending June 30, 1952* (Des Moines, 1952), 102–3, 108–11, 222–25; Schwieder, *Iowa: The Middle Land*, 291. These changes created ambivalent feelings of nostalgia for the past while preparing for the future. To some degree, this dynamic reinforced the tenets of the Catholic Rural Life and Country Life movements that nostalgically celebrated Iowa's rural roots while pragmatically promoting economic cooperatives to support it. See David S. Bovée, *The Church and the Land: The National Catholic Rural Life Conference and American Society, 1923–2007* (Washington, DC, 2010), 14, 136. In a similar vein, *The Iowa Plan* capitalized on the rural foundations that defined Iowans and instilled in them the importance of education, a necessary prerequisite to develop informed policy that would preserve "our" way of life into the atomic age. *The Iowa Plan*, 5:69–72. See also Devine, "Mightier than Missiles," 186.

After World War II and before the publication of *The Iowa Plan*, students and adults alike shared the nation's growing concern about the challenges of life in the atomic age and creatively explored them. In 1947 the residents of Burlington, Iowa, participated in a community-wide Atomic Energy Week. Later that year the *Des Moines Register* published a series of editorials on atomic energy. Adult education programs commanded large audiences in the small towns of Marengo and Maynard and in the larger cities of Davenport and Iowa City.

Burlington, Iowa (pop. 35,000), held the first community-wide program in the state, Atomic Energy Week, from October 25 to November 1, 1947. The League of Women Voters organized the week's activities, which sought to educate the community about the structure of the atom, the potential peaceful uses of atomic science, and the destructive capabilities of atomic energy. In what would become an enduring theme of *The Iowa Plan* itself, the Burlington program "recognize[d] that international control and strong international political organizations [for monitoring atomic energy] are essentials."<sup>16</sup> A host of volunteers distributed thousands of pamphlets and posters provided by the National Council of Atomic Information and the League of Women Voters. These included the pamphlet "Twelve Points about Atomic Energy" and the posters "Time Doesn't Stand Still for the Atom," "Have You Caught Up with the Atom," and "You Can Do Your Part." In addition, volunteers set up and staffed information booths, arranged public forums, distributed press releases, and encouraged school, club, and theater programs. A group of boys associated with the local Hi-Y club painted atomic symbols on sidewalks and corners. Church leaders included atomic energy topics in their Sunday sermons. Art teachers assisted with displays in retail store windows.<sup>17</sup>

Despite the festive mood of the week's events, many of the exhibits conveyed a somber message. Window designs drove home the theme—"Time Won't Wait, Neither Can You" or "Time Is Running Out"—by filling jewelry store windows with clocks and watches. A department store window displayed an

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16. *The Iowa Plan*, 5:33.

17. *Ibid.*, 34-35.

exhibit based on Ding Darling's cartoon, "Eventually, Why Not Now?" It featured a skeleton "in an atomic-war scarred world" calling for world peace. Another store displayed a brown rabbit in the snow with the sign, "A Brown Rabbit in the Snow is an Easy Target. Animals Who Can Adapt Themselves to Their Environment Survive. Those Who Can't Become Extinct. Can You Adapt Your Ideas to the Atomic Age? Or Are You a Brown Rabbit in the Snow?"<sup>18</sup>

A mass rally attended by 1,200 people, despite heavy rain, concluded the week's activities. Shortly before it began, military planes flew in formation over the city, the Kiwanis Club set off "fire-cracker bombs," and the city blew sirens and organized a five-minute blackout. The speeches that followed continued to emphasize the critical nature of the present times. Atomic Energy Commission member Lewis Strauss presented "The Atom in Civil Life," and *Des Moines Register* editor Forrest Seymour spoke on "A Citizen's Responsibility in the Atomic Age."<sup>19</sup>

The widespread involvement of the community, the informal discussions that followed, and the requests from other communities for program information attested to the success of Burlington's Atomic Energy Week. Prominent scientists and government officials commented on the program, and the Associated Press picked up the story and spread it to papers as far away as Hawaii.<sup>20</sup>

The editor-in-chief of the *Des Moines Register*, William W. Waymack, who felt strongly about the need for public education concerning matters of atomic energy, lobbied for it from his desk at the *Des Moines Register* and later from his pulpit as a member of the first U.S. Atomic Energy Commission.<sup>21</sup> During the fall of

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18. Ibid.

19. Ibid., 35.

20. Ibid.

21. Waymack served on numerous local, state, and national committees before President Harry Truman appointed him to the AEC in 1946. He served on the President's Committee on Farm Tenancy (1936-1937), the Federal Reserve Board of Chicago (1941-1946), and the War Labor Board (1942). See *The Biographical Dictionary of Iowa*, s.v. Waymack, William Wesley, University of Iowa Press Digital Edition at <http://uipress.lib.uiowa.edu/bdi/>, accessed 12/8/2013. For testimony to his commitment to educating the public on atomic energy, see Brian Balogh, *Chain Reaction: Expert Debate and Public Participation in American*

1947 Robert J. Blakely, a *Des Moines Register* editorial writer, published a series of eight columns under the title "You Can Understand the Atom," which provided a basic tutorial in atomic science. Then, between December 1947 and January 1948, the *Register* published a series of six editorials titled "The Atom and You," which called for the public to take responsibility for understanding the essential elements of atomic science so that they could participate in the public discourse on the implications of nuclear policy. The editorials also lobbied for international control of atomic energy; stressed the importance of openness, rather than secrecy, to further scientific advancement; and celebrated the potential for peaceful uses of atomic energy for the military, industrial, and academic complex.<sup>22</sup>

The interest in atomic energy continued to grow during the late 1940s. In response, several Iowa communities developed new adult education programs. In 1949 the town of Marengo, a typical, rural midwestern town with a population of 2,260, hosted an adult education program, dubbed the Marengo Experiment. Several of the organizers, who also constituted the core of the Iowa Committee of Atomic Energy Education, hoped to resolve two key issues: Could atomic energy be explained to the lay person? And would education calm the growing fears of living in the atomic age? The Marengo Experiment answered both questions affirmatively.

Marengo, like many Iowa towns, featured an evening adult education program that offered the usual classes in agriculture, sewing, cooking, woodworking, current thought, music, knitting,

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*Commercial Nuclear Power, 1945-1975* (Cambridge, 1991), 235; Richard G. Hewlett and Oscar E. Anderson Jr., *The New World: A History of the United States Atomic Energy Commission*, vol. 1, 1939-1946 (Berkeley, CA, 1990), 1, 622-40; and W. W. Waymack, "Remarks of Commissioner, U.S. Atomic Energy Commission Before General Session of the Thirty-Second Annual Convention of the National Association of Secondary-School Principals," Atlantic City, NJ, February 21, 1948, in folder: Iowa Education Courses in Atomic Energy Reports, Harley A. Wilhelm Papers, Ames Laboratory Archives, Ames.

22. "You Can Understand the Atom," *Des Moines Register*, 10/12/1947, 10/19/1947, 10/26/1947, 11/2/1947, 11/9/1947, 11/16/1947, 11/23/1947, 11/30/1947; "The Atom and You," *Des Moines Register*, 12/22/1947, 12/26/1947, 12/30/1947, 1/5/1948, 1/7/1948, 1/9/1948; Emil C. Miller, "A Study of Atomic Energy Education for Adults" (Ph.D. diss., State University of Iowa, 1951), 287.

bridge, handicrafts, and public speaking. For ten weeks during the fall of 1949, the 450 adult education students availed themselves of a course on atomic energy offered during the hour that followed their adult education elective. State University of Iowa (SUI) Professor Hew Roberts, former director of adult education and a member of the Iowa Committee of Atomic Energy Education, organized and moderated the presentations, which included lectures, films, demonstrations, and discussions of suggested readings. Much of the program, which included presentations by several of Roberts's SUI colleagues, emphasized science rather than social science aspects of atomic energy. In addition to atomic science and the bomb, there were discussions of a variety of nonmilitary uses of atomic science in industry, medicine, and agriculture. Robert J. Blakely closed the ten-week program with a lecture that raised some of the social implications of the atomic era. His keynote lecture, "Political and Social Adjustments for the Atomic Age," considered many of the controversial issues of the atomic age, underscoring the significance of international scientific collaboration and publication for the advancement of science, as opposed to the government's insistence on secrecy that, arguably, served the interests of national security. He also stressed the importance of international control and cooperation with regard to atomic science, rather than protecting the sovereign right of nations to develop nuclear capabilities to serve their own interests.<sup>23</sup>

The publicity that followed the Marengo Experiment best characterized its success. An SUI science journalism intern who attended the lectures distributed extensive notes as press releases; 137 Iowa newspapers and radio stations incorporated those materials into their own programming schedules.<sup>24</sup> The Marengo Experiment also drew national attention. The Social Science Research Service of the University of Michigan noted that "the level of public information [about atomic energy] was higher in Iowa than in neighboring states." The University of Virginia asked for permission to reprint and distribute the lecture notes. The Atomic Energy Commission lauded the Marengo

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23. *The Iowa Plan*, 5:39–45.

24. *Ibid.*, 42.

Experiment as the "foremost amongst university sponsored adult education programs." The National Education Association journal, *NEA Journal*, and the *Journal of Educational Sociology*, as well as *Midland Schools*, the journal of the Iowa State Education Association, all reported on the Marengo Experiment.<sup>25</sup>

In its wake, the demand for adult education programs grew. Roberts repeated the Marengo Experiment during the summer of 1949 with a college-educated audience at SUI, with a general audience of 267 at SUI during the summer of 1950, and with 537 participants in Davenport during the winter of 1950–51.<sup>26</sup> In 1950 the residents of Maynard, Iowa, appealed to the superintendent of their consolidated school, Donald D. Palmer, who did not have a background in science but rather in commercial law, to develop an adult education program on atomic energy. When he did, 80 of the 430 residents in this rural northeastern Iowa town attended his ten-week presentation.<sup>27</sup>

Clearly, the public was hungry for atomic energy education. The success of these public programs impressed the Committee on Atomic Energy Education, and the content of the programs influenced the substance of *The Iowa Plan*.

IN 1947 Jessie M. Parker, the superintendent of Iowa's Department of Public Instruction, appointed a provisional committee for education and information on atomic energy at the behest of atomic education advocate and *Des Moines Register* editor Robert J. Blakely, who served as its first chairman.<sup>28</sup> In 1948, after Blakely left Iowa for St. Louis, Glenn E. Holmes of the Department of Public Instruction replaced him. Together with Parker, Holmes expanded the committee's membership and appointed subcommittees to develop curricula for particular student popu-

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25. *Ibid.*, 42, 39 (citing *Atomic Energy Educational Programs, 1947-1949* [Washington, DC, 1950]); Vernon Langille, "Understanding Atomic Energy," *NEA Journal* 38 (1949), 592; George L. Glasheen, "The Adult Meets and Tries to Understand the Atom," *Journal of Educational Sociology* 22 (1949), 339-43; Jean Shoquist, "Atomic Secrets Unfold for the Man on the Street," *Midland Schools* 63 no. 5 (January 1949), 6-22.

26. Langille, "Understanding Atomic Energy," 592.

27. *The Iowa Plan*, 5:44.

28. G. E. Holmes, "Introduction," *The Iowa Plan*, 1:10.

lations: elementary, secondary, college, and adult. The 35 members of the Iowa Committee of Atomic Energy Education were educators, scientists, and social scientists from the state's public colleges and university and Luther College and faculty from several elementary and high schools and the two state laboratory schools—the Malcolm Price Laboratory School (hereafter the Price Lab School), associated with Iowa State Teacher's College (ISTC), and the University High School, associated with the State University of Iowa (SUI). They were charged to develop the objectives and the content of *The Iowa Plan*.

The Department of Public Instruction selected the members of the subcommittees carefully to reflect the academic and professional expertise of the state. Faculty from the two state laboratory schools directed the elementary and secondary school subcommittees.<sup>29</sup> Guy Wagner, faculty member of the College of Education at ISTC and director of the Price Lab School, which focused on primary school education, chaired the elementary school subcommittee. John Haefner, director of the social studies program at SUI's University High School, chaired the secondary education subcommittee.

Harley Wilhelm headed the college subcommittee. His résumé made him particularly well qualified for the position. He had completed his Ph.D. in chemistry at ISC in 1931 and after graduation joined its faculty. During World War II, he played a key role in the wartime Manhattan Project.<sup>30</sup> Soon after the

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29. The State University of Iowa operated an experimental elementary school and a high school from 1915 and 1916, respectively, until 1972. From its inception, the high school trained future teachers, and the elementary school initially prepared future administrators. See the finding aid to the Records of the University Schools, University of Iowa Archives, Department of Special Collections, University of Iowa Libraries, Iowa City at [www.lib.uiowa.edu/scua/archives/guides/rg09/rg09.07.htm](http://www.lib.uiowa.edu/scua/archives/guides/rg09/rg09.07.htm). The Price Laboratory School began in the late nineteenth century with the explicit goal of providing teachers at the state normal school with a live laboratory for their training. See "A Brief History of UNI" at [www.library.uni.edu/collections/special-collections/-brief-history-uni](http://www.library.uni.edu/collections/special-collections/-brief-history-uni), accessed July 4, 2013.

30. 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.



Manhattan Project established the Metallurgical Laboratory in Chicago, scientists faced a bottleneck in their effort to purify sufficient quantities of uranium necessary for sustained nuclear fission. Wilhelm, together with Frank Spedding and a group of ISC scientists, developed a process to purify large quantities of uranium metal cheaply. The Ames Process, as it became known, produced two million pounds of pure uranium on the ISC campus in Ames and delivered it to the Metallurgical Laboratory to be used in the first demonstration of a controlled chain reaction under Stagg Field at the University of Chicago, proving the real possibility of creating an atomic bomb. After the war, the Atomic Energy Commission established the Ames Laboratory at ISC, and Wilhelm became its first deputy director. The Ames Laboratory continued studies of nuclear materials and processes and became highly respected for its first-rate atomic science programs.<sup>31</sup>

Wilhelm divided his subcommittee into two groups: a science group and a social science group, reflecting the early commitment of all the subcommittees to include the science as well as the social and political implications of atomic energy in their curricula. Frank E. Brown, a physical chemist and colleague of Wilhelm at ISC and the Ames Laboratory, chaired the science subcommittee; ISTC historian Donald Howard chaired the social science subcommittee. Howard's interest in social science pedagogy served him well in this capacity.<sup>32</sup> These key college subcommittee members held faculty positions at colleges but had prior experience in public schools as teachers and administrators. Wilhelm had worked as a math and science teacher at Mapleton High School in Guthrie Center, Iowa. Both Brown and Howard had been public school teachers and principals before joining the ISC and ISTC faculty, respectively. Presumably, their experiences in public education made them sensitive to and interested in the needs of students.

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31. Goldman, "National Science," 450-52.

32. Howard's dissertation examined the graduate studies program at SUI. In addition, he actively participated in the development of a core curriculum at ISTC. See the Donald F. Howard Papers, University Archives, Rod Library, University of Northern Iowa, Cedar Falls.

In addition to working with institutions of formal education, the Iowa Committee of Atomic Energy Education believed it critical to generate and serve the interest in atomic energy among adults. Hew Roberts, who directed the adult education program at SUI, chaired the adult education subcommittee. Glenn E. Holmes, who specialized in adult education at the Department of Public Instruction and chaired the full Iowa Committee of Atomic Energy Education, also served on this subcommittee.

For the most part, each of the four subcommittees worked independently, with the chairs and subchairs assuming leadership roles in determining the format and content of their respective curricula.<sup>33</sup> To develop their programs they reviewed the variety of resources for atomic energy education, including the literature, audio-visual materials, and documents produced by agencies of the federal government, academic institutions, and private corporations.<sup>34</sup>

The full committee held only two meetings—May 17, 1949, and December 15, 1949—when participants presented subcommittee progress reports and determined the contents of an introductory volume. The introduction set out both to extoll the virtues of atomic science and to raise the alarm with respect to its destructive capabilities. Most importantly, it sensitized educators to the concerns of students living in the atomic age. That introduction, volume one of *The Iowa Plan*, provided the connec-

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33. The surviving evidence suggests that the internal dynamics of the subcommittees varied. James R. Wailes, who piloted the elementary program at the Price Lab School and authored *Barbara and Howard Discover Atomic Energy*, seems to have played a key role in the elementary report. Similarly, John Haeffner was primarily responsible for the secondary school volume. For the college volume, correspondence between Harley Wilhelm and other subcommittee members reveals that Howard edited much of the social science text and Wilhelm much of the science chapters. It appears that Howard had some difficulty getting support from the initial crop of social scientists, but ultimately Hew Roberts and ISC social studies professor Joseph Gittler contributed several chapters. Most of the subcommittee members, including Wilhelm, subcommittee science section chair F. E. Brown, Luther College scientist Emil Miller, and ISTC scientist R. A. Rogers, prepared additional chapters, as did Winfield Salisbury of Collins Radio. There is no record of the adult subcommittee dynamic, although it is clear that its chair, Hew Roberts, was very involved with that volume as well as contributing to the college volume.

34. See "Student and Teacher Materials" and various pieces of drafts of volumes of *The Iowa Plan* in the Wilhelm Papers.

tive tissue that bound the five volumes together. For marketing, the Department of Public Instruction would bundle the introduction with either one individual volume or together with the other four volumes to provide a complete set of the five volumes of *The Iowa Plan for Atomic Energy Education*.

*THE IOWA PLAN* opened with an image of a cornstalk and the accompanying caption, "Iowa: The Tall Corn State," to appeal to the residents of Iowa. Exploiting the importance of this resource, it explained how atomic science could be used for radioactive tracers so that scientists could increase their understanding of organic processes and improve the yield of produce. Completing the loop, *The Iowa Plan* closed with the statement, "This is an Iowa book, designed by Iowans for Iowans at the instigation of certain famous Iowans who have from time to time been called in national service."<sup>35</sup> Nevertheless, much of the content reflected the general concerns that people throughout the nation expressed about living in the atomic age: *fear* of the destructive capacity of the atomic bomb; *hope* for a new level of international cooperation; *optimism* for the potential of atomic science; and the importance of educating the public to *empower* them individually and enable them to responsibly guide the nation and the world into the atomic age.

Each of the volumes reiterated these basic themes and explored them with detail appropriate to the age and capabilities of the targeted audience. For example, to combat the *fear* of atomic weaponry, *The Iowa Plan* asserted that the key to survival in the atomic age lay with international cooperation and control of the atom. To this end, each of the volumes lobbied for the adoption of the principles embodied in the U.S.-supported Baruch Plan, and argued against the approach favored by the Russians. Presidential adviser Bernard Baruch had presented his plan to the United Nations Atomic Energy Commission at its first meeting in 1946. The Russians countered with a plan of their own. Although both programs provided for the destruction of nuclear

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35. Hew Roberts, "The Committee Checks Out," *The Iowa Plan*, vol. 5, chap. 10, n.p. It is likely that the "famous Iowans" were William W. Waymack and Robert J. Blakely.

arsenals, the crux of the debate, as reported in *The Iowa Plan*, focused on the nature of an international regulatory authority. The Baruch Plan called for an international authority to inspect and operate atomic energy plants worldwide as well as to engage in atomic energy research itself. This authority would also maintain control of all uranium and thorium mines. Once fissionable material became unsuitable for weapons but valuable for peacetime uses, it would be "leased" by sovereign states and used for application in medicine, agriculture, industry, or power generation. The Russians also supported the establishment of an international oversight body but conceived of it quite differently. The international authority would own neither the fissionable material nor the atomic plants. Rather, its charge would be limited to periodic inspections of atomic facilities. The framers of *The Iowa Plan* argued that this alternative would do little to alleviate world tensions. "As the actual quantity of fissionable material required to make a bomb is physically small, nations whose plants were inspected only once a month could easily conceal quantities of fissionable products secretly used in preparations for war." Moreover, according to the Russian proposal, sovereign nations maintained veto power over the oversight body's authority; the Baruch Plan called for this authority to be omnipotent when it came to international atomic policy.<sup>36</sup>

The internationalization of atomic energy provides just one example of *hope* for a new era of global cooperation anticipated by *The Iowa Plan*. Nationally, the notion of a "world government" had gained momentum in the immediate aftermath of the bombings of Hiroshima and Nagasaki but fell out of favor among policy makers by 1948.<sup>37</sup> Nevertheless, *The Iowa Plan* continued to promote internationalization well into the 1950s. *The Iowa Plan*, noting that international collaboration advanced atomic science, called for continued cooperation, even at the expense

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36. *The Iowa Plan*, vol. 4, *Scientific and Social Aspects of Atomic Energy: A Source Book for General Use in Colleges*, 36–37.

37. Boyer, *By the Bomb's Early Light*, 33–45; Weart, *Nuclear Fear*, 115–16; Winkler, *Life under a Cloud*, 35–36, 46–53; Megan Barnhart, "Selling the International Control of Atomic Energy: The Scientists' Movement, the Advertising Council and the Problem of the Public," in *The Atomic Bomb and American Society: New Perspectives*, eds. Mariner and Piehler, 103–19.

of compromising national interests. The risk that the slippery slope of secrecy would undermine scientific advancement and the fundamental American value of an informed electorate, *The Iowa Plan* argued, far outweighed any protection such secrecy provided.<sup>38</sup>

Increased scientific capabilities fueled *optimism* for peaceful applications for atomic energy. Each of the volumes informed readers of the enormous potential for improving the lives of many, worldwide. In biology, radioactive tracers would reveal organic processes, advancing agriculture and medical science; the quality and yield of farm produce would improve; and cancer could be eradicated. Energy would be produced cheaply, providing virtually unlimited power for homes, industry, and transportation, although many thought that atomic power plants would remain beyond reach for decades.<sup>39</sup> Most importantly, each of the volumes stressed that every woman, man, and child could be *empowered* through education. In fact, individuals had a responsibility to acquire atomic literacy in order to participate in the public discourse on atomic science.

All five volumes articulated these themes, though each had its own format and character. Volumes two and three had the most in common, suggesting specific lesson plans and activities for elementary and secondary school teachers respectively. In contrast, the text of volume four provided information and references that could be used as a resource by science and social science faculty members at colleges or universities. Volume five presented a variety of approaches for adult education. Whereas content dominated the college text, volumes two, three, and five explained “what to do” and “how to do it.”

THE ELEMENTARY SCHOOL subcommittee pondered two issues from the beginning: When can elementary students grasp the subject material of atomic science? And what materials exist to facilitate learning? To answer these questions, the subcom-

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38. *The Iowa Plan*, vol. 1, *The Iowa Plan for Atomic Energy Education*, 12; *The Iowa Plan*, vol. 3, *The Atom and You: A Unit for Secondary Schools*, 24; *The Iowa Plan*, 4:36, 5:61–64.

39. *The Iowa Plan*, 4:19–20.

mittee surveyed elementary school specialists nationwide as well as the editors of nationally distributed magazines and periodicals for school children. Many of the respondents considered elementary school students too young to understand atomic science, but, if attempted, activities should be placed within the context of "energy" and limited to only the simplest of concepts. Others proposed that rather than scientific content, social issues raised by atomic science should be discussed. Not surprisingly, given the secrecy surrounding the Manhattan Project, the editors reported that virtually no literature existed on the subject for grade school students. Despite some discouraging responses, the elementary subcommittee pushed forward to develop curricula that emphasized the social and political aspects of atomic science.<sup>40</sup>

To remedy the dearth of appropriate literature, James R. Wailes, supervisor of elementary education at Price Lab School and a member of the elementary subcommittee, authored *Barbara and Howard Discover Atomic Energy*, a text used in a 14-day pilot project in 1950 involving Margaret Day's class of fifth graders at the Price Lab School.<sup>41</sup> In this fictional narrative, Barbara and Howard, children of about fifth-grade age, read an article in the newspaper about the possibility of flying to the moon in a rocket powered by atomic energy, piquing their curiosity about atomic science. To understand the exciting possibilities, they turned to their father's colleague, Mr. Anderson, who had worked at an atomic energy plant in Oak Ridge, Tennessee. Anderson's tutorial featured the general themes embraced by *The Iowa Plan*: the science of the atom, the destructive capabilities of the bomb, the variety of uses of atomic energy, and the importance of keeping world peace through international control of the atom. International cooperation and the United Nations figure prominently in the narrative.

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40. *The Iowa Plan*, 1:13.

41. *The Iowa Plan*, vol. 2, *Preparing Elementary Pupils for the Era of Atomic Energy: A Source Book for Elementary School Teachers*, 47. This was actually the second of two pilot programs for Margaret Day's class of fifth graders. The first program went virtually unnoticed. It reportedly suffered from a lack of appropriate reading material, just as the respondents had indicated.

Several measures assessed the outcomes of this pilot program. Members of the subcommittee visited the class, and Margaret Day recorded her daily impressions; all reported that the students showed enthusiasm and grasped much of the content. Day evaluated the program as exceeding expectations.<sup>42</sup> At the conclusion of the pilot program, Wailes evaluated the children's understanding of the atom, atomic energy, the uses for atomic energy, and the historic international collaborations that brought about atomic science, and declared the program a success.<sup>43</sup> Several newspapers around the state also praised the program. Perhaps the *Weekly Tribune* of Moulton, Iowa, said it most colorfully: "And experiments with Iowa fifth graders show that the youngsters can understand high-falutin' terms like fission, neutron, splitting the atom—but in terms of everyday fifth-grade English."<sup>44</sup>

The subcommittee on elementary education that shaped volume two of *The Iowa Plan* drew on the experience and the content of the pilot program. It recommended the adoption of Wailes's text and added other materials to introduce students to atomic science and the social implications of living in the atomic age. The volume began with a statement directed at those who believed elementary school children to be too young to comprehend the issues surrounding the atomic age. In the view of the subcommittee, elementary school programs provided the foundation for the "concepts, attitudes, habits, and skills" that would guide students throughout their lives.<sup>45</sup> A mature citizenry, the plan insisted, must be well educated in the issues of the day, and, inasmuch as atomic energy defined new and dire challenges, it must be understood. Education empowered citizens, even the youngest of them.<sup>46</sup>

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42. *Ibid.*, 54.

43. *Ibid.*, 50–54.

44. "Teach Fifth Graders about Atomic Science," *Moulton Weekly Tribune*, 10/12/1950. See also "Teach Atom to Grade Students," *Council Bluffs Nonpareil*, 7/2/1950; "Fifth Graders Familiar with Atomic Term," *Cedar Rapids Gazette*, 7/2/1950; "Will Teach Iowa Fifth Graders Atomic Science," *Pella Chronicle*, 11/9/1950; and "Offer Atomic Energy Studies This Fall in State Schools," *Waterloo Courier*, 7/2/1950.

45. *The Iowa Plan*, 1:13.

46. *Ibid.*

Acknowledging that some background in atomic science should precede the study of its social and political implications and following the guidance provided by its survey, the subcommittee considered atomic energy within the broader topic of energy, a subject with which the students had some familiarity. In this context, atomic fission represented a new type of energy that could be employed for destructive purposes, as in the atomic bomb, or for constructive uses that held great promise for improvements in agricultural techniques and medical science and treatment.<sup>47</sup>

The subcommittee advocated the scientific method of inquiry, that is, identifying issues, collecting and analyzing data, and forming conclusions based on that data analysis. Suggested science experiments compared the properties of elements, physical and chemical changes, and characteristics of the different states of matter. Chain reactions could be demonstrated by using mouse traps and corks or falling dominoes. In the oft-used mouse trap demonstration, the teacher loaded two corks, representing the multiplicity of neutrons released in one fission event, into each of 36 mousetraps. Triggering the first mousetrap released two corks, which set off subsequent events, releasing additional corks in a geometrically increasing fashion, just as in a nuclear chain reaction. Dominoes could be set up and knocked down in a similar manner.

The science provided a foundation for understanding the social implications and responsibilities of living in an atomic age. As stated in *The Iowa Plan*, "It is the task of the schools everywhere to develop those attitudes towards science and toward one's fellowmen which will make sure that atomic energy will be released only in such ways as will result in a better life for all mankind."<sup>48</sup> With the goal of molding citizens capable of coping in an atomic world, children needed to appreciate the differences and similarities between human beings, learn tolerance, and value national and international cooperation.

Understanding the global nature of the contemporary world encouraged students to think beyond national boundaries and to appreciate the importance of a balance of world power. *The*

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47. *Ibid.*, 2:1.

48. *Ibid.*, 57.



*Iowa Plan* championed the critical role of international organizations, particularly the United Nations and, even for this age group, lobbied for the Baruch Plan over the Russian counter-proposal. Nevertheless, it assured elementary school students that international cooperation and the reality of the need for world peace would bring the Russians around.<sup>49</sup>

Even as the curriculum sought to teach students to think globally, it also emphasized the need to encourage patriotism and to promote the development of the "right kind of loyalties," including the value of democracy, the responsibilities that go with it, and the importance of putting the good of the whole above self-interest. Group problem-solving techniques, committee work, group projects, and role-playing exercises explored historical and contemporary conflicts that democracies faced over such issues as race relations, ethnic strife, and economic disparities. Students could also learn useful character traits by studying the biographies of national heroes and people of extraordinary accomplishment to identify desirable qualities of citizens that students could seek to emulate.<sup>50</sup>

It is also illuminating to consider what was not covered or emphasized in this volume. Most notably, it downplayed *fear* of the potential catastrophic consequences of the atomic bomb and the exploitation of atomic energy, stating only that "the handling of atomic energy and radioactive materials requires great care."<sup>51</sup> The text deliberately avoided any discussion of civil defense measures or personal safety protocols. The subcommittee felt that popular media presented the destructive capacity of the atomic bomb extensively and that schools provided an opportunity to balance that with an "optimistic, constructive view of the atomic age."<sup>52</sup>

THE SECONDARY SCHOOL subcommittee also sought to foster well-informed and responsible citizens by promoting the science and social studies of atomic energy. Volume three em-

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49. *Ibid.*, 43–44.

50. *Ibid.*, 8–16

51. *Ibid.*, 6.

52. *Ibid.*, 1, 8.

phasized the science of atomic energy, the destructive capacity of the bomb, the need for international oversight and control of atomic capabilities, and the potential peacetime applications of atomic science. Like volume two, volume three provided a complete curriculum that could be implemented straightforwardly in the classroom.

To reach the greatest number of students, the committee decided to target high school juniors since all public school students in Iowa took American history in the eleventh grade, "and this material is of such vital importance that all pupils must be included."<sup>53</sup> Furthermore, many eleventh-grade students studied physics concurrently so they would have a greater capacity to understand the science. John Haefner, who chaired the secondary school subcommittee, produced a 15-day curriculum that Glenn E. Holmes, who chaired the full Committee of Atomic Energy Education, praised as "the best material that has been produced for the HS level."<sup>54</sup> The secondary school subcommittee endorsed this atomic energy unit and recommended that it be offered at the end of the spring semester in physics and social studies classes taught by the regular classroom teachers in tandem. Despite the rigid nature of its format, the committee suggested that "schools adapt this recommendation to their local situation."<sup>55</sup>

For each of the 15 days, the curriculum identified daily objectives, suggested classroom activities (including discussion questions and classroom exercises), and recommended student assignments. The committee advised teachers to adopt R. Will Burnett's *Atomic Energy: The Double-Edged Sword of Science* as the textbook and included a copy of it with the volume. This 33-page textbook paralleled the format of the proposed curriculum: it consisted of six chapters—the first three on the science of atomic energy and the last three on the social studies of the atomic age. In contrast to the elementary school curriculum, chapter four, "One Edge of the Sword—Atomic Energy for Man's Destruction," addressed *fear*—the vulnerability of the world in an atomic age

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53. *Ibid.*, 3:1.

54. G. E. Holmes to H. Wilhelm, 2/11/1949, Wilhelm Papers.

55. *The Iowa Plan*, 3:2.

and the relative ineffectiveness of civil defense protocols to mitigate damage. Burnett's hope was "to outlaw war by international control of atomic bombs and the sources of atomic weapons."<sup>56</sup> Chapter five, "The Other Edge of the Sword—Atomic Energy for Better Living," *optimistically* foresaw a world of plenty as atomic science could provide an inexhaustible source of power and revolutionary tools for medical, industrial, and agricultural science. The final chapter, "Which Edge of the Sword Shall We Use?" elaborated on the need for international control of atomic energy, promoted the Baruch proposal, considered the Russian counterproposal, and noted that negotiations would result in compromise. It concluded with *empowerment*, claiming that an educated public would rise above provincial attitudes and adopt an enlightened world view that embraced international cooperation. As individuals became more sophisticated and shared their personal insights with one another, they would realize change. "Slowly, by such spreading out of circles of information and of opinion, the American people will develop the informed intelligence to work out the solution of this problem."<sup>57</sup> In addition to the 15-day lesson plans, the secondary school curriculum included a bibliography of resources, supplementary materials, additional activities and demonstrations, and a 45-question multiple-choice examination. The test reflected the curriculum, examining the students' scientific literacy and command of the social science concepts.

Both the elementary and secondary education volumes contained all the materials needed to teach atomic energy in the public schools. After publication of *The Iowa Plan*, the Department of Public Instruction aggressively marketed it. Between May and November 1950, multiple-county one-day institutes throughout Iowa presented *The Iowa Plan* to elementary and secondary schoolteachers. Members of the various subcommittees of the Iowa Committee of Atomic Energy Education made presentations at these institutes.<sup>58</sup> School districts generally re-

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56. R. Will Burnett, *Atomic Energy: Double-Edged Sword of Science* (Columbus, OH, 1949), 19.

57. Burnett, *Atomic Energy*, 29–30.

58. See announcements in Iowa newspapers, for example, *Cedar Rapids Gazette*, 5/15/1950, 5/17/1950, 6/22/1950, 10/8/1950, 11/21/1950; *Kossuth County*

quired their teachers to attend and, although the Department of Public Instruction never demanded that schools adopt *The Iowa Plan*, many did. Arthur C. Anderson of the Department of Public Instruction reported in 1952 that when the course was inaugurated in September 1950, 206 schools used it. By 1952, 491 of 836 schools in the state were planning to use it.<sup>59</sup>

UNLIKE the elementary and secondary subcommittees, the college subcommittee did not develop a curriculum guide, nor did it include any pedagogical materials in its volume. Instead, it prepared a text to be used by faculty as a reference tool for the physical and social science of atomic energy, deciding on this format after it observed the strengths and weaknesses of several pilot programs. In 1950 and 1951 Cornell College, Luther College, and the State University of Iowa experimented with a variety of presentations as they hosted atomic energy programs for their students and interested community members.

On March 22, 1950, Cornell College cancelled classes for its "Atomic Energy Day." The college subcommittee, recognizing the program's value for cementing relations between state institutions and private colleges and stimulating the interest of staff, students, and the general public in atomic energy education, became involved, at the college's request, in organizing and implementing the program.<sup>60</sup> Cornell's Atomic Energy Day began with an opening address by the college's president, Russell D. Cole. The morning activities included five lectures on the science of atomic energy interspaced with informal discussion sessions and opportunities to visit 17 exhibits provided by ISC, SUI, Cor-

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*Advance*, 6/1/1950; *Jefferson Herald*, 5/25/1950; *Le Mars Semi Weekly Sentinel*, 5/26/1950, 8/4/1950, 9/19/1950; *Mt. Pleasant News*, 5/15/1950; *Pella Chronicle*, 7/13/1950, 11/9/1950; *Waterloo Courier*, 7/2/1950; *Burlington Hawk-Eye Gazette*, 9/13/1950; *Mason City Gazette*, 11/24/1950, 9/27/1950, 10/20/1951; *Estherville Daily News*, 9/12/1950, 9/19/1950; *Humboldt Republican*, 9/15/1950; and *Oelwein Daily Register* 9/15/1950.

59. Arthur C. Anderson, a departmental regional supervisor for the Department of Public Instruction, reported this in the *Cedar Rapids Gazette*, 8/31/1952.

60. "Atomic Energy Day at Cornell College," supplement to Hew Roberts, "The Iowa Plan for the Study of Atomic Energy," Record of Committee Meeting, 5/17/1949, Wilhelm Papers.

nell College, and Collins Radio (later Rockwell Collins). The afternoon focused on the social implications of atomic energy, beginning with an introductory lecture, "Atomic Energy and Social Trends," by Joseph B. Gittler, ISC sociologist and a member of the college subcommittee. Panel discussions followed: "The Moral Aspects of the Atomic Problem," "The Impact of Secrecy on the Atomic Problem," and "Controls: Domestic and International." A member of the Iowa Committee of Atomic Energy Education or a Cornell faculty member led each discussion. Presentations by SUI adult education specialist Hew Roberts and George L. Glasheen, assistant director for educational services at the Atomic Energy Commission, concluded the program.<sup>61</sup>

To measure the effectiveness of the program, Cornell students took an objective examination one week before Atomic Energy Day and retook the exam five weeks later. In addition, Cornell faculty subjectively evaluated the students during class discussions. The success and positive feedback for the program prompted Luther College to host its own atomic energy program, with a few modifications.<sup>62</sup>

Luther College's two-day event began on February 20, 1951. Hew Roberts provided continuity to the program, opening with an evening lecture, moderating the following day's presentations, and providing closing remarks. Rather than the dozen discussion leaders and expert lecturers from the state's colleges and university that had delivered Cornell's program, Luther's faculty made all of the other presentations. That created an intimacy among participants and reinforced their sense of community. The organizers scheduled longer, but fewer, lectures and discussion sections and expanded the use of audio-visual equipment. Observers reported that these changes made "Luther Day" even more of a success than Cornell's Atomic Energy Day.<sup>63</sup>

The State University of Iowa experimented with more traditional classroom formats. First, for civil engineering students it offered four two-hour seminars on the social and political implications of the atomic age. The students enjoyed the discus-

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61. *The Iowa Plan*, 4:44-45.

62. *Ibid.*

63. *Ibid.*, 4:45-46.

sions so much that they requested additional sessions. Faculty from physics, chemistry, biochemistry, medicine, engineering, sociology, economics, political science, education, and journalism adopted a different format: a series of 22 evening lectures and discussions on matters related to atomic energy. The feedback identified two problems with this design: too many faculty participants undermined any sense of continuity, and, because the course carried no credit, students felt overburdened by the time commitment.<sup>64</sup>

The college subcommittee internalized these criticisms and recommended that atomic energy education be incorporated into existing courses or presented as a one- or two-day workshop modeled after Atomic Energy Day or Luther Day. To facilitate these options, the subcommittee prepared a reference manual on the atomic age for instructors to employ.<sup>65</sup> The four themes of fear, hope, optimism, and empowerment again permeated the text.

The committee recommended that social science topics should be examined only after students had completed a course on the science of atomic energy. Scientists on the college subcommittee or closely associated with its members wrote the first five chapters of the college volume, which focused on the structure of matter, energy—its nature and sources, atomic fuels, and atomic energy for power—and radioactive isotopes in medical, industrial, and agricultural service. Harley Wilhelm wrote the third chapter of the volume, which dealt with the destructive capability of the atomic bomb. He described it rather dispassionately, triggering neither anguish nor alarm: “Figure 10 shows a photograph [a mushroom cloud] made just one fortieth of a second after the explosion was set off. At this time the fission process was completed. Intense gamma rays, heat rays, neutrons, and an intense light flash had been sent out. The radioactive fission products which may be considered as the ashes from the burnt atom fuel were in the vapor state and were still within the explosion envelope.”<sup>66</sup>

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64. *Ibid.*, 44.

65. *Ibid.*

66. *Ibid.*, 16.

The college subcommittee adopted a particularly ambitious social science agenda. It identified four goals: to *orient* students to the interrelationship of science, technology, and social change; to *moderate* fear, defeatism, a false sense of security, or distrust of foreigners or foreign ideas; to stimulate college communities to *examine* contemporary contradictions with regard to atomic energy policy (security versus freedom of information, military versus peaceful uses of atomic energy, military versus civilian control, and national versus international oversight of atomic energy); and to *cultivate* an understanding of the social science implications of atomic energy, including geographic, political, ethnic, and religious considerations.<sup>67</sup> Social scientists on the college subcommittee discussed the implications of atomic energy in the last two chapters of volume four. They adopted a decidedly more somber tone and darker message than what was found in volumes two or three.

Drafted by Joseph B. Gittler of ISC, volume four offers a litany of concerns characteristic of the Cold War era: the atomic age changed the trajectory of technological and scientific growth, challenged contemporary demographic patterns, altered the economy, and posed a threat to the fundamental social values of the United States. Echoing apprehensions over academic freedom already raised by U.S. academicians, Gittler feared that national security issues would supersede the need for the free exchange of ideas, essential for cultural advancement and technological development.<sup>68</sup> Scientific progress could lag because applied science would take precedence over basic science during wartime, a development many viewed as imminent. Finally, Gittler pointed out that the public, fearing foreign attack, would increasingly turn to the federal government for protection, expanding its powers and the potential for abuse. Gittler's concerns echoed those of many public officials, journalists, and scientists during this period regarding the potential for compromising the

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67. General College Level Production Committee, "Teaching Atomic Energy to General College Students, Report of the Social Science Sub-Committee of the Committee on Education in Atomic Energy at the College Level," 10/1/1948, Wilhelm Papers.

68. Boyer, *By the Bomb's Early Light*, 144, 303-6; Weart, *Nuclear Fear*, 119-27.

public's civil liberties, fundamental to a healthy democracy.<sup>69</sup> He did project some positive outcomes from peaceful uses of atomic energy: medical procedures could increase the lifespan of the population; technological advancements could spread urban culture to rural areas, creating a more homogenous society; and new transportation and communication technologies could reduce rural isolation, a matter of particular significance to many Iowans.

The tone of the final chapter of the volume, "Government in the Atomic Age," written primarily by Hew Roberts, raised more concerns. In addition to addressing Cold War tensions, this chapter considered the domestic political quagmires created by the atomic age and urged college communities to discuss them. In 1946 the Atomic Energy Act had provided for the creation of the Atomic Energy Commission (AEC) and authorized it to exercise executive, legislative, and military oversight.<sup>70</sup> Although Roberts thought that the creation of the AEC raised some thorny issues, he ultimately defended it. Nationalized atomic management served the interests of national security on one hand, but limited the scope of research and free enterprise on the other. Furthermore, the challenges of the nuclear age demanded that the AEC be the arbiter of all things atomic, but where did that leave America's democratic institutions, the principal mechanisms for policy decisions? Roberts conceded that abuses could occur, scientific advancement could be slowed, and the democratic process could be compromised. The chapter offered no definitive solutions; the subcommittee proposed instead that students "examine and discuss the problems, the achievements, the failures and the issues involved in free government in the Atomic Age." The chapter concluded with a quote from AEC commissioner (and former Iowan) W. W. Waymack: "It seems to me that this kind of inquiry has to be made. It seems to me that it is the imperative of practical education." The subcommittee further argued that college students have a particular responsibility to be educated in these issues because of their status as

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69. *The Iowa Plan*, 4:28-29; Boyer, *By the Bomb's Early Light*, 143-48; Weart, *Nuclear Fear*, 119-27.

70. Atomic Energy Act of 1946, Pub. L. No. 585 - 79th Congress (1946).



members of the “educationally gifted.” In addition to embracing the personal empowerment that education provided, college students must be prepared to assume leadership roles in their communities, forming “a nucleus of informed voters” to shape policy and influence those who are less informed.<sup>71</sup>

THE ADULT EDUCATION VOLUME featured the most unique content and the most inspired presentation. Rather than addressing teachers and instructors, as the other volumes had, this volume spoke to the Iowa adult student directly. Furthermore, inasmuch as it connected national issues with local concerns, Iowa culture figured prominently. Finally, the Cold War assumed a more central role in this volume than in the others. To determine what should be included in the volume, the adult education subcommittee conducted personal interviews at lectures and films on atomic energy, sought input from those who sponsored local community programs, and sent agents to engage in “‘spontaneous’ interviews in cafes, clubs, and private homes.”<sup>72</sup> Their findings shaped the content of this volume.

The volume began by attempting to convince readers that they must learn about atomic energy for their own safety, their children’s well-being, their community’s survival, and the future of humankind. The frontispiece drove the point home with a political cartoon reprinted from the *Des Moines Register*. Flanking the cartoon, titled “. . . we control the atom or it controls us,” were quotations by “a famous U.S. Senator” (likely Bourke B. Hickenlooper, U.S. senator from Iowa, 1945–1969) and “a famous Iowa member of the U.S. Atomic Energy Commission” (likely William W. Waymack) that stressed the importance of adult education.<sup>73</sup>

The volume posited that adults have a civic responsibility to be well educated in matters of atomic energy inasmuch as knowledge protects the democratic system. Atomic science literacy allowed the public to understand and contribute to the national dialogue and defend the values that Iowans, in particu-

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71. *The Iowa Plan*, 4:31–32, 38–39.

72. “Introduction,” *The Iowa Plan*, vol. 5, n.p.

73. *The Iowa Plan*, vol. 5, frontispiece.



*This cartoon, which introduced the adult education volume, was titled "WHAT IS YOUR ATTITUDE?" and included the caption, "MAKE UP YOUR MIND, MADAM!" Courtesy of the J. N. "Ding" Darling Wildlife Society.*

lar, treasured, including religious freedom and open access to education. Furthermore, it claimed that parents must be able to supplement the schools' effort to educate their children about atomic energy. Finally, men and women must be prepared to use their knowledge of radioactive contamination and safety to assist their families and communities in the event of an attack.

The first two chapters included a straightforward discussion of these issues, insisting that the public must understand the history and politics of atomic energy—the role of scientific experts, the federal government, the military, and the international community. In addition, adults must comprehend the subtle

dichotomies of the atomic age that had become part of the national dialogue: open scientific exchange versus national security and the current federal monopoly on atomic energy versus the private development of resources. The volume's authors proposed that the contemporary western concepts of "national sovereignty in international relations, parliamentary democracy in politics, and private capitalism in economics" did not adequately serve the atomic age; therefore those values and institutions needed to be reconsidered. Communism, however, must never be an option; its objectives ran contrary to those of a religiously grounded people. The contrast between the piety of those in the United States, especially Iowans, and the "atheism" of the Soviets permeated the public consciousness during the Cold War and defined the essence of the "ideological struggle between the western and communist worlds." Because the committee did not see any middle ground between communism and freedom, it feared that nuclear war might be inevitable.<sup>74</sup>

The final chapter of the volume strived to moderate this fear. Notably, it pointed out that Iowa carried a higher risk of a bio-terror attack on crops and animals than decimation by an atomic bomb, although it prepared residents to survive the latter. The public had to take responsibility. People had to provide shelter, such as access to basements, to everyone: neighbors, friends, and strangers, including those of different religions, races, and values.<sup>75</sup> They must equip themselves with first aid skills, personal information, such as the blood types of family members, and awareness of emergency community resources. Most importantly, people must have literacy in atomic energy. "There is only one type of hiding that we can state definitively to be never safe—hiding your mind from exposure to knowledge."<sup>76</sup>

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74. *The Iowa Plan*, 5:61–66; Stephen J. Whitfield, *The Culture of the Cold War*, 2nd ed. (Baltimore, 1996), 77–100.

75. *The Iowa Plan*, 5:70. This tapped the popular notion that rural people in particular had a character that would be indispensable in the event of an atomic attack and "could prevent any type of socialism or communism from taking hold in local, state, and national governments." See Devine, "Mightier Than Missiles," 186.

76. *The Iowa Plan*, 5:71.

Much of the rest of the volume presented different formats that could be used to engage adults in these subjects. Those chapters emphasized the content of atomic science and its social implications. The adult subcommittee had initially intended to promote a ten-week program modeled after the Marengo Experiment, but after studying other formats that had been implemented in Iowa and elsewhere, it recognized that individual study, one- or two-day programs, as well as community-wide events also held value.<sup>77</sup> To facilitate individual study, chapter three—"Atoms from an Easy Chair"—provided the means for individuals to expand their own understanding of atomic science. It contained a comprehensive listing of the current literature along with detailed reviews. However, the Adult Education Committee favored informal group activities that provided social forums for education, believing that reading circles, library exhibits and programs, and informal social quizzes and games would generate excitement and interest in learning about atomic energy.

The committee also recognized value in informal programs led by lay speakers. Community members such as the neighborhood doctor, veterinarian, waterworks engineer, social studies and science teachers, and clergy could all make presentations about different aspects of atomic energy.<sup>78</sup> More formal professional lecture series also had an important place in adult education. The committee included a description and analysis of its role in Burlington's Atomic Energy Week and the Marengo Experiment. Furthermore, it hoped that as individuals, groups, and communities raised new questions, they would seek answers by participating in even more events. To facilitate all of these suggestions, the volume included an extensive list of films and recordings that would complement a multimedia series.

The volume concluded as it began, with a political cartoon, as bleak as the one that opened the volume, that had appeared in the *Des Moines Register*.<sup>79</sup> These two political cartoons, reprinted

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77. Hew Roberts, "The Iowa Plan for the Study of Atomic Energy," Record of Committee Meeting, Des Moines, Iowa, May 17, 1949, 5-7, Wilhelm Papers; "Introduction," *The Iowa Plan*, vol. 5.

78. *The Iowa Plan*, 5:28.

79. *The Iowa Plan*, 5:23-31.



from the *Des Moines Register*, captured the importance of adult education on atomic energy and the dire consequences of ignorance.

THE VOLUMES of *The Iowa Plan* treated the destructive capabilities of the bomb, the social challenges of living in the atomic age, and the international tensions of the Cold War with a progression of detail; as the age of the targeted audience advanced, these concerns deepened. Volume two, for elementary school students, carried the most optimistic message. It avoided discussing the potential devastation of an atomic attack entirely; instead, it emphasized the rewards that atomic science would reap and a future of international cooperation.

Volume three, the secondary school curriculum, paid the dangers of the Cold War a bit more attention. One of its 15 lessons focused on the devastating impact of an atomic bomb and the need for students to learn the skills of civil preparedness. It suggested showing graphic films about the dropping of the atomic bomb—*Tale of Two Cities* or *One World or None*—and the recommended textbook argued that one could not completely protect oneself from an atomic bomb attack.<sup>80</sup> The subcommittee also suggested that students read and formulate presentations on *The Challenge of Atomic Energy*, by Ryland W. Crary et al., a book that presented a “bleak picture of a culture in the grip of atomic fear,” and *Hiroshima*, by John Hersey, which offered an explicit account of the effects on six Japanese individuals of the dropping of the atomic bomb.<sup>81</sup> Five questions in the accompanying multiple-choice test examined the students’ understanding of civil defense preparedness and the effects of the bomb.

In the college text, the culture of the Cold War received even more explicit treatment. The section titled “international frictions” highlighted the stalemate between the United States and the Soviet Union.<sup>82</sup> The college subcommittee contrasted the differences between the two nations with regard to access to the strategic material, uranium, and the disagreement over the future control of atomic energy. It noted that the United States obtained its supply of uranium by purchasing it from sovereign nations, if those nations chose to export the materials. The Soviet Union, on the other hand, controlled Czechoslovakia, which had the largest supply of uranium in Europe, and forced an exclusive arrangement with its “satellite,” prompting a rebuke phrased in classic Cold War rhetoric: “The uranium mines of Czechoslovakia were in large part the reason behind the allegedly altruistic desire of the Russians to ‘liberate’ Czechoslovakia. This type of liberation is of course merely another name for imperialist conquest and monopoly of sources of raw materials.”<sup>83</sup>

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80. *The Iowa Plan*, 3:18. See also Burnett, *Atomic Energy*, 18–19; and Scheibach, *Atomic Narratives*, 57.

81. *The Iowa Plan*, 3:20. For descriptions of these books, see Boyer, *By the Bomb's Early Light*, 203–10, 280.

82. *The Iowa Plan*, 4:35.

83. *Ibid.*

In the last of the five volumes, *Iowa Citizens Investigate the Atom*, the Cold War took center stage. Indeed, suspicion and gloom permeated the entire text of the adult education volume, making it the bleakest of the five. The text included a good deal of graphic and frightening detail of threats presented by the atomic age and the tensions of the Cold War, underscoring the urgency of the situation and driving home the message that the future of one's family, community, nation, and world depended on one's literacy in atomic science. Clearly, in the view of the Committee of Atomic Energy Education, the parents of elementary-age students, rather than the schools, were obligated to convey and mitigate the dark side of the Cold War to their young children as they saw fit.

Immediately after the Department of Public Instruction published *The Iowa Plan*, many Iowa educators considered it compelling and adopted it. *The Iowa Plan* became the first comprehensive atomic energy education plan in the United States, and that made it noteworthy. Throughout the nation, other teachers and schools taught the subject of atomic energy, but adopted curricula on an individual or district-wide basis. During the 1945–46 academic year, Oak Ridge High School in Oak Ridge, Tennessee, introduced a curriculum that considered the scientific, social, and political implications of atomic science and called for the creation of a “world government” to control it.<sup>84</sup> *The Iowa Plan* itself included an appendix in volume two—“Elementary Schools Where Atomic Energy Has Been Taught”—which reported on eight programs in six states: Illinois, Massachusetts, New Hampshire, New York, Rhode Island, and Virginia.<sup>85</sup> George L. Glasheen, the closing speaker at Cornell College's Atomic Energy Day, and later the AEC's chief of educational services, compiled a much more extensive list of atomic energy education initiatives throughout the country for a 1953 special edition of *School Life*, a publication of the U.S. Department of Health, Education, and Welfare's Office of Education. He reported on a wealth of reference materials, traveling exhibits, and classroom audio-visual resources that the recently

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84. Hartman, *Education and the Cold War*, 137.

85. *The Iowa Plan*, 2:70–73.

formed Atomic Energy Commission made available. Nonetheless, reflecting on the traditional value of local control over education, he asserted that "it is the job of the schools to mold these [AEC] source materials into teaching materials. This the schools are doing with satisfying results." Among his list of programs, he found *The Iowa Plan* particularly noteworthy for its important *comprehensive* contribution.<sup>86</sup>

Nationally, atomic science education became widespread in the 1950s. In the late 1940s and early 1950s national laboratories partnered with universities, school districts, and even museums to educate teachers on atomic science. To serve this growing community of educators, private companies, including GE, McGraw-Hill, Encyclopedia Britannica, MGM, and Disney, individually and in partnership with the AEC and the U.S. Department of Education, developed curricular materials.<sup>87</sup>

As teachers were trained and more classroom materials became available, atomic science education became more commonplace and mainstreamed into traditional classroom curricula. That probably diminished the impact of *The Iowa Plan* during the latter half of the 1950s. Nevertheless, during the early Cold War period, several features made it a program worthy of recognition. The membership of the Iowa Committee of Atomic Energy Education reflected all sectors of the state's educational community and together constituted a particularly diverse group that contributed breadth to the program. Furthermore, there is no indication that any individual or institution dictated content or format to any of the subcommittees; the evidence suggests that each developed its content independently, reflecting the priorities that the committee-at-large agreed on. Moreover, *The Iowa Plan's* presentation as a statewide program targeting elementary, secondary, college, and adult education venues defined it as uniquely comprehensive. Their differences reflect mid-century assumptions about the objectives of education for different age groups.

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86. George L. Glasheen, "What Schools Are Doing in Atomic Energy Education," *School Life* 35 (Sept. 1953), 159, 154.

87. Weart, *Nuclear Fear*, 169; Scheibach, *Atomic Narratives*, 50-71. Although Scheibach's compilation of local initiatives and school materials is extremely extensive, he does not reference *The Iowa Plan*.



*The Iowa Plan's* messages provide important opportunities to view the complexity of Cold War culture. The plan mitigated the profound fear of the bomb by teaching the power of knowledge and the importance of civil defense preparedness. Many scholars have stressed that the importance of "duck and cover" programs overshadowed other aspects of atomic science education as the Cold War intensified in the 1950s, but that is not evident in *The Iowa Plan*. Rather, it argued that international control over the world's atomic arsenal would provide effective protection against the United States' Cold War nemesis, the Soviet Union. Although the most influential U.S. policymakers rejected the Baruch Plan, it remained central to each of the volumes of *The Iowa Plan*. Most importantly, *The Iowa Plan* rested on the foundation that all people had a responsibility to be educated in the potential benefits of atomic science and its political, social, and ethical implications. In that regard, it presented the most comprehensive curricula on atomic energy education in the nation.

# Perils of Production: Farm Hazards, Family Farming, and the Mechanization of the Corn Belt, 1940–1980

DEREK ODEN

AFTER WORLD WAR II, Iowa farmers rapidly adopted new technologies, acquiring gasoline-powered machines and a new repertoire of chemicals and grain-handling equipment. “These physical manifestations of technological change,” according to historian J. L. Anderson, “were signs that Iowa, the heart of the Corn Belt, was an industrial landscape as much as it was a rural one.”<sup>1</sup> A “leading state in feed grain and livestock production,” Iowa was also one the most cultivated states in the entire nation

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1. J. L. Anderson, *Industrializing the Corn Belt: Agriculture, Technology and Environment, 1945–1972* (DeKalb, IL, 2009), 5–6, 194. Other scholars investigating twentieth-century agriculture have used similar terms to describe how farmers’ acquisition of new technologies transformed rural landscapes. In 1962 historian Wayne Rasmussen used the term *second revolution* to depict recent dramatic technological and economic changes. Wayne D. Rasmussen, “The Impact of Technological Change on American Agriculture, 1862–1962,” *Journal of Economic History* 22 (1962), 578–91. Later John L. Shover made similar observations, indicating that rapid innovation had “turned traditional farming upside down.” John L. Shover, *First Majority–Last Minority: The Transforming of Rural Life in America* (DeKalb, IL, 1976), 5. More recently, historians such as Deborah Fitzgerald and Stephen Stoll have incorporated the term *industrial* and associated terms to depict such change. Deborah Fitzgerald, *Every Farm a Factory: The Industrial Ideal in American Agriculture* (New Haven, CT, 2003), 3–5; Stephen Stoll, *The Fruits of National Advantage: Making the Industrial Countryside in California* (Berkeley, CA, 1998), 2.

and continued to be dominated by "family farming" throughout the period.<sup>2</sup> The state's importance in agricultural production and the dominance of family farms make it ideal for a study investigating the work-related hazards of Corn Belt agriculture.

Anderson argued that Iowa farmers were the primary decision makers as they specialized to meet the demands of the marketplace by streamlining their methods and adopting new technologies. As a result, farm operators increasingly relied on monoculture and capital-intensive technologies to boost production.<sup>3</sup> Americans living through and participating in these changes were fully aware of this transformation. In 1941 a rural journalist in Illinois wrote, "Some farmers believe that this is fast developing into a machine age in farming and that within a few years horses will be little used on farms and some places not at all." In 1966 Professors Walter R. Butcher and Norman K. Whittlesey of the University of Washington, speaking at a meeting of the American Farm Economics Association, stated, "Farming in the near future is likely to have more in common with today's factories than with many of today's farms." And in 1974 Iowa state legislator Michael Blouin complained that U.S. Secretary of Agriculture Earl Butz's farm policies favored "the industrialization of farming and the creation of an assembly line system of food production in this country."<sup>4</sup> As these statements indicate, the farm was becoming as much an outdoor factory as an organic process consisting of sun, soil, muscle power, and manure. Although scholars have investigated the multifaceted nature of these changes, the issue of safety in Corn Belt agriculture has been largely ignored.

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2. Anderson, *Industrializing the Corn Belt*, 5-6. Shover also emphasized how farmers were increasing the scale of their operations. Nonetheless, farms during the era were overwhelmingly owned by individuals. As a result, family farming dominated Corn Belt agricultural production. For a detailed discussion of such economic and demographic issues, see Shover, *First Majority-Last Minority*, 164.

3. Anderson, *Industrializing the Corn Belt*, 190-96; Stoll, *The Fruits of National Advantage*, 16-24.

4. "Threshing Runs in Galt and Como Are through for Year," *Sterling Daily Gazette*, 8/11/1941; Ovid Martin, "University Economists Predict Million Dollar Farms for Agriculture," *Muscatine Journal*, 8/26/1966; "Blouin Says Butz Should Be Replaced," *Cedar Rapids Gazette*, 9/13/1974.

Scholars who specialized in workplace safety and farm safety experts who labored to reduce accidents during the era agreed that farming was one of the nation's most dangerous professions from 1940 to 1980. Some argued that the switch from horse-powered farming to petroleum-powered machines increased farm-related hazards. In 1983 Frederick R. Schneider, a retired Farm Security Administration official, said that, although "specific data" were not available for the early 1940s, he believed that "there was a noticeable increase in the number of farm accidents," particularly those involving machinery. Mark Aldrich, an expert on the history of industrial safety, recently concluded, "Manufacturing risks almost certainly declined more than risks in most sectors, at least after the mid-1920s, while agriculture may have become increasingly dangerous as it mechanized."<sup>5</sup> There is little statistical data about farm accidents for the period prior to World War II, so comparisons over time are problematic, but enough accident studies are available for the mid-twentieth century to support the argument that agriculture was a particularly hazardous profession.<sup>6</sup>

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5. Frederick Schneider, "Tractor and Farm Machinery Safety," in *Iowa Farm Safety in the 20th Century: A History of Contributions by Rural Safety Volunteers*, ed. Herb Plambeck (Des Moines, 1983), 32; Mark Aldrich, *Safety First: Technology, Labor and Business in the Building of American Work Safety, 1870-1939* (Baltimore, 1997), 262. Allan B. Kline, president of the American Farm Bureau Federation, agreed that "the increased mechanization of the farm operations, plus the speed at which we operate, has vastly increased the hazards to which all farm people are exposed every day." "Agricultural Leaders Endorse Farm Safety Week's Objective," *Farm Safety Review*, July/August 1948, 3.

6. An abundance of studies support the view that farming was and is especially dangerous. For further discussion and analysis of farm accident statistics, see John D. Rush, *Fatal Accidents in Farm Work: An Analysis of 12,141 Fatal Accidents from 1940-1945 in the United States* (Washington, DC, 1949), 1-12; Conrad F. Fritch, *Occupational and Non-Occupational Fatalities on U.S. Farms*, Agricultural Economics Report 356 (Washington, DC, 1976), 2-9; Arnold B. Skromme, "A Farm Safety Program Sponsored by Farmers" (paper presented at the annual meeting of the American Society of Agricultural Engineers, Chicago, December 18-21, 1990), 1-3. These studies and others rank farming among the nation's most hazardous occupations. Nonprofit organizations and governmental agencies such as the Occupational Safety and Health Administration and the National Safety Council have produced a variety of documents confirming agriculture's persistently high ranking. Such documents can be accessed by consulting online resources at [www.osha.gov](http://www.osha.gov) and [www.nsc.org](http://www.nsc.org). For a discussion of how farm safety activists created a vibrant educational movement in response to the farm safety problem, see Derek Oden, "Selling Safety: The Farm Safety Movement's Emergence and Evolution from 1940-1975," *Agricultural History* 79 (2005), 412-38.

In 1988 Purdue University agricultural engineers Mark A. Purschwitz and William E. Field noted that agriculture had ranked first or second in the category of "most dangerous industry in the U.S." every year since 1979 and in the top three for more than 30 years. The perception that farm accidents were increasing convinced many agricultural leaders that something needed to be done. Still, as Purschwitz and Field argued, despite agriculture's hazardous nature, the federal government devoted paltry funds to preventing accidents.<sup>7</sup>

Before examining the specific mechanical hazards that farm families encountered, it is crucial to recognize the unique nature of agricultural labor as well as the dominant forms of farm machinery. First, farm work differed from labor in sectors such as textiles, steel, and food-processing industries. The typical factory worker was an employee who worked indoors, often as part of a system of mass production. Farmers, however, operated a business that existed in a familial setting characterized by a dependence on child labor in which training was disseminated primarily from parent to child. Farm hazards were also dramatically influenced by the structural differences between agriculture and other occupations associated with industrial processes. Farmers were generally independent, and agriculture was less consolidated than manufacturing. This relatively autonomous status meant that regulations were generally adopted more slowly than in other industries. Farm families were not only responsible for the proper maintenance and safe operation of their equipment but also were more exposed to the economic consequences of accidents. They had less access to benefits such as workers' compensation than factory workers who were often employees of large corporations. Additionally, farmers worked outdoors in all seasons, in isolated rural settings, alongside both animals and machines, all of which complicated and diversified potential hazards.<sup>8</sup>

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7. Mark A. Purschwitz and William E. Field, "Safety Spending: Is Agriculture Being Shortchanged?" *Agricultural Engineering* 69, no. 7 (November/December, 1988), 10.

8. A wealth of literature on the development of twentieth-century factory and manufacturing labor provides a useful contrast with farm work. See, for example, Lindy Biggs, *The Rational Factory: Architecture, Technology, and Work in America's Age of Mass Production* (Baltimore, 1996), 224; David A. Hounshell, *From the American System to Mass Production, 1800-1932* (Baltimore, 1984), 411; and Robert

In sum, Corn Belt farmers worked in a unique, highly industrialized setting in which the home and workplace intersected. As a result, farm life during the period was hazardous for the entire family.

FARMERS adopted a variety of technologies to increase crop production in response to a diverse array of economic factors, including changing government policies, escalating production expenditures, and shrinking profit margins. Anderson describes this overpowering trend as a “cost price squeeze,” which, he argues, was crucial in a farmer’s decision to mechanize rapidly.<sup>9</sup> In the 1950s Iowa farmers faced growing capital needs. In 1957 Herbert Crock from Olin complained, “Land is high but so is everything else.” Clifton Klaus of Colesburg noted one of the implications: “For a young fellow starting out the investment in stock and machinery is too high.” Don Rimathe and Craig Fausch, both lifelong farmers in Story County, expressed similar sentiments. Rimathe vividly portrayed the ever-growing scale, costs, and sophistication of farming as a “vicious circle.” Fausch echoed his friend’s comments that farmers were constantly “spreading the costs out.” Farmers also experienced increasing labor expenses, which appears to have accelerated the trend toward mechanization.<sup>10</sup>

Farmers purchased tractors, harvesting equipment, grain transport devices, and hay processing machinery at a dramatic rate. From 1940 to 1950 the number of tractors on farms rose from 1.6 million to 3.4 million, signaling the decline of the horse and

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Kanigel, *The One Best Way: Frederick Winslow Taylor and the Enigma of Efficiency* (New York, 1997), 675. Scholars have devoted much less attention to examining farmers’ unique working conditions. For an investigation of these conditions and how they relate to the issue of safety, see Derek Oden, “Harvest of Hazards: The Farm Safety Movement, 1940–1975” (Ph.D. diss., Iowa State University, 2006).

9. Anderson, *Industrializing the Corn Belt*, 193.

10. “The Farmer’s Opinion,” *Cedar Rapids Gazette*, 7/21/1957; Don Rimathe, interview by author, 1/3/2013; Craig Fausch, interview by author, 1/3/2013. Midwestern newspapers identified an intensifying shortage of workers. See, for example, Arthur Bystrom, “Wisconsin Farmers Swelled Production Hard Way,” *Rhineland [WI] Daily News*, 3/7/1945; and “Farm Hiring Clinic at Fort Dodge Wednesday, Jan. 25,” *Humboldt Independent*, 1/17/1956. See also Anderson, *Industrializing the Corn Belt*, 120.

mule as a power source.<sup>11</sup> By the 1950s, the oddity of using horses on the farm had become newsworthy. In 1956 the *Racine Journal Times* reported that Tom Ballack, a Wisconsin farmer who still depended on horses to plow and cultivate his fields, was “perhaps the only farmer in Racine County who uses horses regularly for farm work.”<sup>12</sup>

Farmers also rapidly acquired mechanical corn pickers. Between 1941 and 1951, the number of corn pickers farmers were using grew from approximately 120,000 to 502,000. The majority of these machines could be found in midwestern states such as Iowa, Illinois, and Indiana. By 1951, Iowa farmers had procured 95,000 corn pickers, the most in the nation, followed by their counterparts in Indiana and Illinois who had purchased 48,000 and 80,000 machines respectively. The introduction of the combine corn-head resulted in a similarly rapid adoption by farmers who sought greater ease and efficiency in the corn harvest. The number of elevators also “doubled on the average every two years” from 1940 to 1959, reaching one million on the nation’s farms by 1959.<sup>13</sup>

Farmers’ acquisition of agricultural equipment not only led to more efficient production but also to increasing physical risks. The Iowa Cooperative Extension Service conducted a study of fatal farm accidents in the period from 1947 to 1971 that placed the agricultural accident problem in context. A grisly sum of 1,773 individuals had died in machinery-related farm accidents during the period. The investigators concluded that the dramatically expanded use of farm equipment had amplified the hazards associated with agricultural machinery. They also believed that while mechanization had contributed to a reduced work load and

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11. Don Paarlberg and Phillip Paarlberg, *The Agricultural Revolution of the Twentieth Century* (Ames, 2000), 24.

12. O. C. Hulett, “For 86 Years Ballacks Have Used Horses to Farm Their 240 Acres,” *Racine [WI] Journal Times*, 5/6/1956. For more on the decline of horse-powered farming, see F. A. Hankins, “Word from the Country: Hankins Would Like More Horse Stories,” *Cedar Rapids Gazette*, 7/21/1963.

13. Charles Scranton, “Safety and the Mechanical Corn Picker,” *Agricultural Engineering* 33, no. 3 (March 1952), 140; Benson J. Lamp and Kenneth A. Harkness, “Recommendations for Improved Design of Portable Elevators” (paper presented at the annual meeting of the American Society of Agricultural Engineers, Chicago, December 15–18, 1959), 1.

an exodus from the farm, it also meant that the remaining farmers worked in a more mechanically sophisticated environment.<sup>14</sup>

Farmers readily acknowledged the dangers associated with farm work. Jim Klein, who grew up on a northern Iowa farm near Ashton in the 1960s and 1970s, commented that “at least a dozen times I should have been killed on the farm.” Larry Glenn, a life-long Iowa farmer in Wapello County, agreed that one had to be careful around “everything.” Lawrence Schmitz recalled that his father “warned him daily” about the many hazards associated with agricultural life.<sup>15</sup>

Thus, researchers and farmers agreed that farming presented a host of hazardous situations that could result in serious bodily harm or even death. A farmer could be trapped under a tractor as a result of a rollover. A child could be caught in a power take-off or fall and be crushed underneath a tractor’s wheel. During the harvesting of grain, agricultural laborers needed to be aware of a corn picker’s swiftly moving parts. Processing square bales of hay was also hazardous: a hand or foot could get caught in the machinery. Large round bales of hay could easily tip over a tractor. Farmers also adopted new material handling devices such as elevators and augers; their moving parts presented dangers, and elevators could tip over if improperly transported. Farmers who procured grain bins needed to be aware of dangerous gases that could damage lungs or cause asphyxiation. The diversity of hazards distinguished farming from other occupations such as factory work, which often emphasized specialization or mastery of more concentrated skills.

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14. Iowa State University Cooperative Extension Service, *Fatal Accidents of Iowa Farm People, 1947–1971* (Ames, 1971), 8–9. Researchers also provided yearly snapshots of the farm accident problem in the Midwest. *Wallaces’ Farmer* reported that “farm accidents claimed 467 Iowa lives” in 1952 alone. “Gear Your Farm for Safe Living,” *Wallaces’ Farmer and Iowa Homestead*, 7/19/1952, 10. In 1957 an Ohio farm accident researcher found that at least 58 Ohioans had been killed in tractor accidents in the previous year in that midwestern state. Wilbur Stuckey and William Gill, “Tractor Tragedy,” *Farm Safety Review* 15, no. 9 (November/December 1957), 13.

15. Jim Klein, interview by author, 12/15/2012; Larry Glenn, interview by author, 12/28/2012; Lawrence Schmitz, interview by author, 12/28/2012.



THE VULNERABILITY of farm residents was exacerbated by the fact that the farmstead functioned as both a home and a workplace. Home and workplace were usually clearly delineated for town dwellers but intersected for farm families. Furthermore, children worked and played on farms even as their environments were becoming more technologically sophisticated. As a result, farm families encountered a dizzying array of hazards that affected rural individuals regardless of age. Leroy Hogeland, a lifelong farmer from Monroe County, began doing chores "as soon as my hands were big enough to hold a hoe." Teresa Klein, summarizing the farm safety problem vividly while recalling her childhood on a dairy farm near Oelwein in the 1960s and 1970s, stated, "People don't ever think of having their kids live at the factory with them, but that's essentially what you're doing; you're living on a very dangerous factory."<sup>16</sup> Klein's comments vividly capture how farm families were exposed to hazards in ways that were unique and pervasive.

Children's natural inexperience and curiosity combined with the complexity of agricultural machinery to pose special problems. Lawrence Schmitz, a farmer from Wapello County, related a story from the late 1940s when, as he and his friend were headed home on their tractors "out of sight of both dads," they kicked their tractors out of gear and raced down a big hill. He stressed that such races were unsafe but that such potentially dangerous playfulness was not unusual for farm boys. Bernard Stodghill, another career farmer from Wapello County, stated that he once broke his arm trying to start the family's F12 International tractor. He acknowledged that the accident was the result of improper technique in starting the tractor, but he had desperately wanted to help his dad. Perry Middlesworth, another lifelong farmer

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16. Leroy Hogeland, interview by author, 1/3/2013; Teresa Klein, interview by author, 12/15/2012. Farm children were particularly vulnerable because the few legal safeguards that existed applied only to individuals who worked as farm employees and did not protect the thousands of children who worked on their own families' farms. Thus, parents were ultimately responsible for their children's welfare and for assigning them age-appropriate work tasks. For further insights regarding labor laws and farm dangers associated with farm children, see U.S. Department of Labor, Employment Standards Administration, Wage and Labor Division, *Child Labor Requirements in Agriculture under the Fair Labor Standards Act*, Child Labor Bulletin No. 105 (Washington, DC, 1984), 1-5; and Harold Heldreth, "Safety for Farm Children," *Farm Safety Review*, March/April 1955, 12.

from Wapello County, echoed his neighbor's observations, commenting that once when he was 10 years old, while driving his father's Minneapolis Moline UB, he "ran the harrow right into the fence and took the wing clear off of it."<sup>17</sup> Such incidents powerfully demonstrate how youths sometimes took unnecessary risks or were inadequately trained for a particular job.

Farmers' entrepreneurial status also distinguished their occupation from others such as those in manufacturing or extractive industries such as coal mines. Some farmers viewed this feature of their chosen career as beneficial because it enabled greater flexibility and freedom than other professions. John Van Ringelstein of Wapello County said that being his own boss was an advantage of the agricultural lifestyle. Prospective farmers made similar comments regarding the independence derived from the farming way of life. In 1950 Dwight Colliver, a 17-year-old Future Farmers of America member from Sigourney, said that his interest in farming was largely related to how it was a "good occupation and you are your own boss." In 1966 Plymouth County farmer Larry A. Peterson concurred: "I wanted to farm so that I would be working for myself." This independent spirit persisted and was widespread. Jim Klein believed that many of his friends wanted to be farmers so they could also be "their own boss."<sup>18</sup>

SUCH AUTONOMY expressed itself in at least a skeptical but sometimes even a hostile view of safety regulations. Farmers expressed this resistance to outside influence in their workplace in response to the events following the passage of the Occupational Safety and Health Act of 1970. The Occupational Safety and Health Administration (OSHA) actually had minimal impact on family farmers during the 1970s, yet many of them expressed their displeasure with the agency's threat to their autonomy.<sup>19</sup> In 1976

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17. Lawrence Schmitz interview; Bernard Stodghill, interview by author, 12/29/2012; Perry Middlesworth, interview by author, 12/29/2012.

18. John Van Ringelstein, interview by author, 12/28/2012; "The Farmer's Opinion," *Cedar Rapids Gazette*, 4/20/1950; Bill Tudor, "Outstanding Farmer Works for Future Successes," *Le Mars Daily Sentinel*, 3/22/1966; Jim Klein interview.

19. For a useful general discussion of the early history of the Occupational Safety and Health Administration, see Charles Noble, *Liberalism at Work: The Rise and Fall of OSHA* (Philadelphia, 1986). For a description of the nature of

the editors of *IH Farm Forum*, a periodical sponsored by the International Harvester Company, asked their readers' opinions of OSHA. The results reflected only the opinions of the 829 *Farm Forum* subscribers who returned the feedback form, but it nonetheless indicated that farmers generally held an unfavorable view of the agency. The survey confirmed that most of the respondents believed that OSHA officials were largely incompetent and that they were wrongly interfering with farmers' work. The piece also exposed a common attitude that farm safety, like many domains of farmers' work, was familial in nature. Lloyd Ziegler, an Illinois farmer, expressed the commonly held belief that it was appropriate for adolescent boys to operate tractors: "I've trained three sons to operate tractors, and I started each one of them at 12. First, they learned to operate the tractor with no equipment attached. Then I let them operate the tractor with light loads for an hour or two at a time until they were ready to do bigger jobs. Any showing off and they were grounded." Ziegler also represented a majority of the respondents who did not appreciate what they viewed as OSHA's misguided attempt to prevent accidents.<sup>20</sup>

Some farmers were even more direct in expressing their resistance to what they believed to be OSHA's capacity to threaten their independence. In 1974 a proposal that would have required farmers to "retrofit" older equipment with safety features such as shielding caused a visceral reaction. Harold V. Cobbs, a farmer from Lodi, Wisconsin, summed up his feelings: "We will never submit to young, long-haired college kids from the Department of Labor inspecting our farms and slapping us with fines that could put us out of business."<sup>21</sup> In 1976 the rural public's reaction

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OSHA regulatory activities in one midwestern state and the controversy the agency engendered amongst Iowa's agricultural leaders, see Plambeck, ed., *Iowa Farm Safety in the 20th Century*, 143-48.

20. "Reporting Back: On Farm Safety and OSHA," *IH Farm Forum* 1 (Fall 1976), 26-29. In response to the question "Should OSHA or OSHA type regulations be extended to include the farmer and members of his family as well," 88 percent of the respondents chose either "No, a farmer's safety should be his own responsibility and no law is going to make him more safe" or "Under no circumstances does the government have any business telling a farmer whether to practice safety." *Ibid.*

21. "Farmers Object Vigorously to Proposed Safety Devices," *Sheboygan [WI] Press*, 8/27/1974. For a brief but insightful summary of a public hearing regard-

to a pamphlet titled *Safety with Beef Cattle*, published by OSHA, was particularly harsh. Some felt that the brochure lacked substance and reflected a condescending tone. Lyle Borg, a member of the Iowa Farm Bureau Federation, said, "Bureaucrats: we are not a group of helpless children. We are educated professionals operating the most involved, respected, and important industry in the world."<sup>22</sup> John Dvorak, a writer for the *Kansas City Times*, surmised that Missouri and Kansas farmers viewed OSHA's involvement in agriculture to be "less popular with farmers than a weed-infested cornfield." C. R. Johnson, a farmer near Springfield, Missouri, who was also the president of the Missouri Farm Bureau, staunchly resisted OSHA intervention. Johnson expressed a common sentiment: "There are just things that government can't do."<sup>23</sup> These farmers' reactions to OSHA's potential involvement suggest the relevance of considering the value they placed on their independence and autonomy when examining the issue of farm safety.

FARMERS' INDEPENDENCE influenced other aspects of their work more directly than a distrust of regulation did. For instance, a farmer's success depended on individual effort and the seasonal aspect of the work. Because farmers sometimes handled large amounts of capital, their choices could also have a dramatic impact on their financial survival. Story County farmer Don Rimathe stressed the need to work long hours during harvest time: "If you miss that window, you might miss out for a long, long time and end up with a lousy crop." Pat Larkin, a career farmer from Wapello County, emphasized the profession's fiscal pressures: "I never minded hard work, but I hate the stress, you know, handling so much money today." "One little mistake,"

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ing proposed OSHA machine guard standards, see "OSHA in Agriculture: Machinery Guarding Hearing," *Implement and Tractor*, 10/7/1974, 56-58, which reports a number of controversies regarding OSHA standards, including the prohibitive cost of retrofitting older equipment with new safety features such as machine guards.

22. Mary Ovrom, "OSHA Has Some Zingers," *Burlington Hawk Eye*, 8/8/1976.

23. James Dvorak, "Farmers Not Too Receptive to Increased OSHA Impact," *Lawrence [KS] Journal-World*, 9/29/1977.

he added, can have profound financial consequences. Jim Klein remembered that after his father retired from farming he was finally able to get a full night's sleep. As Illinois farmer Joe Slaymaker observed, such burdens could affect safety, for one could be preoccupied more with working quickly than carefully. Many farmers, he noted, are "thinking about something else. Get that job done — it's going to rain — hurry — pressure, pressure, pressure." James Wilson, a lifelong farmer from Appanoose County, added that farming was particularly stressful during harvest time. He remembered falling asleep several times while harvesting crops late into the night, which presented obvious risks.<sup>24</sup>

Such work-related stress and excessively long work days exposed farmers to heightened risks. In 1946 a *Farm Safety Review* writer recognized this tendency, highlighting farmers' decreased alertness since they were exposed to the "hazards of this occupation for longer periods than most workers." Robert Westpfahl, an Illinois farmer, commented that some farmers "just run these machines into the ground and there is no machine safer than the man running it. If a man has been running the machine for 16 or 18 hours a day for seven days a week, he is getting dangerous." John Van Ringelstein emphasized the seasonal stresses of farming. There were times, he recalled, that "you'd work like the dickens on days you had to get the crop in, and there were times, rainy days, you could take off."<sup>25</sup> Such comments reflected the unique aspects of farming compared to manufacturing jobs with more established work schedules and a predictable indoor environment. They also suggest that while farmers' independence offered an unusual level of freedom, it also exposed them to work-related risks that would have been less common in more consolidated industries.

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24. Don Rimathe interview; Pat Larkin, interview by author, 12/29/2012; Jim Klein interview; Joe Slaymaker, "One Farmer's View of Safety" (speech given at the National Institute of Farm Safety meeting in Rock Island, Illinois, June 17, 1981), Norval Wardle Collection, Iowa State University Archives, Iowa State University, Ames; James Wilson, interview by author, 12/30/2012.

25. Arthur W. Turner, "Let's Be Sensible about Farm Safety," *Farm Safety Review*, November/December 1946, 9; Robert Westpfahl, "Another Farmer's View of Safety" (speech given at the National Institute of Farm Safety meeting in Rock Island, Illinois, June 17, 1981), Norval Wardle Collection; John Van Ringelstein interview.

Farming's cyclical demands were not the only aspects of Corn Belt agriculture that could extend working hours. Many farmers maintained their agricultural responsibilities while holding a second job. Bernard Stodghill was a lifelong farmer who at the same time held a full-time job at Anderson Erickson Dairy in Des Moines. His dual work responsibilities were not unusual, especially for farmers who owned or rented small acreages. In 1969 D. B. Pointer, a farm editor for the *Jefferson City Post Tribune*, noted that "the high cost of living, increased taxes, and a dwindling market price for farm products in relation to land and equipment costs, has caused a stampede of small farmers seeking a job in the city to supplement farm income." It is difficult to know the degree to which the resulting stress contributed to accidents; however, in the early 1960s Stodghill sustained a horrible injury after a shift at the dairy. He caught his hand in a tractor-mounted corn picker and had to drive himself to a neighbor's house for emergency assistance. Although he recovered, Stodghill's loss of part of a finger served as a permanent reminder of his accident.<sup>26</sup>

FARMERS not only faced considerable time-related stresses, but their rapid procurement of equipment also meant that they had to adapt swiftly to the introduction of new machinery, which could also add to work-related risks because farmers were largely responsible for their own training. The rapid acquisition of gasoline tractors provides a case study of this challenge. Some farmers who lived through this transitional era found it challenging, especially those who previously had used horses. Robert Westpfahl, reflecting on the difficult transition his family had experienced going from horse-powered machinery to tractor-powered implements, stated that farmers of an earlier era "had been walking behind horses for 40 years and all of a sudden they give him this machine, and he knew that before all he had to do

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26. Bernard Stodghill interview; D. B. Pointer, "Part-Time Farming Way of Life," *Jefferson City [MO] Post Tribune*, 4/10/1969, 15. The issue of part-time farmers appeared occasionally in midwestern newspapers throughout the era. See, for example, W. D. Davison, "Country Squire Faces Challenges," *Waterloo Sunday Courier*, 1/20/1960; and Rodney Hayden, "Part-time Farming Costly," *The Advocate* [Newark, OH], 9/10/1975.

was tell the horse to stop and the machine stopped wherever he was working. Well, after he got the tractor, he would stop the tractor, but sometimes the machine wouldn't stop. Well, that is just plain suicide because those guys have never been around a machine and mechanical things." Lawrence Schmitz made similar comments regarding his observations of a hired hand who awkwardly made the transition from horses to tractors in the 1940s. Years later Schmitz recalled, "He'd get on that tractor; he'd never driven one before, so it was comical to watch him try to get going. It was almost like you had to get down there and lead him."<sup>27</sup>

Sometimes this uneasy shift could contribute to unsafe situations. In 1952 a *Wallaces' Farmer* author wrote, "Some farmers drive tractors the same way they drove horses. The horses did part of the thinking for the driver. Tractors don't think for you. It doesn't make any difference to a tractor whether it plows up the corn or the weeds." Robert Westpfahl reflected on his grandfather's experience when making the transition from horses to tractors: "One time when he was out harrowing with a tractor, the harrow came unhooked from the tractor and he didn't know it came unhooked until he drove it completely around the field and ran over it the next time. And that is the truth. He was to me one of the smartest and most intelligent men that I have ever met. I mean I really respected him. But he never grew up with anything that was behind him or running around him. He had always been around a horse."<sup>28</sup>

Some farmers who came of age in the early twentieth century were uncomfortable with the switch to power farming. Don Rimathe, who was born in 1945, vividly described his grandfather's attitude to the new technology. "Horses were probably second nature to him," he recalled, but "he did not like things with engines; he loved horses." Larry Glenn's father also was not a "lover of tractors and machinery." Leroy Hogeland, born in 1932, provided the perspective of a younger generation of farmers who, unlike some in an older cohort, welcomed the change. "If I had to have been a horseman," he observed, "I would have had to have been something else; I would not have been a farmer. I was never

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27. Westpfahl, "Another Farmer's View," 1; Lawrence Schmitz interview.

28. "Gear Your Farm for Safe Living," 10; Westpfahl, "Another Farmer's View," 1.

a horse lover that much. I had some really, pretty bad experiences, like biting. Dad was kicked, thrown off of horses.”<sup>29</sup> These observations demonstrate an important point: comfort levels with technological innovation were often age-related. But for farmers of all ages, mechanical innovations were transforming farm work and presenting new challenges.

The diversity of farm equipment posed challenges because in-depth knowledge was required to properly operate and maintain each machine. Farmers were usually not experts on any individual piece of equipment and did not work in close proximity to machinists, mechanics, or engineers who did have mechanical expertise. Instead, they were generalists who operated different kinds of equipment while completing their daily chores. Some writers emphasized that farmers existed in a more mechanically diverse environment than more specialized occupations. Craig Fausch, who spent decades working in agriculture, echoed these conclusions: “You do a lot of different things in a day’s time.” Modern farming thus took place in a complex, challenging environment.<sup>30</sup>

The challenges presented by workplace diversity were exacerbated by the general lack of formal training opportunities. In 1942 Frank Zink, the director of the Farm Equipment Institute’s Research Department, pondered, “Who trains the operator of a machine? Who trains the new or young operator of a farm machine? The probable answers to these two questions are—the older persons, either fathers or farm hands, neither class of which may have had any safety training.”<sup>31</sup> Thus, unlike workers in a manufacturing setting, farmers usually relied on family members to learn how to operate machinery, often at very early ages. Craig Fausch recalled spending many hours as a second rider on his dad’s tractor. He was with his father every day and “lived and breathed” farming from an early age. As Don Rimathe observed,

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29. Don Rimathe interview; Larry Glenn interview; Leroy Hogeland interview.

30. “Practice Safety with Machinery,” *Hoard’s Dairyman*, 8/10/1943, 466; “Farm Accidents Are Made,” *Hoard’s Dairyman*, 7/20/1943, 412; Craig Fausch interview.

31. Frank J. Zink, “Farm Equipment Can Be Operated Safely” (paper presented at the Nebraska Conference on Home and Farm Safety, Lincoln, Nebraska, October 2, 1942), 5. Zink also observed that the war had only exacerbated the problem as millions of inexperienced laborers entered the agricultural workforce with insufficient training, particularly large numbers of women and children who were replacing males serving in the armed services. *Ibid.*, 6.



"You can learn about the science of farming, but to learn how to do the job—I just don't think you can learn it without being there."<sup>32</sup> As farmers learned to farm from their fathers at an early age, they were likewise exposed to the hazards of farming from an early age.

Farmers were also responsible for maintaining their equipment to ensure that it operated efficiently and safely. John Van Ringelstein remembered his father in the late 1930s working hard in cold weather to start their 1020 McCormick-Deering tractor. He would "build a fire underneath it to make the grease warm enough so they could shift gears." Perry Middlesworth reflected that maintenance changed as innovations continually altered the equipment. He noted that back in the 1960s "everything had to be greased every day," but by the 1980s he had learned that over-greasing sealed bearings was unwise and might cause expensive machinery repairs.<sup>33</sup> New equipment posed challenges to farmers who not only adopted many types of new machines over the years but who also had to be aware of new features and maintenance requirements to avoid costly repairs and prevent accidents. Thus, as farming knowledge became more intricate, farmers were forced to adapt to rapidly advancing innovations.

FARMERS also had to adjust to the rapidly increasing speed of moving parts, which were often inadequately protected. The power take-off (PTO) was particularly dangerous. The whirling device, which contributed significantly to agricultural efficiency by transferring energy from a tractor to many types of agricultural equipment, was a leading agent in farm accidents. Farmers could be injured by a PTO by accidentally falling on the whirling shaft, hastily stepping over it, or wearing loose clothing that could become entangled. All of these practices could end in serious injury or even death. Removing the PTO guard multiplied the hazards. In 1950 E. W. Tanquary, who chaired the Farm Equipment Institute's Advisory Engineering Committee, stressed the importance of using such shields. "The best designed and most expensive shield ever provided is worthless if left in the implement

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32. Craig Fausch interview; Don Rimathe interview.

33. John Van Ringelstein interview; Perry Middlesworth interview.

shed and the implement operated without it," he noted, "yet accidents are reported where ample shields were provided with the implement and left off through carelessness."<sup>34</sup> Machines that reduced physical drudgery also increased the speed of farming, producing unintended and unexpected consequences. Farmers' decision making also affected the probability of suffering an accident.

Many farmers recognized the potential of a swirling PTO shaft to result in death or injury. Appanoose County farmer Rex Peterson was keenly aware of farm hazards since his father lost his arm in a corn picker accident in the 1940s. When he witnessed his son stepping over a PTO shaft, it had "scared him to death." Seeing his son's unwise action so upset him that he broke the handle of a corn rake that he was holding. Perry Middlesworth remembered being extra careful around the PTO shaft as a result of seeing a sack become entangled in the whirling shaft: "It caught a burlap bag once, and in no time it was wrapped around it tight." After seeing that bag, he was "a lot more safety oriented."<sup>35</sup> Middlesworth's comments are especially important because they show that, unlike workers in other work environments, farmers often learned about safety experientially and arbitrarily.

The corn picker relieved farmers of the physically demanding task of hand harvesting, but its rapidly moving parts could catch limbs and appendages. Agricultural engineer Charles Scranton celebrated the fact that "these pickers have ended the backbreaking and time-consuming job of hand harvesting, and the day of the horse and wagon in corn picking is pretty well on the way out." Nonetheless, he acknowledged that "with the growth in the number of mechanical pickers has come an unwholesome record of farm accidents." Lee Thompson, writing in *Wallaces' Farmer*, considered the corn picker to be one of the most potentially hazardous pieces of agricultural equipment. Such assessments were amplified by gruesome stories that included disturbing accounts of farmers who were forced to cut through their own fingers or arm to free themselves from a corn picker. Leroy Hogeland, who often purchased used equipment at farm sales, stated that sometimes

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34. E. W. Tanquary, "Safe Guarding Power Driven Farm Machinery" (paper prepared for the Farm Equipment Institute's Advisory Engineering Committee, Chicago, Illinois, 1950), Norval Wardle Collection.

35. Rex Peterson, interview by author, 1/1/2013; Perry Middlesworth interview.

“you’d go to a farm sale and you’d see a guy with just one hand and you didn’t have to ask him what had happened; you knew.”<sup>36</sup>

Researchers who studied the corn picker situation confirmed Hogeland’s bleak observation and identified contributing factors. Agricultural engineer Charles Scranton identified 434 corn picker accidents in 1948 in Iowa, the state with more corn pickers than any other state. In 1951 Norval Wardle, an Iowa State University farm safety specialist, systematically investigated 418 corn picker accidents in the state. He believed that the accidents could be attributed to such factors as operator fatigue, employing careless work practices, and not using safety shields. The parts most responsible for corn picker accidents were, in order, “husker rolls, snapper rolls, chains, elevators, and stalk ejectors.” Such fast-moving, unguarded machinery parts could produce devastating consequences if a hand or arm found itself in their path. As Rex Peterson stated simply and ominously, “Machinery is made to grab stuff” and thus one had to exercise great caution around it.<sup>37</sup>

Farmers were particularly vulnerable if, while rushing to complete the harvest, they attempted to unclog a picker or make repairs with the power still on. In 1952 the wife of a Wapello County farmer commented on this aspect of the problem: “I think that the men just try to get in a hurry when they are tired.” An exhausted farmer could get caught in the picker’s rollers or chains in a variety of ways. In 1955 Daniel Kitchen stated, “Many accident victims have dismounted with the power take-off running with no intention of approaching the picker. Then they saw an ear crossway in the elevator, saw a stalk of corn laying across the picker points—or they stumbled or lost balance. And another hand was added to the list.” Regardless of the situation, Kitchen reinforced the idea that farmers could prevent many accidents by turning off machines before trying to fix them. John Van Ringelstein avoided accidents with an early combine corn head by using an old broom handle to unclog it. He remembered

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36. Tanquary, “Safe Guarding Power Driven Farm Machinery,” 140; Lee Thompson, “Haste Costs Arms,” *Wallaces’ Farmer and Iowa Homestead*, 10/6/1951, 5; C. L. Hamilton, “Live to Pick Another Year,” *Wallaces’ Farmer and Iowa Homestead*, September/October 1948, 4; Leroy Hogeland interview.

37. Scranton, “Safety and the Mechanical Corn Picker,” 140; Franklin, “Don’t Lose an Arm,” 8; Rex Peterson interview.

that by the day's end the handle was chewed up to the point that it was very short.<sup>38</sup> Although Ringelstein's practice reflects farm ingenuity, it also embodies the common theme that farmers often faced hazards alone, armed only with their own resourcefulness.

Haymaking tasks became easier as the result of mechanical advances such as new mowers, rakes, and baling equipment; but new dangers surfaced at the same time. During the 1940s the safety literature described a plethora of injuries that could ensue during haymaking, including cuts from mowers, crushing injuries from rakes, as well as the possibility of entanglement in the baler's moving parts. James Wilson provided a chilling account of a near fatal experience with a round baler in 1967. He remembered, "I always felt like I was 4 or 5 seconds away from losing my life. I got my foot caught in an Allis Chalmers Round Baler and the tractor was running wide open." He surmised that if a hired man hadn't been present, the outcome might have been very different. Wilson's experience highlights the fact that farmers faced particular risks due to their solitary occupation, which often meant that they did not receive prompt emergency treatment.<sup>39</sup>

As haymaking continued to advance with equipment improvements such as the big round baler, accidents continued to occur. The production of big round bales eased the burdensome task of handling the much smaller round and square bales but presented its own set of risks. Transporting the large bales proved dangerous. By the mid-1970s, such devices produced hay bales as large as 1,000 to 1,500 pounds. Sam Brungardt, an *Implementation and Tractor* contributor, noted that farmers sometimes unwisely adapted older front-end loaders to move large round bales. Unfortunately, the heavy bales could cause tractors to capsize

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38. "Pick More Corn—Safely," *Farm Safety Review*, September/October 1958, 8-9; Franklin, "Don't Lose an Arm," 8; Daniel Kitchen, "Stop That Picker . . . Before You Leave the Tractor Seat," *Farm Safety Review*, September 1955, 5; John Van Ringelstein interview.

39. James Wilson interview. Bernard Stodghill's corn picker accident in 1964 also illustrates this point. He drove his tractor and mounted picker home in order to receive emergency assistance. Bernard Stodghill interview. Iowa's newspaper record also contains examples of farmers whose medical treatment was delayed because of their isolated work environment. See, for example, "Goodin Loses Hand in Picker Accident," *Elgin Echo*, 11/5/1953; and "William De Wall Breaks Leg in Silo Accident," *Titonka Topic*, 3/15/1956.



*The appearance of big round bales represented the culmination of decades of hay-making innovations. Although such developments reduced physical exertion, they also altered work and safety conditions. Farmers had to exercise caution while operating round balers and transporting the weighty bales. Photo from A. M. "Pete" Wettach Collection, State Historical Society of Iowa, Iowa City.*

and crush farmers underneath their machines.<sup>40</sup> The slow implementation of safety features exposed farmers and their families not only to the dangers associated with unguarded moving parts but also to crushing injuries due to the lack of tractor cabs.

Farmers faced this danger for decades as many continued to use tractors that were not fitted with roll-over protective technology long after that technology had been introduced. In April 1952 Marion County farmer Paul Murphy experienced a frightful incident when his tractor overturned on a hill. Fortunately, he was able to leap off quickly and escape without injury. "No doubt about it," Murphy said, "I was lucky. I have always tried to be careful with a tractor, but this accident really scared me." Larry

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40. Sam Brungardt, "Safe Handling of Big Bales," *Implement and Tractor*, March 1976, 12.

Glenn did not own a tractor with a cab until the mid-1960s, and many farmers he knew didn't have them until much later. At first, Glenn appreciated the shelter from inclement weather more than the added safety protection. Jim Klein's family had several tractors, and they continued to use one without a cab until his dad retired from farming. This economically practical but potentially dangerous practice of using older equipment that lacked safety features was prevalent for decades.<sup>41</sup>

EVEN IF farm implement companies produced safer machinery, farmers would not necessarily purchase it. One such example involves the safer transport of hay bales. Dr. Richard L. Jepsen, a farm safety specialist from Kansas State University, believed that even though "three-point-hitch bale handling devices" were safer than "modified front-end loaders," farmers would persist in using less stable adapted front-end loaders. Rollin Schnieder, a University of Nebraska farm safety expert, echoed Jepsen's opinions: "Some of the front-end loaders which are modified in farm shops may be poorly engineered and put excess stress on a tractor's hydraulic system."<sup>42</sup>

Sometimes, however, farmers did make a rapid transition to safer equipment. Such was the case in the changes associated with the corn harvest. The introduction of the combine corn-head increased both the speed and safety of harvesting because it gathered corn more quickly and clogged less often than a corn picker. In the mid-1960s an *Implement and Tractor* contributor praised

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41. "Next Time . . . This Might be You!" *Wallaces' Farmer and Iowa Homestead*, 6/7/1952, 8; Larry Glenn interview; Jim Klein interview. Agricultural engineers and safety specialists produced an exhaustive literature on the tractor rollover protection structure (ROPS) and the advantages of using it to prevent fatalities. See J. R. Myers and K. A. Snyder, "Roll-over Protective Structure Use and the Cost of Retrofitting Tractors in the United States, 1993," *Journal of Agricultural Safety and Health* 1 (June 1995), 185. According to David H. Bucher, a high-ranking engineer for John Deere, "Tractor upsets cause 50 to 70 percent of the fatal farm accidents in this country." David H. Bucher, "A Protective Canopy for the Farm Tractor," *Agricultural Engineering* 48 (September 1967), 496. For more on how tractor overturns were a leading cause of deaths on the nation's farms and the need to implement ROPS devices, see Ernest C. Carlson, "Frame the Operator for Safety's Sake," *Excavating Contractor* 56 (October 1968), 12.

42. "Next Time . . . This Might be You!" 13.

the continued improvement of the machines, which had “more horsepower, larger grain tanks, more efficient drives, more hydraulic applications, larger fuel tanks, more diesel engines, bigger elevators and unloading augers, improved operator platforms, and larger headers – they are bigger and better than ever.” New safety features augmented the performance improvements. In 1965 a National Safety Council staff writer opined that a number of modifications, including better shielding over moving parts and headers that congested less frequently while harvesting corn more quickly, had made harvesting safer. The improved shielding did not go unnoticed by farmers. Rex Peterson indicated that guarding had improved to the point that today “everything is so protected you can’t hardly service them.” Don Rimathe agreed that guarding had improved dramatically in recent decades.<sup>43</sup>

Farmers could also suffer serious injury or even death while using augers and elevators. In the late 1950s and early 1960s David McFarland and William Fletcher emphasized the dangers associated with being hurt when such devices overturned. Such incidents occurred for a variety of reasons, including simply losing control during transportation or unintentionally upending the device while attempting to clear debris from the elevator’s trough. The prospect of accidentally running into another object represented a common hazard. According to McFarland and Fletcher, “the accidental hitting of the undercarriage by a tractor or other object can quickly topple an elevator which has been set on sloping terrain.” Farmers further exposed themselves to serious injury if they attempted to stop a falling elevator. All of these situations could result in becoming pinned under the machine, causing serious injury or death. Perry Middlesworth remembered once as a boy that he thought he was “strong enough to lift up an elevator,” which came down on him and pinned him to the ground, leaving a gash in his knee.<sup>44</sup> A boy’s overly enthusiastic desire to help his father could result in serious threats to a youth’s well-being.

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43. Mark Zimmerman, “Scanning the Self-Propelled Combines,” *Implement and Tractor*, 6/21/1965, 20; T. David McFarland, “Eight Steps to Combine Safety,” *Farm Safety Review*, May/June 1965, 3–4; Rex Peterson interview; Don Rimathe interview.

44. W. E. Stuckey, B. J. Lamp and K. A. Harkness, *The Portable Farm Elevator . . . Make it a Helper Only*, Bulletin 367 (Columbus, OH, 1962), 2–3 (this is a revised



*Grain elevators eased the arduous task of shoveling grain by hand. Unfortunately, farmers were sometimes caught in whirling PTO shafts or other rapidly moving of parts of such devices. Photo from A. M. "Pete" Wettach Collection, State Historical Society of Iowa, Iowa City.*

Besides their desire to be helpful, children's natural curiosity and playfulness could also lead to accidents with elevators. Ohio farm safety specialists documented serious injuries and deaths in such elevator accidents. Two boys had fallen to their deaths from an elevator. One had been running up an elevator when he stumbled, plummeted to the ground, and died; the other youth, who had climbed up an elevator hoping to enter a barn's hay mow, also fell to his death. In 1973 B. J. S. Grogono, a surgeon from Halifax, Nova Scotia, described a gruesome aspect of auger accidents involving children. When a child's limb became caught in an

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version of a 1957 Ohio State publication regarding elevator precautions: W. E. Stuckey and B. J. Stamp, *Live Longer with Portable Elevators*, Bulletin 367 [Columbus, OH, 1957], 5, 8); Perry Middlesworth interview. In the face of such accident problems, engineers were making progress by adding features such as "safety tracks" to elevators, which provided stability; nevertheless, such accident prevention devices were not on all new models in the late sixties. For more on the issue of elevator safety, see Stuckey, Lamp, and Harkness, *The Portable Farm Elevator*, 4; and T. David McFarland and William J. Fletcher, *Analysis of Portable Farm Elevator and Auger Accidents to Determine Corrective Measures* (Washington, DC, 1969), 33-34.



auger, the damage could be greater than for an adult because a child's extremities were smaller. Thus, their arms and legs were pulled farther into the machine and suffered more damage.<sup>45</sup>

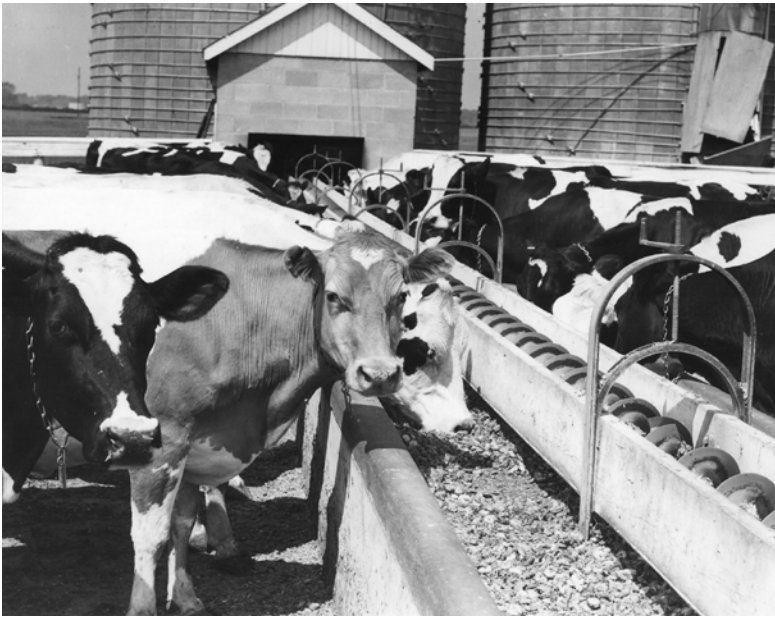
By the late 1960s, researchers agreed that such incidents involving entangled limbs represented the most persistent elevator hazard for both children and adults. The problem was exacerbated because manufacturers were slow to install shields on the elevator's moving parts. Some experts believed that the failure to provide guards might have been related to the perception that an elevator's moving parts moved more slowly than those of other farm equipment. However, "contact with an unshielded power shaft rotating at slow speeds definitely is a hazard and can result in severe accidents, as elevator accident reports verify. There is no justification for elevators to be manufactured and sold without properly shielded shafts and gears."<sup>46</sup> Thus, agricultural safety experts and engineers were still grappling with tremendous changes even as farmers struggled to adapt to an increasingly sophisticated mechanical environment.

The lack of guards on augers persisted into the late 1960s. In 1969 "an informal survey of machines on dealers' lots, at agricultural shows, and in sales literature . . . measure[d] the 'state of machine' guarding on U.S. machines." The survey found that "most V-belt drives were unshielded, even on machines of recent vintage. Auger intake guarding varied from none to the provision of several rods running parallel to the auger shaft at the base end. Most PTO shafts on new machines are shielded, but on many units, the stub shaft shield where the shaft connects to the elevator is in need of improvement." In 1972 a review of a number of manufacturing brochures revealed that augers were on the whole insufficiently guarded and that the lack of protection presented a significant threat to farm families. The expert who conducted the review charged that the companies that produced such machines thus displayed a lack of concern for safety. He illustrated his point by disclosing that some farmers had crafted guards themselves following accidents. For example, Horace Neu,

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45. Stuckey and Stamp, *Live Longer with Portable Elevators*, 7; B. J. S. Grogono, "Auger Injuries," *British Journal of Accident Surgery* 4, no. 3 (February 1973), 243.

46. Lamp and Harkness, "Recommendations for Improved Design of Portable Farm Elevators," 3.



*New feeding and storage systems offered labor-saving possibilities, but they also produced unexpected health risks such as noxious gases and crop dust. Unguarded augers could pose additional hazards. Photo from A. M. "Pete" Wettach Collection, State Historical Society of Iowa, Iowa City.*

a farmer from Nevada, Iowa, had fashioned a "lattice type guard over the auger's intake" after catching his hand in an auger.<sup>47</sup>

To address the complicated, rapid, and multifaceted consequences of agricultural technology, farmers adopted other technologies that probably reduced accidents or at least saved wear and tear on their bodies. For instance, the advent of "self-feeding silos" may have lessened the dangers associated with feeding livestock by automating much of the process. Earl D. Merrill, an official for Republic Steel Corporation, stated that farmers now could avoid the potentially dangerous practice of "climbing conventional silo chutes and lugging silage to feed bunks." He

47. McFarland and Fletcher, *Analysis of Portable Farm Elevator and Auger Accidents*, 33; Norval Wardle, "Safety Controls and Shielding for Augers" (paper presented at the annual meeting of the American Society of Agricultural Engineers, Hot Springs, AR, June 28, 1972), 3-4.

claimed that researchers had been searching for ways to decrease the work associated with feeding livestock their silage. "Mechanical unloaders in the top or bottom of silos looked promising, but they did not deliver the silage to livestock. Silo structural and management adjustments to permit the animals to feed directly from the silos now seem to offer the most promising solution."<sup>48</sup>

Pat Larkin, a lifelong beef cattle producer from Wapello County, emphasized the importance of improvements in livestock-handling systems, stressing that such developments were crucial in lessening the hazards associated with working with cattle. Larkin worked for ten years at the Iowa State University Extension Service helping researchers improve livestock structures. He stated, "I got into designing a lot of facilities for working cattle and we designed it to where you never got in a pen with the cattle. . . . We used to grab a calf and throw him down and vaccinate him, but now we drive him up an alley way, reach through, and poke him with the use of a head gate." Larkin underscored that such structures, which emerged not only from practical experience but also from animal behavior research, reduced hazards for people and lessened animal stress while increasing cattle-processing speed.<sup>49</sup>

Additional innovations reduced farmers' exposure to bull-related hazards. By the mid-1950s, when some farmers no longer required a bull's reproductive services, scientists had discovered new solutions to bull hazards. In 1956 Harold Heldreth observed that farmers' growing interest in artificial insemination and the possibility that this reproductive method would enjoy increasing popularity might mean that fewer farmers needed bulls. "Besides eliminating a serious farm accident hazard and the expense of keeping individual bulls," he noted, "the plan also extends or multiplies the services from valuable bulls many fold."<sup>50</sup>

In addition to reducing exposure to livestock hazards, technological improvements also reduced health risks in other ways. For instance, the increased use of the round baler undoubtedly

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48. Earl D. Merrill, "Self-Feeding Silos Aid Safety," *Farm Safety Review*, March/April 1953, 3.

49. Pat Larkin interview.

50. Harold E. Heldreth, "Safe Practices Can Mean Bigger Profits," *Farm Safety Review*, August 1956, 9.

reduced the physical exertion associated with handling hay bales. Previously, while catching hay bales and stacking them in the hay mow, John Van Ringelstein noted, “a sixty-pound bale of hay would frequently hit me in the head.”<sup>51</sup> Fortunately, the reduction in work associated with the mechanization of hay harvesting and storing reduced physical wear and tear.

HORSE-POWERED AGRICULTURE of an earlier era had not been without risks. For example, in Kansas more than 90 people had been killed in runaway horse accidents between 1930 and 1945. Twenty people died in horse-related mishaps in Wisconsin in 1944.<sup>52</sup> Even though the number of horses was decreasing, rural families continued to use them into the 1950s. In 1955 Harold Heldreth commented on this dual, multigenerational use: “Thousands of farm people—boys, girls and adults—are in the saddle daily, carrying out farm jobs that can be done more efficiently on a mount. Many farm people also seek recreation in the saddle.”<sup>53</sup>

The dangers remained in Amish communities that continued to rely on horse-powered farming. In the mid-1990s, Amish families in LaGrange County, Indiana, suffered a sudden increase of horse-related accidents that killed six of their members. Purdue University faculty sought to help families address this spike in horse-related fatalities. Scott Whitman, a Purdue University farm safety expert, searched through the university’s collections for obsolete horse safety handbooks. Whitman stated, “We might have to dust them off and see if we can use them again.” Although machines undoubtedly changed agricultural working conditions, farming had always been fraught with danger and uncertainty.<sup>54</sup>

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51. John Van Ringelstein interview.

52. Marvin J. Nichol, “How’s Your Horse Sense?,” *Farm Safety Review*, May/June 1945, 8. Horse accidents were nothing new and likely even more common when farmers depended on horses to plow, disc, and harvest their fields. For stories of horse accidents in the midwestern rural press, see, for example, “Right Leg Amputated; Another Farm Accident,” *Aberdeen [SD] American*, 5/4/1915; and “Badly Injured in Farm Accident,” *Grand Forks [ND] Herald*, 5/21/1915.

53. Harold E. Heldreth, “Safe in the Saddle,” *Farm Safety Review*, January/February 1955, 5.

54. “Amish Seek Help in Cutting Down Farm Accidents,” *Cedar Rapids Gazette*, 5/26/1996.

The most basic tool involved in hay processing, the pitchfork, could inflict severe damage if used unwisely. A pitchfork user could become injured in many ways, and such injuries were often ghastly. In 1943 Claire Swisher, editor of the *Hammermill Bond*, indicated that although pitchforks were indispensable for farm work, they were sometimes involved in fatal accidents. Their sharp points could easily puncture the flesh and even organs, and some farmers had fallen off their haystacks and impaled themselves on their pitchforks. Such accidents usually resulted in grotesque deaths. In 1943 a *Farm Safety Review* writer stated that Mr. Hedge, a farmer from Leavenworth, Kansas, "climbed onto the hay loft, threw food down for the cattle, and tossed the fork into it. As he started down the ladder, he missed the top rung. The additional impact broke the second rung and he fell. The fork handle pierced deeply into his abdomen, and he died a few days later."<sup>55</sup> Such gruesome stories served as vivid reminders of the dangers of agricultural labor.

Safety writers provided abundant advice about how to avoid pitchfork accidents. Their suggestions included owning several of them and locating them in convenient places, thus limiting the need to carry them. They also advised that under no circumstances should a pitchfork be tossed, and it should always be placed firmly in the earth instead of placing it flat on the ground.<sup>56</sup> Larry Glenn remembered an uncle telling him a pitchfork accident story involving a youth who was impaled as he played while others were putting up loose hay.<sup>57</sup> The story left a powerful impression regarding the hazards associated with farm work. It also demonstrates that farming presented significant hazards long before farmers acquired the sophisticated machines of the mid-twentieth century.

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55. Claire Swisher, "An Editor Talks about Pitchforks," *Farm Safety Review*, September/October 1943, 7. *The Hammermill Bond*, of which Claire Swisher was the editor, was published exclusively for the employees of the Hammermill Paper Company. "Pitch Forks Are Dangerous," *Farm Safety Review*, November/December 1945, 9.

56. "Pitch Forks Are Dangerous," 10.

57. Larry Glenn interview.

THE STORY of Corn Belt farm dangers reveals that farmers encountered more immediate and sometimes deadly costs beyond those associated with increasing expenses of land, machines, and labor. That price can be counted in the fingers lost to corn pickers, or in the lives of young children snuffed out by the terrible weight of an overturned tractor. The frightful toll was also represented in the fact that farming ranked as one of the most dangerous professions during each of the decades from 1940 to 1980. Agricultural equipment hazards were amplified by farm families' diverse working environment, their comparative independence, and the rapid rate of technological change. Farmers also often felt pressured to get their work done quickly due to ever-changing weather and economic conditions. The lack of safety features such as adequate guarding and tractor roll bars amplified the dangers. Thus, even though the phenomenon of astonishing agricultural productivity owed much to mechanical improvements, mishaps with these machines sometimes produced a harvest of injury and death.

The agricultural safety issue was also influenced by the view of farming as both a way of life and an industrialized business. The former view can be found in a variety of sources, including sentimental reminiscences of rural childhood, as well as in surveys from the era. A study conducted by University of Missouri researchers in 1967 revealed this deeply personal attachment: "A farmer doesn't decide to farm in the same way that a mechanic or salesman chooses his work. To a farmer, farming is a way of life, not just a job." James Wilson echoed these comments when explaining his decision to return to farming after returning home from military service during the Korean War. He said that once you've farmed, "it never leaves you."<sup>58</sup> Despite such warm sentiments, most Corn Belt farmers could not ignore the inescapable fact that agriculture's industrialization had produced a variety of unintended and unpleasant consequences.

Nevertheless, many farmers still highly valued their independence and communicated a cautionary attitude toward stringent safety regulations, an attitude that was clearly demonstrated

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58. "Farming Is Way of Life unlike Most Other Jobs," *Jefferson City [MO] Daily Capital News*, 11/17/1967; "Winter Increases Peril of PTO's for Farmers," *Mason City Globe Gazette*, 1/14/1966; James Wilson interview.

by many farmers' resistance to OSHA regulations in the mid-1970s. James Wilson echoed this sentiment when he stated, "We are pretty dang independent and if some city slicker comes out and tells us how to do something, we're just going to walk off and leave him."<sup>59</sup> Although Wilson's comments communicate an important rationale for choosing a farming lifestyle, the farm accident story suggests that such independence was becoming more difficult to maintain. Farmers' continued acquisition of new equipment reflected the ongoing process of replacing an earlier reliance on muscle power with a dependence on machines and fossil fuels. Although these powerful tools freed them from the back-breaking tasks of hand-picking corn, processing loose hay, and transporting grain, it exposed them to a plethora of new hazards, many of which they did not fully comprehend. Farmers lessened their chance of injury or death by working slowly, using guards, and avoiding working by themselves. They could also reduce dangers to their children by giving them age-appropriate work. Even if such measures were followed, however, the combination of work autonomy with the technologically advanced nature of modern agriculture could still prove to be a lethal combination.

The unique aspects of farming meant that working safely at all times would have been difficult. Farming remained familial, less consolidated, and offered fewer formal training opportunities than other industries that were also undergoing industrial change. In addition, the growing technological complexity of farming produced an environment in which hazards were not only diverse and numerous, but also not immediately apparent. Farmers adopted new equipment, chemicals, and storage practices rapidly in an effort to remain economically competitive. Any hope of a complete understanding of such hazards would have been as unfeasible as would have fully adopting all safe work practices in a timely manner. James Wilson reflected this dilemma while discussing his experience working in metal grain bins and breathing crop dust. He stated, "I would come out of there coughing and spitting with black stuff coming out of my nose. You just thought it was all right. You're trying to make a

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59. James Wilson interview.

living and get ahead."<sup>60</sup> His comment communicates the reality that economic pressures could sometimes trump safe work practices even if one knew the proper safety procedures.

Despite the profound changes that accompanied this era, some features of farm life, such as a sense of community, remained. Neighbors often responded to accidents affecting their neighbors with compassion by doing much-needed work. In 1959 a story in the *Muscatine Journal and News-Tribune* showcased how a community responded to the situation of Guy Hoobler and Floyd Hausman, both of whom had been injured in farm accidents. The paper reported that "two separate crews are being organized to harvest corn crops for the injured men." The *Postville Herald* reported another community's response to a corn-picker accident: "A large group of neighbors, friends and relatives came to the Harold Hoffman farm home Saturday with corn pickers and a wagon and helped husk about 60 acres of corn."<sup>61</sup>

The power of community could sometimes mitigate the effects of dramatic technological change, yet the toll of farm accidents remained significant. Rex Peterson, reflecting on the corn-picker accident in which his dad lost his arm, stated, "It affected the whole family. It had an awful impact on dad."<sup>62</sup> Farm families paid an incalculable physical, emotional, and psychological price as they produced abundance for the food needs of an ever expanding global population.

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60. *Ibid.* For a fascinating and influential perspective on risk and its meaning in the late twentieth century, see Ulrich Beck, *Risk Society: Towards a New Modernity*, trans. Mark Ritter (London, 1992). Beck's observation that during the twentieth century threats to human welfare transitioned from more organic factors to those created by an increasingly technologically sophisticated society is particularly germane to an investigation of the health risks associated with Corn Belt agriculture, since by the mid-twentieth century, agricultural technologies and economic dangers had greatly altered the hazards associated with farming.

61. "Neighbors to Husk Corn at Morning Sun," *Muscatine Journal and News-Tribune*, 11/10/1959; "Good Neighbors Help at Hoffmans," *Postville Herald*, 11/25/1959. For similar stories elsewhere in the Iowa press, see "Pick Corn for Bud Weis," *Harlan News-Advertiser*, 11/20/1951; "Friends Make Hay for Sumner Farmer," *Waterloo Daily Courier*, 7/8/1962; "35 Acres, 41 Good Neighbors," *The Guthrie* [Guthrie Center, IA], 6/23/1969.

62. Rex Peterson interview.



## Book Reviews and Notices

*The Lost Region: Toward a Revival of Midwestern History*, by Jon K. Lauck. Iowa and the Midwest Experience Series. Iowa City: University of Iowa Press, 2013. xii, 166 pp. Notes, index. \$35.00 paperback and e-book.

Reviewer Bill Silag, former editor-in-chief at Iowa State University Press, is writing a biography of Iowa novelist Ruth Suckow.

For the past half-century there has been a decline in the attention given to the midwestern experience in the grand narrative of American history, claims author Jon K. Lauck in his new book, *The Lost Region*. Lauck contends that the historical study of the Midwest has been crowded out of the history curriculum at many of the region's colleges and universities in order to accommodate the emergence within the discipline of new fields of study, particularly those having to do with gender, class, and ethnicity. As a result, increasing numbers of students are now earning degrees in American history with little understanding of the important role the Midwest has played in the history of the United States. Moreover, with proportionately fewer regional specialists now teaching, there has been a concomitant decline in the production of publications focused on the region's history. "The consequence of these trends and the failure of recent generations of historians to see the Midwest as historically significant," he writes, is that the region has fallen off "the main map of American historiography and lost to the main channels of historical inquiry" (7).

*The Lost Region* is Lauck's impassioned response to this situation. His book is essential reading for all historians of Iowa and the Midwest. Packed with useful information for scholars and students, *The Lost Region* is simultaneously an extensive survey of the historiography of the state and region; an up-to-date bibliographic guide to the secondary literature of the field; and a highly charged admonition—a jeremiad really—addressed to historians of the Midwest, to join with him in an effort to revitalize a long dormant historiographical tradition and thereby restore and preserve the cultural integrity of "the lost region" at a time when the placelessness of a digital universe threatens to supplant intellectual and emotional ties to locality altogether.

As stated in its introduction, the book's purpose is to "demonstrate the importance of the Midwest, the depth of historical work once performed on the region, the continuing insights that can be

gleaned from this body of knowledge, and the lessons that can be learned from some prominent historians that will bolster future attempts to revive the study of the American Midwest" (8). Long-term, the author's goal is to revive a midwestern regionalist historiographical tradition, quiescent for a half-century now, that once had the strength to redirect the historiography of the entire nation and to bring into being what remains today the preeminent professional organization for American historians.

*The Lost Region* is an extended essay in four heavily annotated chapters. In chapter one Lauck discusses "foundational events" in the eighteenth- and nineteenth-century history of the Midwest, particularly the experiences celebrated by Frederick Jackson Turner in his paradigmatic essays about the role of the frontier experience in shaping democratic social and political values in the agricultural communities of the antebellum West.

Chapters two and three focus on the Prairie Historians showcased by the author in the spring 2012 issue of the *Annals of Iowa*, a sizable community of scholars—including Benjamin Shambaugh and Louis Pelzer at the State University of Iowa and Louis B. Schmidt and Earle Ross of Iowa State College—whose regionalist worldview influenced much of the historical scholarship in the Midwest and beyond in the first half of the twentieth century. Inspired and encouraged by Turner, the early Prairie Historians were responsible for the formation in 1907 of the Mississippi Valley Historical Association (later renamed the Organization of American Historians) as an alternative to what was perceived by the midwesterners to be the Ivy League elitism of the establishment American Historical Association. Lauck considers their work in somewhat greater detail here than he does in the *Annals of Iowa* article, with an eye to demonstrating the continuing viability of their approach to historical research, albeit on updated philosophical foundations that include the pragmatic hermeneutics of intellectual historian James T. Kloppenberg. Lauck's detailed portrait of the Prairie Historians—based on extensive archival research in the manuscript collections of the individual scholars—includes information on their family backgrounds, personal and professional affiliations, and career trajectories, a major step toward the rigorous intellectual biography warranted by the rich historiographical legacy of the Prairie Historians.

Chapter four catalogs the cultural forces that contributed to the demise of the Prairie Historians in the decades after World War II, a discussion that reveals as much about the author's own regionalist proclivities as it does about the institutional and cultural forces responsible for their diminishing stature in the second half of the twentieth century.

eth century. Lauck's comments here lack the sharp focus of his writing on the Prairie Historians, but his commentary on representative works from the succession of modern-day historiographical trends that undermined the midwesterners' prestige is instructive regarding perceptions of what was lost and what was gained in the process.

The book's brief epilogue considers the prospects for a revival of the Prairie tradition after a hiatus of more than fifty years. The author is sanguine about a renewal of midwestern history—and for good reason. For all the methodological and ideological controversy within the profession since the end of World War II, an enormous body of work, focused in one way or another on the Midwest, has been produced in the past half-century, much of it informed by the gender, class, and ethnicity distinctions of culture studies. "In addition to dusting off the older works of the Prairie Historians," Lauck writes, "these newer works can serve as building blocks for a more integrated history of the Midwest in the future" (85). No doubt there is plenty to work with on this score. The books and articles listed in the author's endnotes—this slender book's 90 pages of text are accompanied by 67 pages of endnotes—provide enough material to keep historians and their readers busy for years to come.

*Making Marriage: Husbands, Wives and the American State in Dakota and Ojibwe Country*, by Catherine J. Denial. St. Paul: Minnesota Historical Society Press, 2013. 191 pp. Illustrations, notes, bibliography, index. \$19.95 paperback, \$15.99 e-book.

Reviewer Michael Knock is assistant professor of history at Clarke University in Dubuque. His Ph.D. dissertation (University of Notre Dame, 1996) was "'Alone with Sitting Bull's People': The Dakota Indian Mission of the Congregational Church, 1870-1937."

Marriage and family have long been key elements in the making of culture on the American frontier. As Catherine J. Denial writes in *Making Marriage*, "When the first significant numbers of Americans arrived in the region now known as Minnesota, they did so armed with the belief that good government and an orderly household went hand in hand" (3). They weren't the only ones. Native women had their own ideas and traditions pertaining to what marriage meant: "In the clash between these systems of belief is the story of Minnesota's beginning—a complex, uneven tale which does not offer a narrative of easy triumph for the American state" (23).

Denial's book is really four different stories that center in and around Fort Snelling in the first half of the nineteenth century. The

stories span race and culture in their discussion of competing conceptions of marriage, family and divorce. And the stories are subversive. At first glance, for example, one might overlook the tale of Pelagie Faribault's ownership claim to an island near the confluence of the Mississippi and Minnesota rivers. Denial, however, sees something more. Pelagie, a woman of mixed French Canadian and Dakota heritage, was the wife of the fur trader Jean Baptiste Faribault. Decades after the land grant was made to Pelagie, the U.S. government tried to untangle the question of ownership as it worked to extinguish native claims in the area. Then things got complicated. American property law recognized the island as belonging to Pelagie's husband. Others claimed that Pelagie was first and foremost a Dakota woman; as such, she was capable of owning property in her own right. "Pelagie Faribault occupied a legal, social and cultural space quite different from the standard Euro-American model," Denial writes. "Her ownership of Pike's Island was an extension of the peculiar circumstances of the Upper Midwest and their ideas about gendered behavior and the meaning of land" (52).

The most interesting of the stories told by Denial is one not of marriage but of divorce. In the tale of "Margaret McCoy's Divorce," Denial continues to illustrate the complicated nature of intercultural family relations on the frontier. McCoy was a half-Ojibwe woman who wed trader Joseph Brown at Fort Snelling in 1836. They were granted a divorce five years later. While admitting that the story could be dismissed as "interesting trivia," Denial demonstrates what such "trivial" events can tell us about marriage and family in the "middle ground." Divorce, Denial writes, was uncommon in the territory. Couples seeking legal separation even on grounds of cruelty or abandonment rarely had their requests granted. Not so for McCoy and Brown, however, whose divorce was granted on the grounds that a state of war raging between the Dakota and Ojibwe made it dangerous for the couple to reside among either group. As Denial explains, "This was the very real and lively backdrop to Joseph and Margaret's petition—a country as yet sparsely settled by Americans and absorbed by violent episodes Americans could not control, where alternate meanings of place, family, law and spirit thrived" (125).

Other chapters cover the efforts of missionaries to alter marriage customs; yet another involves domestic life at Fort Snelling. The larger story here is one of the evolving nature of family on the Minnesota frontier at a time of dynamic and sometimes even violent change.

*Dakota Prisoner of War Letters: Dakota Kaškapi Okicize Wowapi*, by Clifford Canku and Michael Simon, with an introduction by John Peacock. St. Paul: Minnesota Historical Society, 2014. xxx, 225 pp. Illustrations, notes, index. \$27.95 paperback.

Reviewer Thomas Maroukis is professor of history at Capital University, Columbus, Ohio. He is the author of *Peyote and the Yankton Sioux* (2004) and *The Peyote Road: Religious Freedom and the Native American Church* (2010).

The introduction to this volume by John Peacock (Spirit Lake Dakota) describes the largest mass execution in American history, when 38 Dakota men were hanged for participating in the Dakota–U.S. War of 1862. The 270 others who were also condemned to death but had their sentences commuted by President Lincoln were sent from Mankato, Minnesota, to prison at Camp Kearney, in Davenport, Iowa, for three years. Davenport was chosen because Camp McClellan was an available facility with a military presence. Camp Kearney was built inside the fort. The letters in this volume are from those prisoners.

The Minnesota Historical Society holds 150 of these letters; 50 are translated here by two experienced translators, both native Dakota speakers and enrolled members of the Sisseton Wahpeton Oyate [Nation]. Clifford Canku, coauthor of *Beginning Dakota* (2010), is director of Dakota studies at North Dakota State University and teaches Dakota. Michael Simon teaches Dakota in the Moorhead (Minnesota) public schools.

This volume is a significant contribution to the publication of native voices. The letters were originally sent to missionaries Stephen Riggs and John Williamson, who ministered to the prisoners, for distribution to families and seeking information about their families. Some of the prisoners already knew how to write; Riggs taught others. Riggs was a Dakota scholar who published a Dakota grammar and dictionary and used his knowledge of the language to try to Christianize the Dakota.

After two unsuccessful attempts to complete the translation of the letters, North Dakota State University in 2009 funded the new translations that led to the present volume. The format of the translations is on a par with the best of modern translations. There are five parts. The left page is trilinear: the first line is word-for-word Dakota; the second line is word-for-word literal translation to English; and the third line is English translation in sentence form. On the right page is the full Dakota text of the letter, with the modern English translation beneath. This format will allow future scholars to assess the accuracy of the translations.

The letters help fill a void of native voices from this tragic era. In addition to the longing for their families and their release, the letters describe the hardships of the internment. The Dakota prisoners were not treated as prisoners of war but as criminals: there was insufficient food and poor sanitation; they were mistreated by the guards, often kept in chains, and suffered deaths from smallpox and measles. Residents in Davenport were allowed to view the prisoners as if the camp was a zoo. Some prisoners were allowed to work for Davenport residents on nearby farms; some residents, however, complained of their presence. With the end of the Civil War, Camp McClellan was no longer needed. In May 1866 the prisoners were released. In 1867 the government established Fort Traverse Reservation, where the prisoners, their families, and other Dakota were relocated.

The letters are more than historic documents. They are treated as sacred texts to honor and memorialize the spirits of the prisoners. The memory of these events is part of today's oral tradition among the Dakota. There is a yearly commemorative march. The translations will be valuable in rewriting the history of the era since most sources are from non-Indians. A strong point is that the English translations carry the cadence of Dakota; Dakota speakers, for example, end many sentences with "do" or "it is so," as in "I want you to help me with this—it is so" (51). The repetition captures the cadence of the language. The only element missing is a bibliography. There are some references in the notes, but a brief bibliography would have been helpful. Also, the excellent article by Sarah-Eva Ellen Carlson on the Davenport internment that was published in the *Annals of Iowa* (Summer 2004) is not mentioned.

*The Jury in Lincoln's America*, by Stacy Pratt McDermott. Ohio University Press Series on Law, Society, and Politics in the Midwest. Athens: Ohio University Press, 2012. xiv, 258 pp. Chart, illustrations, appendix, notes, bibliography, index. \$54.95 hardcover.

Reviewer David J. Bodenhamer is professor of history and executive director of The Polis Center at Indiana University–Purdue University, Indianapolis. His publications include *Fair Trial: Rights of the Accused in American History* (1992).

Trial by a jury of one's peers was a bedrock principle of English law long before the colonial period, and during the American Revolution the alleged abuse of this guarantee defined the scale of British tyranny for many alarmed colonists. Enshrined in the revolutionary state constitutions and the U.S. Constitution, with renewed emphasis in the Bill of Rights, the jury quickly became an emblem of American commitment

to liberty, justice, and democratic local government. Ironically, popular attachment to the jury in all its forms—civil, criminal, and grand jury—grew stronger as the institution itself became less central to law enforcement or to the resolution of legal disputes. Today, many Americans view jury duty as a sacred civic duty they would just as soon avoid.

Significant scholarship exists on the law and practices of the jury in the twentieth century, but, oddly, these bodies have gone almost unstudied in the nineteenth century when they were most venerated. Stacy Pratt McDermott addresses this gap in the literature in her well-written, exhaustively researched study of midwestern juries. In doing so, she makes valuable contributions to both legal history and midwestern history.

With few exceptions, historians have been content to cite legal treatises or, more likely, handbooks written to guide local officials and newspaper accounts on those occasions when petit or grand juries compelled their attention. Not so for McDermott, who combed antebellum court dockets, fee books, trial records, county histories, and the large collection of materials on Lincoln's law practice—he handled 5,200 cases in his legal career—to create a veritable roster of antebellum juries for Sangamon County, Illinois (Springfield), which she uses as a lens into midwestern legal and community culture. Then she searched for information on who those jurors were, thereby developing a demographic profile that may be unrivalled in its scope. She also read the relevant appellate opinions from a number of midwestern states, as well as the stories about juries contained in newspapers and other forms of popular literature. This in-depth analysis gives us an unparalleled sense of how juries worked, what juror status meant for the outcome of legal cases in the four topic areas she examined (drinking and gambling, divorce, slander, and race), and what it suggests about legal, political, and social culture in this county—and by extension in the larger Midwest. It is an impressive accomplishment.

So what do we learn? First, the jury pool was small. Because of various restrictions on who could serve—propertied citizens (white men) of good moral character who voted—only 15–17 percent of the population was eligible and only 5–6 percent ever served. Jurors, in brief, were gentlemen of good standing within their communities. That circumstance made it easier to revere the jury and proclaim it a bulwark of democracy. Those juries were also competent; as the economy grew more complex and as society became more mobile and diverse, they demonstrated the ability to sort out complicated evidence and follow sophisticated legal arguments, developing an expertise that corresponded to the rise of a professional bar. Ironically, in McDermott's

mott's telling, this competence set them up as rivals with the bench and bar and paved the way for their decline in the late nineteenth century. Finally, antebellum Sangamon County jurors were the connection between individuals and the legal system. Although paternalistic, they were not patriarchal; instead, they controlled trial outcomes in a way that corresponded with the expectations of local justice and local culture.

On the whole, McDermott paints a compelling portrait, even if it is uncertain whether the experience of Sangamon County reflects the circumstances of other midwestern states. Indiana, for example, gave the legislature power to abolish its grand juries in its Constitution of 1851, and proposals to reform the institution were rife in other states during the later antebellum years. It is unclear whether Illinois had the same debate when rewriting its constitution in 1848. Also, the widespread debate over the respective powers of judge and jury surely influenced Sangamon County jurists, but if so we do not learn about it here. These quibbles should not detract from the significant contributions McDermott has made to our understanding of the antebellum jury in law and practice. Anyone who wants to understand the history of this vital democratic institution must begin with her work.

*Necessary Courage: Iowa's Underground Railroad in the Struggle against Slavery*, by Lowell J. Soike. Iowa and the Midwest Experience Series. Iowa City: University of Iowa Press, 2013. 275 pp. Maps, illustrations, notes, suggested readings, index. \$24.95 cloth.

Reviewer Jennifer Harbort is assistant professor of black studies at the University of Nebraska-Omaha. Her Ph.D. dissertation (University of Iowa, 2008) was on African American political culture and the settlement of the antebellum and wartime Midwest.

Scholars of the antebellum Midwest, the Underground Railroad, and famed abolitionists such as John Brown will welcome this detailed account of Iowa's role in the destruction of slavery. As these scholars know all too well, the history of Iowa (and its surrounding "free" and border states) is complex and frustrating. Slavery was not legal in states like Iowa and Illinois, but citizens of those states also made sure that oppressive "Black Codes" not only discouraged but penalized African American settlement. To the south, slavery was legal in Missouri, although slaveholders made up less than 10 percent of white families in that state. To complicate matters more, invalidation of the Missouri Compromise in the U.S. Supreme Court's Dred Scott decision in 1857 offered no immediate hope of citizenship for African Americans anywhere in the United States. Furthermore, the rights of slaveholders



were protected everywhere they traveled, everywhere they set up towns and schools, everywhere they breathed.

As Lowell Soike argues in *Necessary Courage*, Iowans who defined themselves as either abolitionist or antislavery understood the realities of the fight brewing across the midwestern states. The Fugitive Slave Act of 1850, passed just three years after the highest court in the land, for only the second time in American history, had declared an act of Congress unconstitutional, now meant that northerners, westerners, slaveowners, antislavery activists, abolitionists—in fact, all Americans in every corner of the nation—were now complicit in the capture of fugitive slaves, whether they wanted to be or not. That brought an explosion of antislavery sentiment in states like Iowa, where citizens resented the encroachment of the Southern aristocracy and the proslavery Congress alike. Although Soike does not go to great lengths to explain the vast differences between the antislavery and abolitionist movements (and every mode of thought in between), the situation in Iowa was such that ordinary citizens were now making decisions about whether they wanted to willingly hide fugitive slaves in their cornfields or turn them in for bounty and provide succor to the Southern cause. In his painstakingly researched and detailed work, Soike shows how these Iowans were now forced to reconcile their feelings toward the Peculiar Institution and take an explicit stand. When it came to John Brown, whose travails in Iowa and elsewhere in the West occupy one tightly woven chapter, Iowans were again sharply divided as to his character and motivations.

Yet this book is not really about slavery or even slaves. What has kept historians so simultaneously intrigued and confounded since the passage of the Thirteenth Amendment is that the war “over” slavery had very little to do with real, substantive equality for African Americans. That was left to blacks themselves, who actually welcomed changes in the Midwest’s political economy, as those changes provided new formulations for empowerment. Soike seems unfamiliar with the latest developments in African American historiography, which has lately posited that blacks were consistently proactive in pursuing their own interests in the development of towns, neighborhoods, schools, and churches in the new states of the Midwest. (At one point Soike dismisses the so-called myths surrounding the codes of quilts and the Underground Railroad. Although little research exists to support the theory that quilts conveyed actual travel and escape information to fugitives, a discussion of the social behaviors surrounding the quilting myths themselves seems warranted in a book on the Underground Railroad.)

African Americans came to Iowa with a justifiable skepticism of the sincerity of whites, but Soike's descriptions of the white Underground Railroad "conductors" place a greater emphasis on the altruism of whites than on the fears of blacks. Soike's discussion of the Fugitive Slave Act is nuanced and descriptive, but it lacks a three-dimensional quality because it focuses too much on the actions of whites—and men—rather than on the cultural process of emancipation as a whole. The last few paragraphs of the book offer encouragement for other scholars who might want to plow through the remaining vast archival treasure trove to discover more about blacks who wanted to "live free and unfettered in Iowa" (212), but one wonders why Soike himself chose not to spend more time imagining the black emancipation experience alongside that of proslavery Germans or abolitionist Quakers, both of whom are addressed here so well.

Soike's command of the history of Iowa, its counties, people, roads, historical sights and markers, and even myths is expansive. This work provides a much needed corrective to Civil War historiography, in which midwestern states have long been ignored or misunderstood. Moreover, those who practice or are interested in public history will easily recognize Soike's command of genealogy, American memory (or lack thereof), and white Iowans' understanding of what the Civil War meant to and for them specifically. Finally, this meticulous tome performs an act of history that is of the utmost importance to students of the past: it gives a voice to those people who no longer have one. To that end, scholars of local and state history in particular will appreciate Soike's handling of the evidentiary material. I have no doubt that someone will find their ancestors in this book and be impressed by their courage and cunning, to use Soike's terms. Although the analysis might have been strengthened by a more discursive approach to white supremacy and white racism in the Midwest, it is still a major contribution to scholarship on Iowa, the Underground Railroad, and the (mostly white) "conductors" who risked so much to ensure their own vision of a free Iowa.

Lowell J. Soike won the State Historical Society of Iowa's Benjamin F. Shambaugh Award, recognizing *Necessary Courage: Iowa's Underground Railroad in the Struggle against Slavery*, as the most significant book on Iowa history published in 2013.—Ed.

*Confronting Slavery: Edward Coles and the Rise of Antislavery Politics in Nineteenth-Century America*, by Suzanne Cooper Guasco. DeKalb: Northern Illinois University Press, 2013. xxi, 293 pp. Illustrations, maps, notes, index. \$28.95 paperback.

Reviewer Vernon L. Volpe is professor of history at the University of Nebraska at Kearney. He is the author of *Forlorn Hope of Freedom: The Liberty Party in The Old Northwest, 1838–1848* (1990).

According to author Suzanne Cooper Guasco, Edward Coles deserves greater credit for his role in crafting an “antislavery nationalism” that eventually led Americans to fulfill their revolutionary era destiny promising equal freedom. Born into a rather prominent Virginia slaveholding family (and educated at the College of William & Mary), Coles served as President James Madison’s private secretary before pursuing a private quest to emancipate his slaves en route to a new life in the “free state” of Illinois. His personal commitment to emancipation brought him to an early term as Illinois governor and made him an important symbol of antislavery action, culminating in a symbolic meeting with Abraham Lincoln on the way to his fateful inauguration in 1861.

The goal Coles seemingly sought through a long, eventful life reached fruition with the election of an Illinois president. Lincoln had embraced the view of the nation’s founders that Coles had zealously guarded (through rather extensive personal contacts): Jefferson, Madison, Monroe, indeed virtually all of the founders, saw slavery as morally wrong and within federal power (and intention) to restrict its growth and thus speed its demise. (Coles insisted that Jefferson had authored the antislavery Northwest Ordinance.) As a “Southerner,” though one who sought slavery’s death, Coles dreamt of a national vision to fulfill the founders’ antislavery hope, a mission to be pursued by an entire nation. Yet sectionalism, and eventually secession, undermined the unity that Coles sought.

Maintaining impressive family and professional connections with many people on both sides of the Mason and Dixon Line, he feared how partisan loyalties and sectional feelings would ruin his hope for a unified, free nation. Likewise, he dreaded the intense anti-black inclinations of those not only in his native Virginia but also in his adopted homes of Illinois and Philadelphia (the city of his later life). Coles had taken careful steps to establish (and support) the black families he helped to resettle in Illinois and Missouri in a rather successful experiment in emancipation. However, obvious and unrelenting white hostility to freed blacks eventually led Coles to accept the promise of the American Colonization Society of voluntary black emigration to Africa.

Despite the obvious pitfalls of this approach, Coles saw it as the only way to gain Southern support for emancipation and to avoid the national division he feared but that came anyway.

Coles's moderation and ties with colonization may taint his anti-slavery credentials, but he earned his place within the ranks of freedom's advocates. In addition to his personal efforts at emancipation (at the risk of his valued family ties, which he always sought to continue), Coles would be known for his fight to keep (or to make) Illinois a free state (under his beloved Northwest Ordinance). In 1822 (only a few years after relocating to the state), Coles emerged as a surprise winner in a four-way contest for the governor's office in Illinois. Declaring his intention to end slavery in Illinois by eliminating a thinly veiled system of indentured servitude, Coles emerged as a key leader in the 1824 contest to defeat a call for a state constitutional convention that threatened to establish slavery in the Prairie State. These valiant efforts in Illinois, and a lifelong campaign (primarily through a series of public letters) to safeguard the founders' antislavery vision, certainly earned Coles a warm handshake from president-elect Lincoln.

The author of this focused biography has clearly succeeded in reviving interest in the career of Edward Coles. Known to specialists, perhaps, Coles deserves greater public recognition as well. Guasco acknowledges her subject's personal flaws (a tendency to self-absorption if not pomposity and an interest in personal advancement if not comfortable living), but typically she shows his views and actions in a favorable light. She excels at demonstrating how Coles provided a key link to antislavery sentiment in the early republic through antebellum efforts to resolve America's dilemma with black servitude. Understandably, the author may overstate the actual impact Coles had on events and antislavery ideology (especially his nascent "free-labor" critique), but Coles was well connected (and not just with his mentor, Madison) and surprisingly involved in events from the War of 1812 through the Virginia slavery debates (of 1829-1832) and the onset of the Civil War. Emancipation through bloody civil war did not signal a triumph of Coles's approach (his youngest son died fighting for Virginia and the Confederacy), but his influence should not be ignored nor his role forgotten.

*From the Hornet's Nest to Custer's Last Stand: The Immigrant Story of Norwegian Sergeant Olaus Hansen*, by Ozzie Sollien. Charleston, SC: CreateSpace Independent Publishing, 2013. 312 pp. Illustrations, bibliography. \$18.07 paperback.

Reviewer Paul Fessler is professor of history at Dordt College. His research interests include Dutch and German immigrant history as well as American military history. He reviewed this book jointly with Justin Vos, a Dordt College upperclassman from Lynnville, who will be attending graduate school in history.

Painting an interesting tale that stretches from the remnants of feudal Norway to the plains of the Dakota Territories, Ozzie Sollien details the life of Olaus Hansen, a Norwegian immigrant who settled in Iowa in the mid-nineteenth century, served in the 12th Iowa Infantry during the Civil War, played a part in Reconstruction, and was involved in Custer's Last Stand at the Battle of the Little Bighorn. As Sollien admits, much of the detail in this work is of his own invention based on historical evidence, although without any footnotes or citations, it is impossible to discern where facts end and Sollien's imagination begins.

Sollien's focus on Olaus Hansen provides an interesting view of the troubles that Norwegian immigrants faced in nineteenth-century America. This is seen especially in the first few chapters, where Sollien lays out the journey that Hansen had to endure in order to reach America and then to settle a homestead in Winneshiek County, Iowa. A large portion of the book follows Hansen's experience as part of the 12th Iowa Infantry Regiment during the Civil War. Sollien provides extensive detail regarding the movements and engagements of the 12th Iowa. With the end of the war, Hansen continued his military career. Sollien touches on life in the South during Reconstruction and ends with Hansen's adventures in the Dakota Territories as part of the 7th U.S. Cavalry. This first half of the book addresses topics most relevant to readers interested in Iowa history, especially those interested in the history of European immigration and the Civil War.

Despite Sollien's lively writing, readers should not accept the work's historical accuracy without question. Although Sollien's bibliography shows that he consulted many works about the 12th Iowa, he admits that Hansen left no letters or diaries. The lack of footnotes leaves readers in the dark as to which parts of the story are based on historical fact and which are figments of Sollien's imagination. He notes at the start of the narrative that Hansen's "thoughts and actions are my own invention, based on historical fact" (10). For example, knowing that Hansen was both a Norwegian and a member of the 12th Iowa, which was present at the battle of Fort Donelson in February 1862, Sollien imagines, "Olaus and Hans shook their heads. In-

credible! Now what? How long were they going to be stuck in this ice box? Olaus pulled out his pipe with hands numb from the cold and managed to light it." Throughout the work, Sollien, based on regimental histories or letter collections, imagines how Hansen would have likely reacted and creates imaginary discussions and scenarios. Such imaginings might serve well in a work of historical fiction. In fact, reading this book as if it were historical fiction might be the best way to glean insight from the author's research. However, as a work of historical nonfiction, such use of imagination without citations or evidence creates serious problems. In addition, the work would have benefited from an examination of immigration historiography to contextualize Hansen's immigrant experience. Most notably, the bibliography does not cite works from the late Jon Gjerde, the most important historian of Norwegian immigration to the United States (*From Peasants to Farmers: The Migration from Belestrand, Norway, to the Upper Middle West* and *The Minds of the West: Ethnocultural Revolution in the Rural Middle West, 1830-1917*). Sollien's work addresses an important and overlooked topic. One may hope that it provides the impetus for more in-depth studies of Norwegian Americans, their place in Iowa history, and their role in the U.S. military during the Civil War and afterwards.

*Almost Pioneers: One Couple's Homesteading Adventure in the West*, by Laura Gibson Smith, edited by John J. Fry. Guilford, CT: TwoDot, imprint of Globe Pequot Press, 2013. xv, 215 pp. Maps, photographs, notes, appendix, index. \$16.95 paperback.

Reviewer Dee Garceau is professor of history at Rhodes College. She is the author of *The Important Things of Life: Women, Work, and Family in Sweetwater County, Wyoming, 1880-1929* (1997).

Western writer William Kittredge once said, "We tell stories so we can inhabit them." *Almost Pioneers* speaks to our need to make meaning out of choices we have left behind. Laura Gibson Smith homesteaded barely three years in Chugwater, Wyoming, yet she flagged this experience as significant and wrote about it, even after returning to Iowa for most of her adult life. "There is a fascination about the vastness of the western plains," she wrote, "the uncertainty of the horizon, the crispness and clarity of the air . . . that captures the imagination of anyone who comes to Wyoming"(1). Not only was Smith moved by the high plains landscape, but the subsistence life of homesteading framed the first years of her marriage, adding romance to the daily business of working out domestic routines. Her memoir reads like trimmings in a scrapbook that make an ordinary life exceptional.

Laura Smith and her husband, Earle, married in 1911, moved to Wyoming in 1913, and earned title to their claim in 1916. Their brief stint on the homestead offers insight into the range of motives for claiming public land. The Smiths caught the fever when others in their hometown spoke of "prospering with wheat and cattle" in Chugwater, Wyoming (3). But the Smiths treated their claim as an investment, not as a ranch or farm. After earning title, they left Wyoming and rented the land to tenant ranchers. Their western claim became a modest, long-term source of income, and the Smiths became absentee landlords. They spent most of their adult lives in Iowa, Earle serving as county attorney and Laura raising their son.

Those neighbors who stayed on the land in Wyoming mobilized family labor in a group enterprise, committed to ranching full time. In contrast, Earle Smith periodically returned to Iowa to teach school while Laura held down their residency. In this respect, the Smiths were like single women homesteaders who supported their investment claims with wage work outside the claim.

But if the Smiths were temporary visitors on the land, Laura Gibson Smith still drew on the lore of pioneering to add meaning to their experience. Her stories of surviving rattlesnakes, high winds, and heavy snows became bonds that knit together a new marriage. Her descriptions of baking bread on a coal stove, carrying water, and learning to plan for long winters without access to grocery stores added color to domestic routine. Smith reveled in "roughing it" even as she described its inconveniences. The romance of pioneering was a luxury that temporary residents could afford; she was aware that neighboring ranch women tired of privation and that their childrearing and ranching responsibilities bound them to their claims in ways that she and Earle escaped. Her narrative reveals what differences youth, temporary residency, and middle-class income could make in the lives of homesteaders on the high plains.

Editor John L. Fry has done a fine job annotating the memoir. His notes verify facts, add back story, and provide useful explanations of land law. In an afterword, Fry emphasizes the Smiths' status as sojourners who exploited an economic opportunity, but adds that even the opportunity for absentee landlords was short-lived, since drought and falling farm prices prompted committed ranchers to leave their homesteads and rented acreage by the score. What is most striking is that Laura Gibson Smith shared with lifelong ranch women a love of the Wyoming plains that deepened the color and texture of domestic life in significant ways.

*Buffalo Bill on the Silver Screen: The Films of William F. Cody*, by Sandra K. Sagala. William F. Cody Series on the History and Culture of the American West 1. Norman: University of Oklahoma Press, 2013. xvi, 218 pp. Illustrations, appendix, notes, bibliography, index. \$24.95 hardcover.

Reviewer J. T. Murphy is professor of history at Indiana University South Bend. His research and writing have focused on the military history of the U.S. West.

"I am certainly in the lime light now if I ever was," William F. Cody told his attorney in 1913, "and I will certainly keep it up because these moving pictures we are about to take will perpetuate me for future generations as well as for the present" (76). Ever conscious of his persona as Buffalo Bill, Cody never hesitated to tell his story or place himself within the heroic narrative of the American West. He was Iowa-born—a son of the frontier whose life as hunter, scout, and Indian fighter evoked an appealing mystique for eastern audiences. He became the subject of dime novels, appeared in theater productions, published an autobiography in 1879 when only 33, and, after 1883, became best known touring with his Wild West Show. But by the start of the next century, increased competition and financial losses pushed Cody toward the new medium of motion pictures.

Beginning in 1894, he welcomed Thomas Edison's cameras to showcase his troupe; then in 1910, Pliny P. Craft of the Patrick A. Powers Motion Picture Company helped Cody and his partner Gordon W. "Pawnee Bill" Lillie establish a film company of their own. Craft intended to capitalize on Cody's fame, and the old scout appreciated the continued attention. He appeared as himself in the opening and final scenes of John O'Brien's *The Life of Buffalo Bill* (1912); as he dreamt about past exploits, an actor portrayed the younger Buffalo Bill. An advertisement in *Motion Picture World* called the film "a truthful record of the life of the only surviving hero of the Indian Wars" (49).

When a federal court forced Cody to pay his debts by auctioning off what remained of his Wild West Show, he found backers for a film project titled *The Indian Wars* (1913), a retelling of the Wounded Knee massacre. Insisting on authenticity and truth telling, he garnered support from the army and the Lakota, hired novelist and Indian War veteran Charles King to write the screenplay, and set up his cameras on the Pine Ridge Reservation. Unfortunately, the film fared poorly. Audiences liked its realism but increasingly questioned the sameness of western themes, while government officials worried that its message was too real and at odds with their narrative of a benign Indian policy. Its failure forced Cody back on the circuit, but his popularity remained intact. After his death in 1917, filmmakers fought over rights



to his identity so they could continue telling Buffalo Bill stories. It seemed that no one grew tired of him.

Today, anyone interested in revisiting Cody's life has access to new editions of his books, and the Buffalo Bill Center of the West has made his papers and films available through its digital archive. With *Buffalo Bill on the Silver Screen*, the first volume in the William F. Cody Series on the History and Culture of the American West, independent researcher and historian Sandra K. Sagala contributes to our understanding of this iconic American by clarifying the final stage of his lengthy career. She includes a list of movies and television shows that feature Buffalo Bill, but the focus of her narrative is the early films. By explaining Cody's interest in the burgeoning industry, she reinforces his image as a self-promoting showman as well as a storyteller forever trying to inform and please the public.

*Mapping the Nation: History and Cartography in Nineteenth-Century America*, by Susan Schulten. Chicago: University of Chicago Press, 2013. xii, 246 pp. Maps, illustrations, notes, index. \$30.00 paperback.

Reviewer David Bernstein is visiting assistant professor of history at Denison University. His Ph.D. dissertation (University of Wisconsin-Madison, 2011) was "How the West Was Drawn: Maps, Indians, and the Construction of the Trans-Mississippi West."

History, so dependent on chronology and change over time, has more recently begun to turn its attention to geography. Propelled in part by new digital visualization tools, this "spatial turn" has become the most coherent unifying theme of historical investigation since the cultural turn of the 1980s. Yet, as Susan Schulten argues in *Mapping the Nation*, long before GIS and Google maps seemingly revolutionized the questions historians could ask, people understood that *how* knowledge was organized and displayed shaped the *substance* of that knowledge. In words that could easily be applied to a twenty-first-century digital spatial history project, a reviewer of Francis Amasa Walker's *Statistical Atlas of the United States* (1875) articulated this understanding: without maps "many interesting questions would scarcely be solved, and many others would never have been raised at all" (178). That realization, according to Schulten, prompted nineteenth-century educators, scientists, social scientists, and federal administrators to use thematic mapping as a potent discursive tool. In so doing, they ushered in the graphic and map-saturated world we live in today.

In the first of two sections, Schulten explores how maps shaped national identity in the nineteenth century. That process was exemplified

by the work of educator Emma Willard, whose *History of the United States, or the Republic of America* (1828) used successive maps of the same region to tell a visual story of settlement as national progress. By emphasizing the backstory of the contemporary nation, Willard was the “first to depict American history through maps” (27). This analysis alone helps us understand the development of American nationalism, but it is Schulten’s focus on Willard’s *intent* that reveals the importance of nineteenth-century cartographic thought. By tracing her pedagogical vision through a series of innovative graphics (which can be viewed, along with a number of high-resolution maps, on the companion website, [www.mappingthenation.com](http://www.mappingthenation.com)), Schulten successfully demonstrates how Willard made the American nation a “tangible entity, much as Webster codified an American language” (39).

If maps could help construct progressive narratives of American history, they could also stimulate anxious ones. The frontier, as Schulten argues, is a cartographic idea: it cannot exist without a map. That is no coincidence. Frederick Jackson Turner wrote his seminal essay “The Significance of the Frontier in American History” only after immersing himself in contemporary statistical atlases and thematic maps. After completing his essay, Turner then sent a copy directly to Francis Amasa Walker, whose *Statistical Atlas* had proved so useful. Not only had Walker coined the phrase “frontier line” but he had depicted that invisible boundary on the 35 maps he created for the atlas. Thus, according to Schulten, Walker “enabled Turner and others to visualize the frontier as a continuous line worthy of careful consideration” (186).

Yet maps could do more than create historical narratives. The second section of *Mapping the Nation*, explores how government agencies, exemplified by Walker’s Bureau of Statistics, used thematic mapping as a form of analysis rather than simply to illustrate data. Using historian Brian Balogh’s model of a nineteenth-century government that was most powerful when it was “out of sight,” Schulten argues that the seemingly disparate maps created by the Coast Survey, Geological Survey, the Smithsonian, the Census Bureau, and the army need to be viewed together to understand cartography’s role in the creation of the modern bureaucratic state.

*Mapping the Nation* is an excellent historical inquiry. Perhaps more importantly, it reminds us that even as the volume of graphic information circulated pushes our ability to absorb it, maps are still valuable analytical tools that can raise new questions, uncover unseen patterns, and generate new solutions to modern problems.

*Something for Everyone: Memories of Lauerman Brothers Department Store*, by Michael Leannah. Madison: Wisconsin Historical Society Press, 2013. xx, 204 pp. Illustrations, appendixes, index. \$22.95 hardcover.

Reviewer Matthew Lindaman is professor of history at Winona State University. He is the author of "First the War, Then the Future: Youngkers Department Store and the Projection of a Civic Image during World War II" (*Annals of Iowa*, Winter 2014).

The twenty-first-century consumer landscape is dominated by big box stores such as Walmart, warehouse behemoth Amazon, and fast-food restaurants. These entities have displaced the twentieth-century shopping experience of the regional department stores. Michael Leannah's *Something for Everyone* waxes nostalgic as he seeks to capture the vanishing history of iconic regional department stores, focusing on the Lauerman Brothers Department Store of Marinette, Wisconsin, as a case study in what has been lost.

Employing the store's advertising slogan, *Something for Everyone*, as the title of his book, Leannah underscores the versatility of Lauerman Brothers, which enjoyed a nearly 100-year reign as the anchor of Marinette's main street square. Multiple departments, ranging from shoes to paint and wallpaper, filled the three-story, ornate building. The entire operation included a popular lunch counter, known for its frosted malted milk cones, a doughnut machine located on the first floor, talking Christmas trees during the build-up to the holiday season, and an overflow warehouse.

Leannah argues that much was lost in the transition to twenty-first-century consumerism as managers and corporate CEOs figured out how to logistically move larger amounts of bulk goods at cheaper prices, thus displacing the regional department stores. "Of course, the owners of Wal-Mart and Shopko aren't seen on the city's sidewalks or in the next pew over in church on Sunday," the author wryly notes (42). Specifically, he underscores the loss of personal service, human connections, and civic engagement, all parts of Lauerman Brothers' success and history. Dozens of the store's employees, many of whom worked for the Lauerman family for decades, are named to underscore the importance of service and personal connections. Although the employees were known by their real names, they were even better known, perhaps most tellingly and comfortingly, as the store's own "Maytag Man" or "Lunch-Counter Lady." As for the Lauerman family, Leannah argues, "Unlike the business executives of today, the Lauermans were stitched into the fabric of the community of Marinette" (42).

Chapters covering the store's advertising and civic engagement initiatives are the richest in source materials and anecdotal evidence.

Leannah deftly traces the evolution in Lauermand's advertising campaigns, starting in the 1890s. "Always a little cheaper than the cheapest" (136) was the store's mantra, and for decades Lauermand Brothers held itself to the slogan while drawing customers and turning a handsome profit, which in turn was invested back into the community. In the chapter covering the store's civic initiatives, readers learn that the Lauermand family supported the Marinette Bijou Theatre, sponsored a semiprofessional football team in the 1920s, and donated money to Marinette's parks and football stadium. Friday evenings in Marinette belonged to Lauermand Brothers as it was the social place to be during the evening's extended business hours.

From the 1920s to the 1940s, Lauermand's expanded its regional and even national reach. Iowa readers will be interested to note that a Lauermand Brothers store existed in Waterloo, Iowa, during the 1920s and 1930s, the biggest of over a dozen Lauermand branch stores. By the 1950s, the Lauermand family also included a prosperous Marinette Knitting Company, which held exclusive rights to produce Disney clothing, in its portfolio.

Leannah does a great job of chronicling the social and cultural history of Lauermand Brothers Department Store as an iconic institution, although the book should not be taken as a scholarly history. It is devoid of notes, while offering a casual approach to the subject that makes it easy to read. The author's main sources include newspaper advertisements and articles supplemented by personal interviews with past employees. Readers who fondly remember a bygone shopping era dominated by regional, flagship department stores will not be disappointed.

*The Church and the Land: The National Catholic Rural Life Conference and American Society, 1923–2007*, by David S. Bovée. Washington, DC: Catholic University of America Press, 2010. xiii, 399 pp. Tables, illustrations, notes, bibliography, index. \$79.95 hardcover or e-book.

Reviewer Philip J. Nelson is adjunct professor of history at the University of Northern Iowa. His research interests include soil conservation and communitarian thought and movements.

The Jeffersonian ideal of the vital, propertied, middle-class farm family as the cornerstone of the republic and backbone of society has resonated down through American history. The belief system associated with it attained mythic status even as America became a largely urbanized, commercial colossus. The viability of a large class of independent, semi-self-sufficient farmers was threatened as early as the 1920s. In response, a whole host of individuals and organizations joined a

growing effort to lead America's development along the lines of a small-scale, substantially rural, agrarian, decentralized society. *The Church and the Land*, by David Bovée, chronicles the history of one such group, the National Catholic Rural Life Conference (NCRLC).

Bovée argues that the immediate reason for establishing the NCRLC in the 1920s, beyond the concern with the fundamental direction of American society, was the growing belief that rural Catholics were increasingly being lost to the faith. The stated purposes of the NCRLC, then, became "solving the Catholic rural population problem and forming the rural arm of the American Catholic social action movement" (163). Bovée calls these the manifest functions of the NCRLC. But it also had a more hidden or latent function of "forming an 'identity group' for rural Catholics, who were unrepresented by any formal organization until 1923" (163). Bovée deals most directly with the former purpose and mostly indirectly with the latter.

Bovée employs a strictly chronological approach for most of the book, except for the last few chapters, which tend to wander thematically through the past four decades. As the first full-length study of the NCRLC, the book is a valuable addition to the literature. Bovée's description of the book as an institutional and intellectual analysis is largely borne out by his first-rate institutional history of the NCRLC, with meticulous research and copious footnotes. He also brings to life the wide-ranging diversity of thought in the twentieth-century American Catholic church without sectarian cheerleading.

Another strength is the succinct writing style. The book opens with an excellent stage-setting chapter on Catholic rural America in the 1920s. Even before the formation of the NCRLC under the leadership of Bishop Edwin Vincent O'Hara, agrarians in the church, as Bovée shows, were divided between those who wanted to pursue radical social reform and those concerned with the more mundane problem of a perceived decline in the number of rural Catholics. The developing rural policy was in accord with the overall defensive nature of the church, which felt itself under attack from movements such as immigration restriction, a resurgence of the KKK, prohibition, and compulsory public schooling. In response, the NCRLC explored a wide variety of solutions, including land colonization, religious correspondence schools, vacation schools, home missionary work, cooperatives, conventions, and an array of publications. The Great Depression forced the NCRLC to increasingly address economic issues. Even as it turned more and more toward government intervention to stem the crisis, it remained critical of that approach.

The dominant theme of the 1940s and 1950s was the charismatic leadership of Monsignor Luigi Ligutti. Much of his early notoriety came from his work with the Granger Homestead subsistence farming project just north of Des Moines, although the author does not spend much time on it or on any of the land colonization schemes initiated by the Catholic church. This and other topics flow by quickly, treated methodically yet sometimes cursorily. Bovée gives more expansive treatment to the inner workings of the NCRLC. Like any institution, it was not immune from bureaucratic infighting, and Bovée is appropriately critical at times, especially of the contradiction of trying to restore simple rural life using modern bureaucratic means. Ligutti injected an added dimension into the NCRLC by turning toward international concerns. In fact, he spent so much time traveling, lecturing, and soliciting donations that his absence from the office contributed to recurring financial crises.

In later chapters, filled with interesting and little-known stories, Bovée presents the NCRLC's more contemporary interests in issues ranging from rural poverty to agribusiness to environmental concerns. As part of his solid treatment of the farm crisis of the 1980s, he shows how the NCRLC supported the radical National Farmers' Organization while engaging in a two-decade-long feud with the Farm Bureau. Throughout, Bovée remains faithful to his stated thesis that the NCRLC maintained its basic founding principles, although in altered form as an accommodation to changes in the larger society. The author admits that fighting to save the family farm was a losing battle.

In a short final chapter, Bovée competently assesses the NCRLC's important effects and main developmental themes. But he seems reluctant to ask the nagging, big question that hangs over the subject of American decentralist reformers of the mid-twentieth century: Why did the NCRLC, along with hundreds of mainly secular cultural reformers, fail in their attempt to direct the evolution of American society more along the lines of a rural, decentralized society? They truly believed that most aspects of rural and small-town life were superior to those of a centralized, urban/surburban civilization. If it is true that humans make their own history and produce their own societies and that no particular cultural form is historically inevitable, then it would appear that there was a short but real window of opportunity between 1920 and 1960. Given the fundamental problems that beset present-day Americans, perhaps a revisioning of the cultural order, partially along the lines of this road not taken, would be advisable.

*A Diverse Community of Believers and Seekers: A History of the First Christian Church in Iowa City, Iowa, 1863–2013*, by David Hudson. Coralville: First Christian Church, 2013. viii, 189 pp. Illustrations, notes, appendixes.

Reviewer Bill R. Douglas researches Iowa's religious history from Des Moines. He retains church membership at Heartland Presbyterian Church, Clive.

"One day in the early 1980's, a woman came in to the church office to see Bob Welsh. 'God told me to come talk to you,' she announced." As uncomfortable as that pronouncement might make historians—and many mainline religionists—how Welsh, the First Christian Church, and the Iowa City religious community responded to that challenge provides a better take on the state of Iowa religion than a cynical view.

As a historian of Iowa religion who belongs to a generation that seeks to write history from the bottom up, why can't I read congregational histories? I'm guessing it's the hagiography; the most interesting congregations seem too busy making history to record it—or, not infrequently, are embarrassed by history and want to erase it. There are exceptions—Allen Fisher and David Hay's take on First Presbyterian Church in Cedar Rapids and Tamara Andrews's "folk history" of Grace United Methodist Church in Des Moines. The fall/winter 2013 issue of the *Journal of Presbyterian History* has welcome advice on how to make local church histories contextual—and then ignores its own advice by describing the Scotch Grove Presbyterian Church without mentioning Barbara Scot's memoir, *Prairie Reunion*.

The rhythms and tumults of a congregation are complicated, contradictory, and mysterious, as anyone who has stayed awake occupying a pew could testify. The grace of David Hudson's book is to evoke such complexity—although only in the later years do we get much of a view from the pew, surely due to the availability of evidence.

Interspersed in a mostly narrative history, three chapters of excursus—covering revivalism, ecumenism, and campus ministry, along with chapter 14, "Our Ministry with Others"—may be more valuable to those who are not members of the congregation. Congregations contemplating a new building may find helpful Appendix C, "Building for Worship," written from separate drafts by Sally Smith and Welsh. [Full disclosure: As a graduate student at the University of Iowa in the mid-1970s, I knew Smith as campus minister, and know nothing to detract from Hudson's high praise of her.] Of the resulting structure, though, I must have passed by it hundreds of times, more bemused by what already seemed a modish retro vibe than invited in.

Extensively researched and eminently readable, the narrative chapters also contain insight. Hudson correctly points to the congregational

event that was most significant for the denomination's history: Caroline Pearre's founding of a women's missionary society that blossomed into the national Disciples group. Hudson locates this at a time of local retrenchment. More national denominational context would have been welcome; for example, when the local church sponsored an overture to the national Disciples convention to recognize conscientious objection (138), we are left wondering what became of that resolution.

But back to that importuning woman in Welsh's office: she said many people needed shoes and clothing. The community response packed clothes nearly to the rafters. Miracles are outside a historian's jurisdiction, but capturing small acts of compassion could be congregational histories' dissent to larger narratives of avarice and power.

*Grant Wood's Iowa: A Visitor's Guide*, by Wende Elliott and William Balthazar Rose. Woodstock, VT: Countryman Press, 2013. xviii, 112 pp. Illustrations, maps, index. \$19.95 paperback.

Reviewer Jan Olive Full is senior principal and managing member of Tallgrass Historians L.C., an Iowa City-based historical and archaeological consulting firm.

Few American painters are as well known as Grant Wood, especially for his ubiquitous *American Gothic*. Yet outside Iowa, the physical locations that nurtured Wood and served as his bucolic settings are much less familiar. This slim, well-illustrated volume intends to rectify that. Organized into five geographic chapters focused on clusters of Wood-related sites, the book is reminiscent of the "tours" promoted in the 1938 WPA guide to Iowa. Following autobiographical prefaces, the author and her spouse, the book's photographer, describe each location and explain its historical association with the artist. Not all sites are directly linked to Wood. Sidebars offer interesting if tangential information on other artists and areas.

The author's insights on Wood's personal and professional life, as well as Wood's evolving reception by art historians, are perceptive and informative though frequently purely speculative. Much of the text is overly dramatic and romanticized. And despite living in Iowa for a decade, the author manages to paint modern-day Iowans as provincial sorts—not an easy task in today's global village—and their cities as charming cultural oases (87). Cedar Rapids, for example, home of a large Quaker Oats factory adjacent to the city's downtown, is compared to "a modern-day Florence," its small skyscrapers evocative of the Superman television set (20). Despite sometimes confusing directions (West Branch is recommended as a "good pit stop" after



leaving Iowa City and heading *west* toward Des Moines [83]) and awkward geographical groupings of sites, the book offers a light and breezy introduction to the abundant artistic landscape to be discovered in Iowa.

*The Crusade Years, 1933–1955: Herbert Hoover’s Lost Memoir of the New Deal and Its Aftermath*, by Herbert Hoover, edited by George H. Nash. Stanford, CA: Hoover Institution Press, 2013. xlv, 519 pp. Illustrations, notes, appendixes, index. \$39.95 hardcover.

Reviewer Glen Jeansonne is professor of history at the University of Wisconsin–Milwaukee. He is the author of *The Life of Herbert Hoover, 1928–1933: Fighting Quaker* (2012) and is working on a complete biography of Hoover.

Herbert Hoover remains a relevant presence. In 2011 the Hoover Institution Press published his account of the Cold War, *Freedom Betrayed*. *The Crusade Years, 1933–1955* followed two years later, after lying fallow in the vaults of the Hoover Institution for more than 50 years. The ex-president began work on the books during World War II and suspended his labor in about 1955, then halted without completing either study, turning to more immediate pursuits. They were turned over to a committee comprising his sons, Alan and Herbert Jr., and several friends and relatives who feared that some tart passages might damage living persons or Hoover’s own reputation. With the publication of *Freedom Betrayed*, a lengthy dissertation on foreign policy, and *The Crusade Years*, a prolific complement, chiefly on domestic policy, specifically the trend toward collectivism in government, focusing on the New Deal and socialism abroad, it is as if an archivist had uncovered a musty epilogue to *Romeo and Juliet* or Charles Dickens had surprised us with another chapter dealing with the “Ghost of Christmas Past.” As these classics continue to fascinate, so, too, does Hoover.

After his presidency, which ended with the bitter defeat of 1932, Hoover became the most prolifically published ex-president in history. His interests ranged from the welfare of children to fishing, food relief, and world peace. Denied his party’s presidential nomination in 1936 and 1940, he moved to the right and remained influential in GOP politics, speaking at conventions and campaigning during biennial congressional elections. He feuded with Franklin D. Roosevelt for more than three terms, befriended Harry S. Truman, became reasonably close to Dwight D. Eisenhower, was active in relief during and especially after World War II, and chaired two government commissions on reorganization of the executive branch. He traveled as an emissary to Europe in 1937, had audiences with Hitler and Goering and with

countless other public officials. He squabbled with Churchill over food relief during World War II, as he had done during World War I. A leader in the Boys' Clubs of America, an opponent of the Morgenthau Plan to deindustrialize Germany, and also an opponent of dispatching American ground troops abroad, he partly won his point in Eisenhower's "New Look" defense policy. Hoover was not always on the winning side during the events of his times, but he was always a factor.

Hoover knew everybody who was anybody, including every president from Theodore Roosevelt to Lyndon Baines Johnson as well as Charles Lindbergh, Henry Ford, and Amelia Earhart. He was a happy workaholic, not a born writer but a made one. Every page of this ponderous tome was written longhand. It is a combination of history, biography, and opinion. The orphan from Iowa was not content to leave the judgments of history, or his role in it, to others. As in his other lengthy books, one weakness is the author's tendency to repeat himself and to incorporate full-length speeches he delivered, which, though meaty, are also verbose. Iowa readers will find little specifically about Hoover's residence in West Branch, although a few speeches he delivered there to commemorate his birthday on several occasions are included in their entirety.

These recently published companion volumes, with their lengthy gestation period, birthed long after his death, are among the prolific ex-president's most important legacies. They demonstrate the most highly consistent philosophic vein since he penned *American Individualism* in 1922. They also help solidify Hoover's place in history, not as a great president, but as a highly versatile individual, and someone who never gave up, who experienced his share of setbacks and successes, led a momentously absorbing life, and put it down on paper.

The meticulous editing of George H. Nash, the dean of Hoover scholars, adds value to Hoover's own work. Nash clarifies, confirms, amplifies, excises, and explains, with impeccable judgment, letting Hoover speak, but elucidating language and obscure references. Eminently fair, Nash has devoted his life to Hoover scholarship. He adds an introduction that sets the manuscript in perspective and traces in painstaking detail via a comprehensible chronology the development of the stages of the book. He also adds appendixes, which Hoover had wavered over including. This work, for both Hoover and Nash, required inordinate dedication. With its publication, Nash adds additional complexity to the multifaceted tapestry of Hoover historiography.

*The Quiet Season: Remembering Country Winters*, by Jerry Apps. Madison: Wisconsin Historical Society Press, 2013. v, 147 pp. \$22.95 hardcover.

Reviewer Barbara J. Dilly is associate professor of anthropology at Creighton University and an Iowa resident. Her current research focuses on popular culture images of young women in American agriculture. She also applies her research and personal experience as an active participant in the transformation of American agriculture toward more sustainable practices in the Midwest.

The winter of 2013–14 is one Iowans will remember as a hard one, but not like the ones Jerry Apps remembers back in the 1940s in Wisconsin. We now get through winter by turning up the thermostat and going about in insulated waterproof garments and warm vehicles. Apps and his family cut more wood and suffered soggy wool. Car heaters existed but were not yet perfected.

Apps's remembering of the material and social life of winter is a good read. It is short and not too deep—good for conversations about the good old days and how we got through them. But it isn't shallow. It has a message. Those of us who live in the upper Midwest need to make peace with winter to survive it, and that entails rites of passage into a particular kind of personhood with particular values and relationships. It makes us patient and resilient. It requires us to rely on and care for each other. It calls us to respect the power of an unforgiving nature—and appreciate its beauty. If you read this memoir carefully, the story is not just about winters of the past; it is about letting winter shape us, not trying to make winter conform to our needs for comfort. Before Iowans face another winter, they should read this book and think about the value of the experience. Don't leave. Some of us have to stay here and tell the stories that make us who we are.

*A Railroad Atlas of the United States in 1946*, volume 5, *Iowa & Minnesota*, by Richard C. Carpenter. Baltimore: Johns Hopkins University Press, 2013. xx, 211 pp. Maps, notes, appendix, indexes. \$70.00 hardcover.

Reviewer H. Roger Grant is the Kathryn and Calhoun Lemon Professor of History at Clemson University. He is the author of numerous books and articles on railroads; the most recent is *The Louisville, Cincinnati & Charleston Rail Road: Dreams of Linking North and South* (Indiana University Press, 2014).

Railroad maps have long been popular. In the 1920s industry magnate O. P. Van Sweringen allegedly told a Cleveland, Ohio, reporter that his two favorite authors were "Rand and McNally." In the not-so-distant past a number of history-oriented railroad map albums have appeared. Kalmbach Publishing Company, producer of *Trains* and *Classic Trains* magazines, found strong sales for its reprint of the 1928

*Handy Railroad Atlas of the United States*, which features a state-by-state set of maps initially published by Rand McNally. More recently, Mike Walker has produced a series of map publications of railroads in North America, including *Comprehensive Railroad Atlas of North America: Prairies East and Ozarks*, which covers Iowa and shows steam and electric inter-urban railroads past and present. The newest contribution to railroad maps that includes the Hawkeye State is Richard Carpenter's volume under review here.

As its title indicates, this volume reveals the once extensive network of rail lines that as of 1946 blanketed Iowa and Minnesota. It does so in considerable detail, indicating both operating and abandoned lines. Take the insert map for Boone, Iowa, for example. The half-page, color-coded drawing shows how the Chicago & North Western; Fort Dodge, Des Moines & Southern (electric); and Milwaukee Road served this county-seat town. The map also indicates a piece of the North Western that had been abandoned about 1930. Included, too, are locations of various support facilities, such as an interlocking plant. The full-page drawing of Des Moines graphically reveals the complexities of railroads that served the capital in the immediate post-World War II period. In addition to town and city maps, the volume proceeds largely county-by-county across the state. Additional features included are notes on maps, references, and indexes of coaling stations, interlocking plants and former interlocking plants, passenger and non-passenger stations, tunnels, and viaducts.

Any undertaking of this magnitude inevitably produces errors. Examples abound (Morton rather than Morton Mills, Thompson River rather than Grand River, and Southern Illinois Railway rather than Southern Iowa Railway). Then there are historical misstatements. Take the Iowa & Southwestern Railroad in Page County, for example. It was not abandoned in 1916, but rather a year later, and then in 1918 its rails and other salvageable materials were removed. It is surprising (even shocking) that the extensive works of Don L. Hofsommer, dean of railroad historians of the Midwest, are virtually ignored in the reference list.

If this volume is used in conjunction with Mike Walker's *Comprehensive Railroad Atlas of North America: Prairie East and Ozarks*, anyone who seeks to learn the location of an active or abandoned rail line in Iowa should readily find the information.

*Off the Main Lines: A Photographic Odyssey*, by Don L. Hofsommer. Railroads Past and Present. Bloomington and Indianapolis: Indiana University Press, 2013. x, 307 pp. Illustrations, bibliography, index. \$55.00 paperback, \$45.99 e-book.

Reviewer Kevin Byrne is professor emeritus of history at Gustavus Adolphus College. His research and writing have focused on military history and the history of technology and railroads.

In *Off the Main Lines*, prolific and accomplished railroad historian Don Hofsommer displays his lifelong fascination with photographing the world of railroading. His black-and-white images of railways and his impressively detailed captions constitute the essence of this study. He opens with a short autobiographical introduction and provides brief contextual information for each chapter and subchapter. The volume traces 40 years of the author's whereabouts and of railroad history, from roughly 1950 through 1990, focusing on the declining branch lines and secondary roads that were "off the main lines."

Raised in small-town Iowa, Hofsommer subsequently followed a path that took him—and his camera—to Colorado, Minnesota, Oklahoma, Texas, and nearby states. Images from these locations dominate this aptly subtitled "photographic odyssey," and many of the captions disclose Hofsommer's memories of family excursions and railroad employees he knew by name. Rest assured, too, the book is excellent history. It transports readers through time and space, providing a visceral sense of the eroding dignity of branch lines and the locales that depended on them, as the embattled industry labored to adapt to changing circumstances. Fittingly, the upper Midwest features prominently: fully one-third of the volume focuses on the Hawkeye State; one chapter highlights Minnesota railways.

Overall, Hofsommer mourns the decline of these branch lines, but his concluding photos foreshadow their partial revitalization by the 1990s. The book is a fitting tribute to its subject; railroad enthusiasts across the upper Midwest and beyond will find Hofsommer's personalized history to be both edifying and immensely rewarding.

*Madam Chairman: Mary Louise Smith and the Republican Revival after Watergate*, by Suzanne O'Dea. Columbia: University of Missouri Press, 2012. x, 202 pp. Illustrations, notes, bibliography, index. \$35.00 hardcover.

Reviewer Catherine E. Rymph is associate professor of history at the University of Missouri. She is the author of *Republican Women: Feminism and Conservatism from Suffrage to the Rise of the New Right* (2006).

Born into a Republican family in southeastern Iowa, Mary Louise Smith did not become an active party worker until the late 1940s, when Cathlene Blue, Iowa's former First Lady, encouraged the young housewife to join a local Republican women's club. Over the next decades, by virtue of her talent for grassroots organizing, her celebrated speaking skills, her ability to earn the confidence of those in power, and her own conviction that she had something to offer, Smith would continue to rise through the ranks. By 1964, she ran successfully to be Iowa's Republican National Committeewoman, moved quickly onto the RNC Executive Committee and was the first woman to chair the RNC in the critical years after Watergate. A "female first" during the heyday of second-wave feminism, she was also a consummate party loyalist. Her belief in the two-party system and her commitment to her party never wavered. As her biographer Suzanne O'Dea writes, however, Mary Louise Smith "found the limits of that loyalty and discipline" (164). Many of those limits concerned Smith's persistent commitment to women's equality even as her party came to be seen as increasingly hostile to that commitment under Ronald Reagan's presidency.

Based on a thorough examination of Smith's papers (held at the Iowa Women's Archives), other archival sources, and oral interviews, O'Dea's work contributes to our knowledge of Iowa politics, the national Republican Party, and women in leadership. A strength of the book is the large number of interviews O'Dea conducted not only with Smith, but also with many of the Republican women and men Smith worked with over the years.

The book covers Smith's long life, from her birth in Eddyville, Iowa, in 1914, to her death in 1997. It concentrates, though, on the period when she was most in the public eye, the late 1960s to the mid-1980s. O'Dea argues that Smith's strengths and interests were always more in organizing than in policy. O'Dea traces the inner workings of the Republican organization, especially during Smith's tenure as RNC chairman (to which O'Dea devotes 6 of her 12 chapters). The party attempted to rebuild after Richard Nixon's resignation, a time when few Americans identified with the party and when its financial condition was dire. One of the difficulties Smith faced was the reluctance of longtime Republican donors to contribute to the party in the face of

new post-Watergate campaign finance laws. O'Dea takes us behind the scenes as Smith and other leaders debated controversial strategies for promoting the party. Seen by some as an unqualified, ill-advised, temporary appointee, Smith was subject to repeated calls for her ouster. She held on, however, through the 1976 elections. Despite party losses in 1974 and 1976, she produced significant accomplishments, especially, O'Dea suggests, in bringing the RNC back to financial viability.

O'Dea explores the sexism Smith encountered, her support for abortion rights and for the Equal Rights Amendment, along with her growing awareness that she was a "feminist" (while still asserting that she was, as O'Dea notes, "first a Republican and only second a feminist") (51). Smith's interests in women's equality did not lead automatically to a concern for the equality of other groups. O'Dea's discussions of Smith's evolution on issues of race are especially interesting. She notes that the black civil rights movement "did not engage" Smith during the critical years of the fifties and sixties (21). When President Reagan appointed her as a member of the U.S. Commission on Civil Rights, Smith had to learn about black civil rights from fellow commissioner Mary Frances Berry. Yet she came to be a strong advocate for affirmative action and busing, much to Reagan's chagrin.

Smith was certainly a national figure, especially during her tenure as RNC chair, but readers of the *Annals of Iowa* will undoubtedly be particularly interested in the book's Iowa stories, including accounts of Smith's friendship with former Governor Bob Ray, her involvement with the Iowa Women's Political Caucus, and her reaction to the Iowa Republican Party's shift to the right during the 1980s and 1990s.

Smith was an intensely private person, so O'Dea's book is, not surprisingly, mostly a story of Smith's public life. We learn very little about her life as a daughter, sister, mother, or wife. There are occasional glimpses of her private concerns, most notably in reference to the last years of her husband's life, when, O'Dea tells us, his health was a factor in Smith's decision to step down as RNC chair. But we learn little about how her public life in politics, her commitments to the Republican Party and to feminist principles, grew out of or influenced her private life.

This book joins Sara Fitzgerald's recent biography of Elly Peterson of Michigan, who served as RNC assistant chair in the late 1960s, in restoring the histories of dynamic, feminist, Republican leaders. (See Sara Fitzgerald, *Elly Peterson: "Mother" of the Moderates* [2011].) Such women deserve to be better known. We can be grateful to Suzanne O'Dea for helping us better understand the public accomplishments and professional struggles of Mary Louise Smith.

*Main Street and Empire: The Fictional Small Town in the Age of Globalization*, by Ryan Poll. New Brunswick: Rutgers University Press, 2012. xii, 223 pp. Illustrations, notes, bibliography, index. \$72.00 hardcover, \$24.95 paperback.

Reviewer Jon Lauck is senior advisor to Senator John Thune. He is the author, most recently, of *The Lost Region: Toward a Revival of Midwestern History* (2013).

Despite the centrality of rural living and the predominance of small towns in the history of Iowa and of the United States more generally, the nature of small-town life has not been a frequent subject of study, perhaps because of its sheer ubiquity until the mid-twentieth century or the relative absence of drama to the story. There were exceptions, of course, including books such as Lewis Atherton's *Main Street on the Middle Border* (1954), Richard Lingeman's *Small Town America* (1980), and, most recently, John Miller's *Small-Town Dreams* (2014), but these exist as exceptions to the general rule. Those earlier but infrequent works on American small towns genuinely sought to analyze and explain their history; Ryan Poll's *Main Street and Empire* seeks instead to minimize and transcend their influence. The book is an attempt to, as the author sees it, cleanse American culture of the pervasive and continuing presence of small towns and the "ideology" they represent.

From the beginning of *Main Street and Empire*, there is little doubt about the basis of Poll's analysis. Early on, he declares his adherence to "Marxist literary and cultural criticism," or what is more generically known as "critical theory," a line of thinking that first took form with the work of the Frankfurt School during the early twentieth century (18). Throughout his book, Poll relies on the now familiar band of Marxist/critical theoreticians and their allies who have strongly influenced academic discourse in recent years: Theodor Adorno, Walter Benjamin, Louis Althusser, Frederic Jameson, Michel Foucault, Jürgen Habermas, Eric Hobsbawm, Judith Butler, etc. Unlike historians such as Atherton, Lingeman, and Miller, who grew up in the small towns they studied, Poll has no personal connection to his object of study. He grew up in Chicago, attended college in Atlanta, and earned a Ph.D. in English at the University of California–Davis, where he absorbed Marxist critical theory. His view of small towns is determined by the lens of critical theory, which is purposely designed to promote the transformation of the existing order and the "emancipation" of the oppressed, not by more traditional and nonactivist theorizing, general empiricism, data collection, or personal experience.

Poll thinks, in short, that the small town has developed into a perverse ideological force in American culture. Too many people are attracted to the small-town ethos and small-scale communal living, he



argues, and that has caused a social blindness to widespread social oppression. The small-town marketing of Walmart, for example, obscures capitalist exploitation, and nice images of small towns obscure racism and exclusionary practices. Notions of innocent small towns also make it impossible, Poll argues, to see America's imperial domination of the world. Films such as Frank Capra's *It's a Wonderful Life*, plays such as Thornton Wilder's *Our Town*, Walt Disney's theme park, and people like Donna Reed and Andy Griffith are all sources of oppression, in his view. To equate small towns with the nation's "heritage" or "traditions" is to promote fascism, according to Poll.

Poll does not dwell on the American small town as a "real, material place"; he focuses instead on its ideological implications or its impact on society and politics. There is an important connection, however, that Poll ignores: the reason people are attracted to small towns—and therefore not ready to man the barricades and spearhead a revolution—is that many people grew up in them and found them desirable. The novelist and screenwriter Diane Johnson, in her recent memoir, *Flyover Lives* (2014), recalls with great fondness her childhood of love and community in Illinois. Such recollections and myriad others cannot be reconciled with critical theory, however, so they are pressed into the category of false consciousness. If, from Poll's perspective, empirical evidence and actual human testimony conflict with theory, then so much the worse for the evidence and testimony.

Another central component of Poll's book is its heavy reliance on the notion of a "revolt from the village," the idea that some writers in the 1920s finally rebelled against their small-town heritage and wrote scathing attacks on small-town life. Poll begins his book with a chapter on this idea and ends it with a rallying cry to perpetuate the unfinished revolt against small-town life. But the existence of a "village revolt" was vehemently denied by the writers who supposedly triggered it and was instead based on one tossed-off magazine article that passed into literary history as fact and remains, therefore, a largely imaginary "revolt." (See Jon K. Lauck, "The Myth of the Midwestern 'Revolt from the Village,'" *MidAmerica* [2013]). Given this misreading of the "revolt" and Poll's more general obeisance to critical theory and the distortions that result, it would be best to look for the history of American small towns in other works.

*Intimacy across Borders: Race, Religion, and Migration in the U.S. Midwest*, by Jane Juffer. Philadelphia: Temple University Press, 2013. xx, 180 pp. Notes, works cited, index. \$26.95 paperback.

Reviewer Douglas Firth Anderson is professor of history at Northwestern College (Iowa) and coauthor of *Orange City* (2014).

“Can one make a home out of wanderings?” (61). Jane Juffer asks this and related questions about her own life journey from Sioux County, Iowa, toward her current identities as a wife, mother, and scholar of Latino/a and feminist studies. She also asks the question about Latino immigrants in Sioux County, Iowa. The book’s varied wanderings also provide an angle for assessing the work. [Full disclosure: I know the author’s parents and a few of her local sources, but I do not know the author.]

For this history journal and its readers, Juffer’s book is worth considering because it documents some recent history and contemporary trends in one Iowa locale. Its approach, however, is not historical, but rather postmodern cultural studies. It is a difficult read—it wanders in and out of memoir, journalism, and feminist and postmodern theory without finding a narrative home in any of them. Arguably, this wandering approach reflects a postmodern perspective in which no meta-narrative has legitimacy; it also reflects the past of the author and the contemporary situation of Latino migrants.

The bulk of Juffer’s volume—the preface, parts of the introduction, and the first three chapters—deals with Sioux County, Iowa, albeit in a wandering fashion. The author grew up in the midwestern-inflected Dutch Reformed culture of late twentieth-century Sioux Center. Feeling constrained by the theology, mores, and political sensibilities of “home,” she found her way into social justice work with Latinos, and then into Latino/a and feminist studies. Ironically—perhaps providentially, from a Reformed perspective—her husband is also familiar with the Dutch Reformed religious tradition. He, though, is not midwestern, but rather “coloured” South African. This personal “intimacy across borders” foreshadows Juffer’s return “home” to Sioux County to study whether Latino immigrants there are finding a home.

Central to her analysis are the ethical theories of the late French Jewish postmodernist philosopher Emmanuel Levinas. (Given her midwestern Dutch Reformed focus, Minnesotan Christian Reformed Nicholas Wolterstorff’s work on justice begs to be considered; he is read in Sioux County more than Levinas.) Juffer suggests how face-to-face encounters between the Sioux County Dutch Reformed folk and the increasing numbers of Latinos over the past decade-and-a-half have led not only to faith-based attempts to treat the immigrants equi-

tably and even push back against alleged racial profiling but also to a “hybrid” Latino church, Amistad Cristiana of Sioux Center. She sees the church as a significant example of “intimacy across borders” in that it is a Latino-run congregation supported by the two dominant Reformed denominations in Sioux County, the Christian Reformed Church (CRC) and the Reformed Church in America (RCA). She also sees significance in the fact that the 2010 General Synod of the RCA meeting in Orange City was when the South African Belhar Confession became an RCA confession of faith. The Belhar Confession was written in 1982 by the “coloured” Dutch Reformed Mission Church as an anti-apartheid theological statement. “I believe it would not have passed” the RCA General Synod in Orange City, Juffer writes, “were it not for the presence of Latinos in the Midwest” (21). (Her statement on page xii that the RCA General Synod voted to adopt the confession on June 11, 2010, is incorrect; in 2010 the General Synod recognized the votes of the classes, which confirmed its adopting action in 2009. See [www.rca.org/page.aspx?pid=6636](http://www.rca.org/page.aspx?pid=6636).)

The historical substance of the book lies in Juffer’s on-site interviews of Sioux County Latinos and others, including a packing plant owner and the county attorney. Such material is significant for any future historical study. However, the book has a number of problems. For one thing, theory gets in the way as much as it helps. The title obscures rather than clarifies. Her exploration of concepts such as intimacy, body, and borders will more than likely deter most general readers from reading the book through. For another thing, while on the one hand the book takes religion seriously—including faith-based social justice—on the other hand there is a superficiality to its analysis of the Reformed theological tradition.

The book’s subtitle stresses the Midwest, but Sioux County does not equal the Midwest, or even the rest of Iowa. Juffer does not compare Sioux County either to Marion County, the other Dutch Reformed enclave in Iowa, or to Buena Vista County, another center of Latino migration in northwest Iowa. Not only is there little evidence that Juffer consulted much sociological or historical scholarship on the Midwest or Iowa, she even missed an important source on Amistad Cristiana (by a South African, no less): Jackie L. Smallbones, “Amistad Christiana, Sioux Center, Iowa,” *Perspectives* 25 (January 2010). Juffer’s only comparison for her Sioux County material is with the Pennsylvania towns of Shenandoah, Altoona, and Hazleton. Thus the author ends the book by wandering far away from the Dutch Reformed, Iowa, and the Midwest.

Juffer's wandering is perhaps deliberate, but it leads to an ending of Anglos and Latinos alienated from each other. Still, in the course of following the book's meanderings, persistent readers will glean some interesting things about some recent developments in Sioux County. Outsiders might consider them surprising, yet the developments have some rootage within the Dutch Reformed tradition. Among the Reformed, it is a theological truism that *ecclesia reformata et semper reformanda secundum verbum dei* (the reformed church is always being reformed by the Word of God). That Word reminds those who have ears to hear that in face-to-face encounters we should expect to meet God. Neither apartheid nor excluding the stranger need be the last word.

*What Happens Next? Matters of Life and Death*, by Douglas Bauer. Iowa and the Midwest Experience Series. Iowa City: University of Iowa Press, 2013. xii, 151 pp. \$17.00 paperback and e-book.

Reviewer Thomas K. Dean is senior presidential writer/editor at the University of Iowa. His extensive writings about the importance of place include *Under a Midland Sky* (2008).

*What Happens Next?* is a collection of personal essays exploring aging and mortality through the lens of the author's own age-related ailments and his parents' and grandparents' deaths, especially his mother's. Currently living in Boston, Douglas Bauer grew up in Prairie City, a small town near Des Moines and the emotional and topical center of his book. The collection has justly received critical acclaim for its sensitive thematic insight and finely honed literary style. Bauer's admirable craft is on full display across nine essays.

For historians of Iowa and the Midwest, most valuable are Bauer's depictions of and insights into growing up on an Iowa farm in the mid-twentieth century, along with his experience maintaining familial and geographical ties in adult life. Raised in a working-class family—he grew up on a multigenerational family farm, and his maternal grandfather was an Iowa coal miner—Bauer gives individual voice to a typical experience of a rural family.

The essay of greatest historical interest is "What Was Served," which revolves around Bauer's mother's life as a farm wife and her domestic duties, particularly serving meals to her husband and father-in-law. The essay's rich detail about a particular farm family's experience is presented from a unique perspective—that of a boy who spent more time inside than outside, who identified more with his mother, Maude, than his father. Framing the farm fields from the kitchen window, Maude saw "the outdoors as just another room, an extension of

the farmhouse to be kept picked up" (46). Because of his asthma and his lack of mechanical skill, Bauer himself joined his mother in the circumscribed life of the house. As he says, "The most I could do to be a farmer was to eat like one" (44).

After living in Cheyenne, Wyoming (where Bauer was born), while Bauer's father was in the service, Maude was eager to return to Iowa when her father-in-law and husband became farming partners. Eventually, however, the limitations of a farm wife's life, especially after she had had some independence as a schoolteacher and a store clerk, weighed on Maude. Partly as a result of living in the same house with her in-laws for a protracted time, "the unwelcome surprises of her adult life began, and she got angry at them and stayed that way" (54). One of Bauer's most interesting observations captures one of those "unwelcome surprises," a kind of estrangement no doubt experienced by many farm women. As Maude tells her son later in life, "Your grandpa was the love of your dad's life" (56).

The book also includes depictions of Maude's widowhood in Prairie City. Of special insight is one of Bauer's observations about small-town life: "People who live their whole lives in such small places must deal with a terribly intimate geography. Memory and moment and future, all of them are embedded and overlapping" (127). Bauer ponders this special characteristic as his mother ages in an apartment ten miles from the farm where she lived most of her adult life, across the street from the nursing home she hopes never to reside in, and only a few blocks from the cemetery where she will be buried.

Bauer's book offers multiple rewards, from an enriching literary experience to unique insight into not only "what happens next" but also to Iowa farm and small-town life.

## 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.

### Manuscripts

Brown, Marcia. Papers. 3 ft., 1978–2000. Brown's documentation of the Register's Annual Great Bicycle Ride Across Iowa (RAGBRAI), in which she participated, including scrapbooks, commemorative issues of the *Des Moines Register*, route maps, and assorted ephemera. DM.

Castle and Plaza Theatres (Manchester). ½ ft., 1930–1944. Calendars of movies and promotional events for these two motion picture theatres. DM.

Cylinder Women's Club. 1 scrapbook, 1959. Cylinder community heritage scrapbook compiled by this women's club. DM.

Des Moines Women's Rotary Club. ½ ft., 1950–1979. Annual programs of this organization. DM.

Farquharson, Joyce Hilliard. 1 scrapbook, ca. 1977. Scrapbook on the community of Montgomery (Dickinson County), including some original Montgomery Methodist Church records. DM.

Hamilton, Charles. 1 document (28 pages), November 27, 1928. Address of Judge Hamilton before the Academy of Science and Letters, Sioux City Iowa, regarding his trip to the Black Hills in spring 1877, which included visits to the Red Cloud and Spotted Tail Sioux agencies with his father, photographer James Hamilton. DM.

Jesse Jackson '88 Iowa Campaign Headquarters (Greenfield). Records. 6 ft., 1987–1988. Collection of records of the state (and temporarily national) campaign headquarters for presidential candidate Rev. Jesse Jackson. It includes documentation related to the campaign exploratory committee and establishment of the Greenfield headquarters; campaign administrative materials (manuals, instructions to staff and volunteers, contact lists); informational files on Jackson, including platform, position materials, and speeches; files on other 1988 presidential candidates; documentation on Jackson's Iowa visits and appearances; correspondence; campaign publicity materials and political literature; ephemera; photographs; publications; clipping files; and several video and audio cassettes. DM.

Kimbel, George Adam. 1 document (4 pages), June 24, 1963, and 7 black-and-white photographs. Typescript reminiscences of George Adam ("Captain") Kimbel (1876–1966) relating his experiences piloting ferries and steamers on the Mississippi River at Bellevue and Dubuque. Accompanied by a portrait and several family snapshots. DM.

Mainquist, Nettie. 3 letters, 1934. Letters of Nettie Mainquist (1884–1967), daughter of Swedish immigrants and lifelong resident of rural Red Oak, describing aspects of life during the Great Depression. DM.

Orr, Ellison. 9 leaflets, 1929–1931 and undated. Reprinted articles of this Iowa archaeologist and geologist on such subject matter as prehistoric mounds and caves of northeastern Iowa, the drift sheets of Iowa, Indian Cave, and the Yellow River (Allamakee County). DM.

Seeburger, Merze. 9 documents, 1934–1935. Biographical information and seismograph recordings of Merze Seeburger, creator and director of a residential seismological station at Des Moines. Includes timeline of Iowa earthquakes, technical specifications of the station, and recordings from December 1934 through 1935. DM.

## Audio-Visual Materials

Klotz, Ruth (Hon.). One DVD (1 hr., 12 min.), October 27, 2010. Video oral history interview of Klotz (b. 1922), a Drake University law school graduate and district associate probate judge for Iowa's Fifth District, 1978–2013. DM.

Novak, Joel D. (Hon.). One DVD (1 hr., 2 min.), February 4, 2011. Video oral history interview of Novak, judge for Iowa's Fifth District, 1979–2011. DM.

Rose, Stephanie M. (Hon.) One DVD (58 min.), November 13, 2012. Footage from Rose's investiture as U.S. District Court Judge for the Southern District of Iowa. DM.

## Published Materials

"The Closedown of LDS Iowa Settlements in 1852 that Completed the Nauvoo Exodus and Jampacked the Mormon Trail," by William G. Hartley. From *BYU Studies Quarterly* 52 (2013), 63–99. IC.

*An Interpretation Manual for Silos & Smokestacks National Heritage Area*, designed by Ben Rendall in collaboration with Angi Reid and Phil Flass. Waterloo: Silos & Smokestacks National Heritage Area, 2012. 61 pages. IC.

*Images of Midwestern Architecture: Iowa*, by Ronald E. Schmitt. Images of Midwestern Architecture. Urbana, IL, 2013. 155 pp. IC.

*Meskwaki along the Upper South Skunk River: Pioneer References to Their Presence in Hamilton, Story, and Polk Counties*, compiled by Arlen Twedt. Ankeny, 2012. 59 pp. IC.

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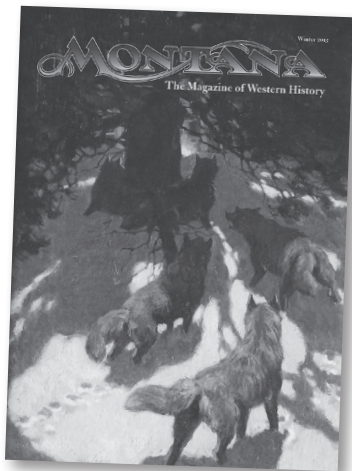
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## The State Historical Society of Iowa

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