REVIEW ESSAY

The New Labor History, the New Media, and New Challenges

Thomas Dublin

For more than a decade, the World Wide Web has been growing and evolving at a relentless rate that seems to defy the possibility of historians keeping pace. In October 2000, the Online Computer Library Center reported some 7 million sites with 1.3 billion indexable Web pages. By March 2008, the number of Web sites had mushroomed to more than 100 million, and by March 2009, the number of indexable pages had surpassed 25 billion. By either measure, the Web grew roughly fifteen to twenty times larger in less than a decade. When I surveyed labor history on the World Wide Web in 2002, I used the metaphor of a "moving express train." That metaphor is even more appropriate today. Since 2002, academic libraries have committed themselves much more decidedly to the electronic revolution. More and more journals are available electronically; acquisitions librarians wade through more and more announcements of digital resources that compete with print resources for collectiondevelopment funds. The growth of Google Book and Google's pending settlement with authors, publishers, and libraries presage further changes in the ways we will do our research.³ As labor historians, we need to keep abreast of these developments and help our library colleagues make informed choices that will serve our and our

- 1. Roy Rosenzweig, "The Road to Xanadu: Public and Private Pathways on the History Web," *Journal of American History* 88 (2001): 550, 552. For more recent statistics, see "We Knew the Web Was Big...," Official Google Blog, googleblog.blogspot.com/2008/07/we-knew-web-was-big.html; Antonio Gulli and Alessio Signorini, "The Indexable Web Is More Than 11.5 Billion Pages," www.cs.uiowa.edu/~asignori/web-size/; and "World Wide Web," Wikipedia, en.wikipedia.org/wiki/World_Wide_Web (all accessed June 27, 2009).
- 2. Thomas Dublin, "Labor History on the World Wide Web: Thoughts on Jumping onto a Moving Express Train," *Labor History* 43, no. 2 (2002): 343–56. Reprinted online at chnm.gmu.edu/assets/history essays/e1/laborhistory1.html (accessed January 4, 2010).
- 3. For a pessimistic view of developments, with the emphasis on the potential monopoly power of Google, see Robert Darnton, "Google and the Future of Books," *New York Review of Books*, February 12, 2009, 9–11.

students' needs in the years ahead. In this article, I take stock of Web resources for research and teaching in U.S. labor history and offer some brief thoughts on changes we can expect in the future.

The World Wide Web is continually changing. In my 2002 overview of labor history on the Web, I reported on sixty-eight Web sites that I had accessed and reviewed in November 2001. In April 2009, I was able to access fifty-two of them at the same URLs—somewhat more than three-fourths of the sites originally reviewed. I was surprised to find such a large proportion of the original Web sites after seven and a half years; still, the turnover of Web resources makes periodic stocktaking worthwhile.

To begin a search for useful Web resources in labor history, one of the Webographies is a good point of entry to literally hundreds of more focused Web sites. One particularly useful site is History Matters, a joint Web site sponsored by the American Social History Project, the Center for Media and Learning at the City University of New York Graduate Center, and the Center for History and New Media at George Mason University.⁴ At this sprawling Web site, the "WWW.History" section lists American history Web sites with brief annotations. Thirty-three categories of sites—organized by time period, topical focus, and region—offer groupings of Web resources. When I employed the site's advanced search and checked the heading "Labor & Labor Movements," for instance, the Webography listed 402 matching records, a substantial increase in the past seven years. When I added "women" to the search and limited the time period to 1890–1930, the search returned 63 possible Web sites.

Among the more useful sites that appear in the comprehensive listing are the American Memory project of the Library of Congress; the New Deal Network, with its rich holdings of photographs and texts; and Dramas of Haymarket, a Chicago Historical Society project exploring the Haymarket affair of May 1886.⁵ History Matters is continually expanding and in recent years added sixteen online essays with interactive examples in a section entitled "Making Sense of Evidence." Essays and resources in this section explore how historians use photographs, oral history, and quantitative evidence, along with a variety of other kinds of evidence. The site also offers numerous sets of resources aimed especially at the teaching of history. The "Digital Blackboard" provides teaching assignments that utilize the World Wide Web, "Students as Teachers" offers examples of student work on the Web, and "Syllabus Central" presents syllabi for U.S. history or American studies survey courses. Finally, the "Many Pasts" section of the site provides more than a thousand online primary documents. The ability to search all sections of the site at once is particularly valuable to labor historians.

^{4.} History Matters, historymatters.gmu.edu (accessed January 4, 2010).

^{5.} To reach these sites directly, go to American Memory, memory.loc.gov/ammem/index.html; the New Deal Network, newdeal.feri.org; and Dramas of Haymarket, www.chicagohistory.org/dramas/overview/over.htm (accessed January 4, 2010).

Labor History Links, compiled and recently revised and updated by Rosemary Feurer of Northern Illinois University, offers the most complete Webography for U.S. labor history. It is accessible from the Web site of the Labor and Working-Class History Association (LAWCHA).⁶ The site begins with an extensive "Teachers Corner," offering links to thirty sites of interest to labor historians, many with multiple documents and lesson plans. The next section offers labor-history-related Web sites organized chronologically into fourteen sections, covering indentured servants and slaves in the colonial period to the labor dimensions of contemporary global capitalism.

Specific items are too numerous to describe individually, but the resources listed here are vast and will repay the time one would put into exploring them. Many are documents available through the History Matters Web site; others come from a wide range of Web sites. One section provides lists of Web sites arranged topically, while another section organizes sites biographically and offers an extensive listing of oral histories available online. A quick comparison of the sections suggests there is not enormous overlap among them, so users of the site will want to explore all of them when looking for relevant Web resources. When the site has implemented a search engine, it will be relatively easy to determine quickly whether the resources listed in these sections include ones related to specific events, organizations, or individuals. Additional resources will be available in the future in sections focused on place, culture, current events, and unions. It will be demanding to keep a Webography site like this one in working order, because the sites that it links to are moving targets. Sites come and sites disappear; they change their locations on the Web; sometimes they remain on the Web but become static and thus less valuable. Nonetheless, Rosemary Feurer has done labor historians a great service with the Labor History Links site, and it offers an excellent view of the state of U.S. labor history on the Web in mid-2009.

Whereas History Matters and Labor History Links reflect their academic roots, the Labor Arts Web site reflects its origins in the labor movement. Cosponsored by Bread and Roses, a cultural project of New York's Health and Human Service Union 1199 / Service Employees International Union (SEIU); the Robert F. Wagner Labor Archives at New York University (NYU); and the Shelley and Donald Rubin Foundation, Tabor Arts explores working-class history and culture through a virtual museum. Organized principally around "Collections" and "Exhibits," the Web site offers a rich collection of art, music and song, photographs, cartoons, newspaper stories, and public commemorations related to working-class themes.

The site's "Collections" are organized by genre, themes, and time periods. Magazine covers, posters, and cartoons are among the graphic arts that are well represented in this section of the Web site, with the images closely connected to labor struggles across the breadth of the twentieth century. The "Exhibits" section offers more

^{6.} I accessed the revised Webography at www.laborhistorylinks.niu.edu/~rfeurer/labor/indexpage .html (accessed July 1, 2009), when it was still under development. The Webography is now accessible from the LAWCHA home page at www.lawcha.org/index.php (accessed December 15, 2009).

^{7.} Labor Arts, www.laborarts.org (accessed July 9, 2009).

developed, interpretive essays. I found "Union Square, a National Historic Landmark" particularly engaging. This exhibit is organized around "six large illustrated plaques" installed in Union Square in New York City as part of its 1997 recognition as a National Historic Landmark as a public space for labor. Each plaque is displayed along with accompanying texts and images that place each within the broader history of labor activism associated with Union Square. The exhibit traces notable labor struggles that touched Union Square, from a Labor Day rally in 1882 to the great shirtwaist strike in 1909—10, the Triangle Factory Fire in 1911, May Day rallies during the Depression, and later strikes by municipal and hospital workers.

The range and variety of the exhibits is striking. One exhibit explores the photographic work of Dorothea Lange among Japanese Americans in early 1942, as they were incarcerated first at assembly centers on the West Coast and later in concentration camps across the western United States. "My Daddy Was a Miner" presents the photographs of Appalachian coal miners and their communities by Builder Levy, and 1940s California and its migrant labor camps provide the focus for the work of documentary photographer Seema Weatherwax. The paintings of Ralph Fasanella provide a series of views of urban, working-class America across the twentieth century, treating both scenes from everyday life and more dramatic moments of labor struggle. "Solidarity Forever: A Look at Wobbly Culture" offers a multimedia view of the folk culture of the Industrial Workers of the World (IWW), and "Art from the Waterfront" presents a view of work and life among longshoremen between the 1930s and 1950s. Still another exhibit, "Images from the Waterfront," presents the photographic work of Otto Hagel and Dorothea Lange combined with a photographic history of the International Longshore and Warehouse Union on the West Coast. I was impressed with the combination of art, politics, and history that the site achieves. Labor Arts is a sophisticated multimedia site that will appeal equally to students, faculty, and nonacademic audiences.

The collections of the American Memory project provide some of the most accessible labor history resources on the Web. As of June 2009, the site included 137 collections with more than 9 million items. Citations to American Memory resources on the History Matters Web site include brief descriptions of more than 200 collections or portions of collections of interest to American historians. Collections of interest to labor historians include "America from the Great Depression to World War II: Photographs from the FSA-OWI, 1935–1945," "Voices from the Dust Bowl: A New Deal for the Arts," "America at Work, America at Leisure," "Inside an American Factory: Films of the Westinghouse Works, 1904," "Working in Paterson," and "American Life Histories: Manuscripts from the Federal Writers' Project, 1936–1940." The most

^{8.} To reach these collections individually, use these links: "America from the Great Depression to World War II: Photographs from the FSA-OWI, 1935–1945," memory.loc.gov/ammem/fsowhome.html; "Voices from the Dust Bowl: The Charles L. Todd and Robert Sonkin Migrant Worker Collection, 1940–1941," memory.loc.gov/ammem/afctshtml/tshome.html; "A New Deal for the Arts," www.nara.gov/

recent of these collections, "Working in Paterson," offers 470 excerpts from interviews and almost four thousand photographs from the 1994 Working in Paterson Folklife Project, sponsored by the Library of Congress. Given Paterson's historical importance in the manufacture of railroad locomotives, firearms, and silk, this folklore study of working Paterson at the end of the twentieth century permits labor historians to carry their teaching into the contemporary period and trace the influences of continuing deindustrialization and immigration.

Another rich resource in labor history is part of Harvard University's Open Collections Program, Women Working, 1800–1930. This online collection provides 500,000 digitized pages and images, including 3,500 books and pamphlets, as well as 1,200 photographs and 7,500 pages of manuscripts—all digitized from collections at Harvard museums and libraries. A search engine provides keyword access to the numerous documents and full-text searches for all but handwritten manuscripts in the collection. A search for "silk," for instance, limited to the catalog records of works in the collection, displays 14 records dating from 1881 to 1936, including a dozen books and pamphlets and two photographs by Lewis Hine. By using the "full-text" option on the search page, I found all uses of the term "silk" within any of the sources in the digital archive—in this case, more than 12,500.

Conducting a few searches revealed the process by which the Harvard site was constructed. All the sources have been scanned and posted on the site, and the fulltext search is performed on a "dirty ASCII" (that is, unproofread and uncorrected) version of the scanned pages produced using optical character recognition (OCR). Thus, searches will not be 100 percent accurate but should still prove valuable for students and scholars working with this collection. It should also be noted that the site has very little in the way of ancillary support material or interpretive essays that might help users place the primary sources in a broader context. Indicative of this limitation is the fact that the "Related Links" section of the site provides links to only six other sites on the Web. Similarly, "Teacher Resources" offers materials organized in five thematic sections, which, although drawing on the materials in the digital archive, do not begin to address central themes in the history and historiography of working women in the United States in this period. Because of these limitations, users of the site will need to make their own connections between the specific resources available here and larger themes in labor history. Still, as a freely accessible source of half a million pages of rare published and manuscript material on working women over the course of 130 years, Women Working, 1800-1930 is certainly a valuable scholarly and teaching resource.

exhall/newdeal/newdeal.html; "America at Work, America at Leisure," memory.loc.gov/ammem/awlhtml/awlhome.html; "Inside an American Factory: Films of the Westinghouse Workers, 1904," lcweb2.loc.gov/papr/west/westhome.html; "Working in Paterson," http://memory.loc.gov/ammem/collections/paterson/; and "American Life Histories: Manuscripts from the Federal Writers' Project, 1936–1940," at memory.loc.gov/ammem/wpaintro/wpahome.html (all accessed July 9, 2009).

^{9.} Women Working, 1800–1930, ocp.hul.harvard.edu/ww/ (accessed June 27, 2009).

Another Web site with valuable primary sources on working women is Women and Social Movements in the United States, 1600-2000 (WASM), an online journal and database that I coedit with Kathryn Kish Sklar. 10 As of June 2009, the site included eighty-nine document projects or document archives with about twenty-eight hundred documents. With new releases twice a year, the site is continually growing and changing. While History Matters and Women Working, 1800–1930 are freely available, open-access resources, WASM is a subscription site available to students and scholars affiliated with any of the 370 academic libraries that subscribe. Primary sources on the site are organized in document projects, analytic collections of typically twenty to forty documents accompanied by an interpretive introduction, headnotes to individual documents, a bibliography, and a set of related links. Although the Web site ranges from the seventeenth century to the present, it is strongest in the nineteenth and twentieth centuries, and although its focus is on women and social movements generally, it has rich material addressing historiographical debates concerning working women. Labor history topics are treated substantially in at least thirteen different projects:11

The ten-hour movement of the 1840s
Women in the New England shoemakers' strike of 1860
Sweatshop reform in Chicago in the 1890s
The origins of International Women's Day, 1886–1920
The shirtwaist strike in New York, 1909–1910
The 1910 Chicago garment workers' strike
The 1912 Lawrence strike
Garment workers in Puerto Rico in the Great Depression
The San Antonio pecan shellers' strike, 1938
Chinese garment workers' strike in San Francisco, 1938
Working-class feminism and the National Congress of Neighborhood Women
The emergence of sexual harassment as a feminist issue
Chinese garment workers' strike in New York City, 1982

A powerful search engine permits analyzing themes, searching for specific language usage across document projects, or searching the works of a given author in the database, and a strong array of full-text sources complements the more focused monographic projects. The site is steadily adding biographical resources, and it should prove an excellent place to track down obscure women activists and reformers. Teaching tools reinforce the materials and emphasize ways that students might explore various themes in the document projects in relation to courses they are taking.

^{10.} Women and Social Movements in the United States, 1600–2000, asp6new.alexanderstreet.com/was2 (accessed June 27, 2009). Because this database is available by library subscription, users do best to access the site through the online databases section of a subscribing library. The site does maintain a freely accessible editorial Web site at womhist.alexanderstreet.com, where one can access nineteen of the site's document projects, all its teaching tools, and learn about the variety of resources available on the subscription site.

^{11.} These document projects are best accessed through the "Browse document projects" command from the navigation bar of the site's home page.

Any user should notice whether a Web site is active or static and, if static, whether the site is being adequately maintained when accessing resources on the World Wide Web. In 2002, I reviewed the New Deal Network, with its excellent documents and images focusing on the New Deal. Today, it still has the nine hundred documents and five thousand images that impressed me in the past, but the site has gone static, and although it still has much to offer students and scholars, pitfalls await the unwary user. For instance, in the "Links" section of the site, half of the syllabi are no longer accessible and the remainder now feel dated because the site has evidently not been revised since 2002. The teaching resource "The Great Depression and the Arts" dates from 1998, another reflection of the static state of the site in recent years. The New Deal—era documents and images found on this site are just as valuable today as when they were first assembled, but users will find dead links and other evidence that the site is not the active undertaking it was between 1996 and 2002. The nature of the Web is that users have to discover this circumstance on their own; sites are unlikely to announce such developments to their users.

Just as some sites have gone dormant in the past seven years, so too have others become more active, offering new resources for labor historians. One site that has grown dramatically in recent years is that of the Harry Bridges Center for Labor Studies at the University of Washington. Peeper years ago, I reported on two ongoing, online research projects there: an extensive treatment of the 1919 Seattle general strike and the "Labor Press Project," with detailed reports on a great many northwestern labor and radical newspapers. Going back to the site recently to review developments was truly stunning. I was not prepared to see how many new projects had emerged in the intervening years. "Seattle Civil Rights and Labor History Project" is a tremendous resource, with illustrated essays on various dimensions of "Segregated Seattle," a glossary with brief descriptions of Seattle civil rights organizations, fifteen essays on Seattle's ethnic press, several slide shows, and forty research reports on various aspects of the city's ethnic history. Searches of the site reveal 212 hits for "Filipino" and 65 hits for "Japanese" as search terms, to name just two ways to explore the resources assembled here.

The Waterfront Workers History Project is a multimedia Web site in progress at the Harry Bridges Center. If explores the history of West Coast ports and their workers, employing more than 250 photographs, an array of videos and oral histories, and a digital collection of the union newspaper *Waterfront Worker*, published between 1932 and 1936. There is also a special section on the eighty-three-day longshoremen's strike in 1934 that eventually led to the formation of the International Longshore and Warehouse Union (ILWU) and the unionization of West Coast ports. Finally, the site includes a video interview with Ronald Magden, a historian of waterfront workers on the Puget Sound; a guide to materials he collected; digitized photographs; and other resources from the Ronald Magden Archive at the University of Washington. This

^{12.} Harry Bridges Center for Labor Studies at the University of Washington, depts.washington.edu/pcls/index.html (accessed June 25, 2009).

^{13.} Waterfront Workers History Project, depts.washington.edu/dock/ (accessed June 27, 2009).

impressive array of materials is clearly in process and will be growing in the future to fulfill the ambitious agenda of its organizers.

These projects are a small slice of numerous undertakings sponsored in part by the Bridges Center and displayed on the Web under the heading "Pacific Northwest Labor and Civil Rights History Projects." "Communism in Washington State" and "Seattle Black Panther Party" are two "History and Memory" projects accessed from this "Projects" page. The communism project includes eleven video oral histories, nine essays, and two hundred illustrations on the history of communism in Washington state as well as a time line and a who's who of the communist movement in Washington. Sections of the site also explore a play and video, *All Powers Necessary and Convenient*, that examine anticommunist hearings held in Washington in 1948 and a four-minute excerpt from a documentary, *Witness to Revolution: The Story of Anna Louise Strong.*

"Seattle Black Panther Party" brings together a similar range of resources for the study of the Seattle chapter of the Black Panther Party between 1968 and 1978. The project includes more than one hundred newspaper articles, about fifty photographs, fifteen videos of oral history interviews, a substantial collection of documents and testimony that arose from hearings about the Seattle chapter in 1970, and, finally, forty-four pages of Seattle Black Panther Party *Bulletins*. It is a treasure trove for reading assignments or research papers in undergraduate classes on African American history or the history of radicalism in the twentieth century. Labor historians are in debt to James Gregory and the teams of researchers who have assembled these varied collections and made them available to the public.

What the Harry Bridges Center has done for West Coast labor history, the Center for History and New Media (CHNM) at George Mason University has been doing for digital history more generally. Since its founding by the late Roy Rosenzweig in 1994, CHNM has become a leader in the development of innovative teaching projects in digital history and for the creation of digital tools for use by historians, teachers, and museum curators. Although labor history is only a small part of the resources assembled here, labor historians should give themselves a self-tour of the Web site, thinking all the time, "What might I find helpful in my research and teaching?" Resources on the site are organized under three categories, "Teaching and Learning," "Research and Tools," and "Collecting and Exhibiting." The teaching area includes a section entitled "Exploring U.S. History," with teaching modules for use in U.S. history courses, several projects related to teaching world history, a

^{14. &}quot;Pacific Northwest Labor and Civil Rights History Projects," Harry Bridges Center for Labor Studies, depts.washington.edu/labhist/ (accessed June 27, 2009).

^{15. &}quot;Communism in Washington State," Harry Bridges Center for Labor Studies, depts.washington .edu/labhist/cpproject/, and "Seattle Black Panther Party," Harry Bridges Center for Labor Studies, depts .washington.edu/civilr/BPP.htm (both accessed July 12, 2009).

^{16.} Center for History and New Media (CHNM) at George Mason University, chnm.gmu.edu (accessed July 12, 2009).

section ("Historical Thinking Matters") developed jointly with Stanford University that offers groups of historical documents to encourage critical thinking, and, finally, the History Matters site, offering resources related to the U.S. history survey, which I touched upon earlier in this essay. Of the various research tools that the center has in development, I can vouch for the value of Zotero, a bibliographic and note-taking program that works within the Mozilla Firefox Internet browser to permit one to collect and manage a research bibliography. Currently, as part of a collaborative project at the State University of New York at Binghamton, we are using Zotero to construct a large digital archive, "Women and Social Movements, International, 1840–2000," that will eventually be added to the Women and Social Movements Web site.

Exploring the projects organized on the CHNM Web site under "Collecting and Exhibiting" reveals the Bracero History Archive, which will be of interest to labor and immigration historians.¹⁷ The site focuses on the Bracero Program, which brought guest workers from Mexico to work in agriculture in the American West and Southwest between 1942 and 1964. As reviewed in June 2009, the bilingual site included almost six hundred oral histories, four hundred documents, and nineteen hundred images. It is clearly still under development, and not all of its features had been implemented when I browsed the site. It should prove an extremely valuable resource for labor historians when fully developed.

Increasingly, oral history resources are finding their way onto the World Wide Web. Roosevelt University, in Chicago, has posted on its library Web pages material related to its Oral History Project in Labor History. There one finds listings and transcripts of oral history interviews with sixty-eight labor-movement leaders and seven founders of Roosevelt University, itself a post-World War II product of the labor and social justice movements. 18 A complementary Web site, produced by the Chicago History Museum, is Studs Terkel: Conversations with America, which provides a sampling of sound recordings of five thousand hours of interviews done by Terkel over almost fifty years.¹⁹ The site is divided into "featured galleries" that enable users to explore audio selections from Terkel's radio program, organized around the themes of architecture, teens, nuclear war, folk music, and Chicago. The galleries follow with audio selections from five of his books, published between 1967 and 1992: Division Street: America, Hard Times, Talking to Myself, The Good War, and Race. They close with selections from programs that Studs Terkel considered his "greatest hits." The recordings are unedited but offer a remarkable resource for understanding the United States between the Great Depression and the 1980s, and working-class history exudes from every interview. Interpretation is muted and typically only emerges by inference from the conversations these recordings preserve.

^{17.} Bracero History Archive, braceroarchive.org (accessed June 27, 2009).

^{18.} Oral History Project in Labor History, Roosevelt University, www2.roosevelt.edu/library/oral history/oralhistory.htm (accessed June 27, 2009).

^{19.} Studs Terkel: Conversations with America, Chicago History Museum, www.studsterkel.org (accessed June 27, 2009).

Chicago labor history is well represented by additional Web projects. The Dramas of Haymarket, for instance, explores the origins of conflict that erupted in the Haymarket affair in May 1886, the tragedy itself, and its aftermath and consequences. ²⁰ Complementing this interpretive online exhibit is the Haymarket Affair Digital Collection, an online archive developed cooperatively by Northwestern University and the Chicago Historical Society. Digitized documents include more than three thousand pages of transcripts of testimony and cross-examinations at the ensuing Haymarket trial, evidence books from the trial, and handwritten autobiographies of several defendants. ²¹ The breadth and depth of primary sources included in these two sites will permit students and scholars alike to conduct significant long-distance research on the Haymarket affair in the future. Though the two sites have been online nearly a decade, they are still valuable resources for exploring a major event in U.S. labor history.

A more recent resource, the Encyclopedia of Chicago, has much of value for the labor historian even though it is not focused expressly on labor history.²² The encyclopedia, a collaboration of the Newberry Library and the Chicago History Museum, appeared first as a published volume in 2004, but the published and electronic versions evolved together, part of an integrated vision of a new kind of historical encyclopedia. It includes thousands of entries, historical sources, and special features. One special feature, a map of labor unrest in Chicago in April-May 1886, complements the two online projects related to the Haymarket affair just described. This interactive map, with a variety of tools for the user complemented by interpretive essays that draw on the Web's hypertext capabilities, provides a rich context for understanding the morepublicized Haymarket protest and bombing.²³ A robust search engine provides excellent access to focused topics of interest. A search for "trade unions," for instance, yields 479 results throughout the encyclopedia; a search for "strikes" yields 119. For this last search, authored entries include accounts of the great railroad strike of 1877, the Pullman strike of 1894, the garment workers' strike of 1910, the 1919 steel strike, as well as more general entries on unionization, anti-unionism, the Women's Trade Union League, and numerous other topics. There is also an interpretive digital essay on labor protests, which includes images and links to other related essays and sources. Finally, maps and historical sources are among the results that come up for this search and provide varied ways to explore the topic at hand. While the encyclopedia is primarily intended as a reference tool, labor historians will find that they can construct a variety

^{20.} Dramas of Haymarket, www.chicagohistory.org/dramas/ (accessed July 7, 2009). See also the treatment of these events in "Chicago Anarchists on Trial," American Memory, Library of Congress, memory .loc.gov/ammem/award98/ichihtml/hayhome.html (accessed July 7, 2009).

^{21.} Haymarket Affair Digital Collection, www.chicagohistory.org/hadc/index.html (accessed July 7, 2000).

^{22.} Encyclopedia of Chicago, Newberry Library and the Chicago History Museum, www.encyclopedia.chicagohistory.org (accessed July 7, 2009).

^{23.} Encyclopedia of Chicago, Newberry Library and the Chicago History Museum, www.encyclopedia .chicagohistory.org/pages/10002.html (accessed July 7, 2009).

of classroom assignments and exercises for their students by employing its resources. It provides an archetypical example of the ways that the Web opens up rich new possibilities for familiar research tools.

Another group of Web resources has evolved and matured in recent years: the Web sites of labor history archives and labor organizations. A useful example of an archival Web site is that of the Tamiment Institute Library and the Robert F. Wagner Labor Archives at the Bobst Library at NYU.²⁴ Beginning with a brief history of the archives, the home page for the site permits access to online finding aids, research guides and tools, and online exhibits. The research guides offer overviews of various parts of the collections, including autobiographical manuscripts, oral histories, and collections related to anarchism, communism, and radicalism in the United States. There is a guide to collections with a Jewish focus and one to women's history resources in the collections. In the "Exhibits and Public History" section of the Web site, there is an exhibit of almost two hundred photographs from anarchist collections at Tamiment. One exhibit explores "Labor and the Holocaust," drawing principally on the massive archival collection for the Jewish Labor Committee. Another exhibit presents the work of the post-World War II labor photographer Sam Reiss. Finally, there is a brief online exhibit on the Rand School of Social Science, with almost fifty photographs from five different collections. These exhibits introduce viewers to rich collections and will no doubt stimulate additional archival research in the original primary sources, but they also stand as valuable resources in their own right.²⁵

Other archives and centers provide equally good points of entry into the labor history and labor studies fields. The Kheel Center at the Industrial and Labor Relations School at Cornell and the Walter P. Reuther Library at Wayne State University offer Web sites that labor historians will want to explore. The Kheel Center Web pages describe its collections, particularly strong in materials on needle trades unions, labor arbitrators, New York City teachers unions, and industrial relations in the railroad industry. The collections include 350,000 images; one online guide describes photographs in collections related to the International Ladies Garment Workers Union (ILGWU)—a collection stretching across the twentieth century. A portion of this collection has been scanned and assembled into a searchable database. To check its usefulness, I did a search for "shirtwaist strike" and came up with a listing of eighteen images ranging from a photograph of "man selling pretzels during the 1909—1910 shirtwaist strike" to one of Fannia Cohn, Rose Schneiderman, and others at the fiftieth anniversary of the strike held at Cooper Union. A search for the subject term "Asian Americans" resulted in eleven images of Chinese Americans in ILGWU

^{24.} Tamiment Institute Library and the Robert F. Wagner Labor Archives, Bobst Library, New York University, www.nyu.edu/library/bobst/research/tam/ (accessed July 11, 2009).

^{25.} All of these exhibits can be accessed from www.nyu.edu/library/bobst/research/tam/exhibits.html (accessed July 7, 2009).

^{26.} Kheel Center, Industrial and Labor Relations School, Cornell University, www.ilr.cornell.edu/library/kheel; and Walter P. Reuther Library, Wayne State University, www.reuther.wayne.edu (both accessed July 9, 2009).

Locals 23–25 that I would judge to be from the 1970s and 1980s.²⁷ Also on this Web site is an excellent exhibit on the notorious Triangle Shirtwaist fire, including a narrative of events, numerous primary documents, images of the disaster, a bibliography, and tips for student projects.²⁸

The Web site of the Walter P. Reuther Library at Wayne State University includes extensive documentation of its manuscript collections, as the library is the official repository for records of the United Auto Workers (UAW), United Farm Workers (UFW), American Federation of Teachers (AFT), and SEIU unions, among others. Urban Detroit has been another focus of collecting, and excellent online exhibits draw upon the strengths of the library's collections. "Virtual Motor City" provides digitized images selected from more than 800,000 negatives of photographs in the Detroit News collection, taken between the late nineteenth century and 1980. This online collection also includes more than four hundred Detroit News newsreels from the 1920s. A search of the collection for the term "strikes" resulted in 559 images; limiting the results to "strikes" and "Flint" provided 54 images, the great majority of them taken during the epochal sit-down strike at General Motors. A second online exhibit/collection, "No Greater Calling," focuses on the life of Walter P. Reuther, longtime president of the UAW. One can browse more than 600 images, organized by decade, read various speeches Reuther gave, and listen to three audio files of Reuther speaking in 1966 and 1968. A teaching guide accompanies the online materials and provides ideas about how one might use this online resource in the classroom.

Working-class culture is another element of labor history that can be accessed well on the World Wide Web. Several academic centers provide useful resources, including the Center for Working-Class Studies at Youngstown State University.²⁹ The Youngstown site offers a variety of resources related to working-class studies, including a syllabus library and an array of materials in a section called "Teaching about Class." "Resources" includes a blog, "Working-Class Perspectives," links to other online projects, and a list of working-class and labor museums around the United States. A "Projects" section takes one to a listing of five major digital projects sponsored by the center. Two projects that should appeal to labor historians are the "Steeltown Digital Library," with primary sources related to the Mahoning Valley, and "Worker Portraits," offering profiles of Mahoning Valley workers written by students at Youngstown State University.

^{27.} For an important analysis of garment workers in New York City, see Xiaolan Bao, "How Did Chinese Women Garment Workers in New York City Forge a Successful Class-Based Coalition during the 1982 Contract Dispute?," *Women and Social Movements in the United States, 1600–2000*, asp6new.alexanderstreet .com/was2/was2.object.details.aspx?dorpid=1000636842 (accessed July 7, 2009). Because *WASM* is a subscription Web site, readers will need to access its resources through a subscribing academic library.

^{28. &}quot;The Triangle Factory Fire," Kheel Center, Industrial and Labor Relations School, Cornell University, www.ilr.cornell.edu/trianglefire/ (accessed July 9, 2009).

^{29.} Center for Working-Class Studies, Youngstown State University, cwcs.ysu.edu; another center with a useful Web site in this area is the Center for Study of Working-Class Life, State University of New York at Stony Brook, www.stonybrook.edu/workingclass/ (both accessed July 7, 2009).

In locating online full-text resources for research and teaching, there is one particularly valuable resource: the Online Books Page is an excellent online, searchable index of books available free of charge on the World Wide Web.³⁰ Currently it lists thirty-five thousand titles, most of them out-of-copyright works that predate 1923 but also a fair number of recent, freely accessible online monographs available through Gutenberg-E. This Web site is the work of John Mark Ockerbloom, a librarian at the University of Pennsylvania, who maintains the site with only limited institutional support. The site permits browsing for books by author, title, and subject and searching by author and title. A quick subject browse for "labor," for instance, yielded six titles, including works by Robert Dale Owen and Elizabeth Gurley Flynn. The listing then offered numerous more detailed categories, including "labor—United States." That grouping included the eleven volumes of John R. Commons's A Documentary History of American Industrial Society. A search for works by Karl Marx revealed thirteen titles. As valuable as the specific titles to which the site links is a section, "Archives and Indexes," that provides links to much larger repositories of similar online books including Google Book Search, Internet Archive Open Access Texts, Hathi Trust, Project Gutenberg, the University of Michigan Digital General Collection, and numerous smaller collections of free online books.³¹

Stepping back from the review of very specific items, I am struck by the vibrancy of labor history on the World Wide Web, the growth of valuable resources since I last surveyed this territory, and the ways that the Web supports research and teaching in the field. One development that distinguishes the Web today from what I surveyed seven years ago is the declining role of energetic individuals and the growing importance of organized centers in the production of new public resources. The History Cooperative and J-STOR stand out in this regard, though their broad purposes and the very specific focus of this review have precluded my considering their impact on our work as labor historians.³² Included in that category are also the Harry Bridges Center at the University of Washington, the Center for History and New Media at George Mason University, and Web sites such as those associated with the Kheel Center at Cornell and the Tamiment Institute Library at NYU. The bulk of the most creative new work appearing on the World Wide Web is the result of collaborative efforts with considerable institutional support from university sponsors and government or private foundations. Individual scholars play a major role in these projects, but grant-getting and entrepreneurial skills are as important in explaining their

^{30.} John Mark Ockerbloom, Online Books Page, onlinebooks.library.upenn.edu/lists.html. This Web site has an extensive Webography of online archives with additional listings of full-text books. See online-books.library.upenn.edu/archives.html (both accessed July 12, 2009).

^{31.} John Mark Ockerbloom, Online Books Page, onlinebooks.library.upenn.edu/archives.html (accessed July 7, 2009).

^{32.} To review the expansion in recent years of both the History Cooperative and J-STOR, see their Web sites at www.historycooperative.org/home.html and www.jstor.org. One History Cooperative project that merits separate mention here is the new online journal, *Digital History*, digitalhistory.unl.edu/ (all accessed July 9, 2009).

success as their scholarly aplomb. These Web projects require a different approach than that called for in researching and writing scholarly monographs. They require assembling an interdisciplinary team of academics, lining up financial support, and coordinating the contributions of diverse members of the development team. With the dramatic growth of the Web in the past decade, the lay of the land has changed, and barriers to entry by new participants have become more substantial; individual scholars will need to participate with larger groups in producing new resources if they are to have an impact. What remains encouraging in this picture is the wide variety of groups and organizations who remain significant players in this process and the continuing importance of university, public agency, and private foundation funding in supporting creative activity on the Web. There is a lot happening on the Web; although that may on occasion feel like a burden as we try to keep track of what's new, it also represents an opportunity for us to extend our research and teaching in new and creative ways that we could have barely imagined a decade ago.